

**U.S. ARMY CORPS OF ENGINEERS
SAN FRANCISCO OFFICE
REGIONAL DREDGED MATERIAL MANAGEMENT PLAN (RDMMP)
DEVELOPMENT OF A PROJECT MANAGEMENT PLAN (PMP)**

**PMP PLANNING MEETING 1 -- TOXICOLOGY
JULY 7, 2020**

The purpose of this meeting is to identify guidelines for a sustainable Project Management Plan (PMP) through an open public process.

TOPIC	AGENDA ITEMS	START TIME
WELCOME Stu Townsley		8:30 AM
CHARRETTE PROCESS Priscilla Ouchida	<ul style="list-style-type: none"> • Introduction of Speakers and Facilitator Team • Explanation of Charrette Process • Review of Meeting Protocols • Questions Regarding Charrette Process 	8:35 AM
OVERVIEW Stu Townsley	<ul style="list-style-type: none"> • Summary of PMP • Meeting Objectives • Overview of Meeting Theme 	8:50 AM
COMMENT REVIEW Brian Gerrity	<ul style="list-style-type: none"> • Introduction of Comments to be Discussed <ul style="list-style-type: none"> • Sediment Quality Testing • Toxicology Associated with Dredging Practices • Toxicology: Transport Modeling 	8:55 AM
COMMENT RELATING TO SEDIMENT QUALITY TESTING	<ul style="list-style-type: none"> • Discussion on Comment • Polling on Comment 	9:05 AM
COMMENT RELATING TO TOXICOLOGY ASSOCIATED WITH DREDGING PRACTICES	<ul style="list-style-type: none"> • Discussion on Comment • Polling on Comment 	9:45 AM
BREAK		10:25 AM
COMMENT RELATING TO TOXICOLOGY: TRANSPORT MODELING	<ul style="list-style-type: none"> • Discussion on Comment • Polling on Comment 	10:35 AM
ADDITION OF NEW COMMENTS	<ul style="list-style-type: none"> • Open List for Addition of New Comments • Stakeholder Polling on Addition of New Comments • Close List of Comments to be Discussed 	11:15 AM
CLOSING STATEMENT Stu Townsley		12:25 PM

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**PMP PLANNING MEETING 2
RELATING TO CLIMATE CHANGE AND ENVIRONMENTAL ISSUES
JULY 9, 2020**

The purpose of this meeting is to identify guidelines for a sustainable Project Management Plan (PMP) through an open public process.

TOPIC	AGENDA ITEMS	START TIME
WELCOME Stu Townsley		8:30 AM
OPENING	<ul style="list-style-type: none"> • Introduction of Speakers and Facilitator Team • Explanation of Charrette Process • Review of Meeting Protocols • Questions Regarding Charette Process 	8:35 AM
OVERVIEW Stu Townsley	<ul style="list-style-type: none"> • Summary of PMP • Meeting Objectives • Overview of Meeting Theme 	8:50 AM
COMMENT OVERVIEW Brian Gerrity	<ul style="list-style-type: none"> • Introduction of Comments to Be Discussed 	8:55 AM
COMMENT 1 RELATING TO CLIMATE CHANGE AND ENVIRONMENTAL ISSUES	<ul style="list-style-type: none"> • Discussion on Comment • Polling on Comment 	9:05 AM
COMMENT 2 RELATING TO CLIMATE CHANGE AND ENVIRONMENTAL ISSUES	<ul style="list-style-type: none"> • Discussion on Comment • Polling on Comment 	9:45 AM
BREAK		10:25 AM
COMMENT 3 RELATING TO CLIMATE CHANGE AND ENVIRONMENTAL ISSUES	<ul style="list-style-type: none"> • Discussion on Comment • Polling on Comment 	10:35 AM
ADDITION OF NEW COMMENTS	<ul style="list-style-type: none"> • Open List for Addition of New Comments • Stakeholder Polling on Addition of New Comments • Close List of Comments to be Discussed 	11:15 AM
CLOSING STATEMENT Stu Townsley		12:25 PM

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**PMP PLANNING MEETING 3
ISSUES RELATING TO PHYSICAL PROCESSES
JULY 14, 2020**

The purpose of this meeting is to identify guidelines for a sustainable Project Management Plan (PMP) through an open public process.

TOPIC	AGENDA ITEMS	START TIME
WELCOME		8:30 AM
OPENING	<ul style="list-style-type: none"> • Introduction of Speakers and Facilitator Team • Explanation of Charrette Process • Review of Meeting Protocols • Questions Regarding Charrette Process 	8:35 AM
OVERVIEW Stu Townsley	<ul style="list-style-type: none"> • Summary of PMP • Meeting Objectives • Overview of Meeting Theme 	8:50 AM
COMMENT OVERVIEW Brian Gerrity	<ul style="list-style-type: none"> • Introduction of Comments to Be Discussed 	8:55 AM
COMMENTS RELATING TO SEDIMENT TRANSPORT	<ul style="list-style-type: none"> • Discussion on Comment 1 	9:05 AM
	<ul style="list-style-type: none"> • Polling on Comment 1 	9:20 AM
	<ul style="list-style-type: none"> • Discussion on Comment 2 	9:35 AM
COMMENTS RELATING TO BENEFICIAL RE-USE SITES	<ul style="list-style-type: none"> • Discussion on Comment 2 	9:55 AM
	<ul style="list-style-type: none"> • Polling on Comment 2 	10:10 AM
	<ul style="list-style-type: none"> • Discussion on Comment 3 	10:25 AM
BREAK		10:45 AM
COMMENTS RELATING TO DREDGING PRACTICES	<ul style="list-style-type: none"> • Discussion on Comment 1 	10:55 AM
	<ul style="list-style-type: none"> • Polling on Comment 1 	11:10 AM
	<ul style="list-style-type: none"> • Discussion on Comment 2 	11:25 AM
ADDITION OF NEW COMMENTS	<ul style="list-style-type: none"> • Polling on Comment 2 	
	<ul style="list-style-type: none"> • Discussion on Comment 3 	
	<ul style="list-style-type: none"> • Polling on Comment 3 	
ADDITION OF NEW COMMENTS	<ul style="list-style-type: none"> • Open List for Addition of New Comments 	11:45 AM
	<ul style="list-style-type: none"> • Stakeholder Polling on Addition of New Comments 	
	<ul style="list-style-type: none"> • Close List of Comments to be Discussed 	
CLOSING STATEMENT Stu Townsley		12:25 PM

**U.S. ARMY CORPS OF ENGINEERS
SAN FRANCISCO OFFICE
DEVELOPMENT OF A PROJECT MANAGEMENT PLAN (PMP)
FOR REGIONAL DREDGED MATERIAL MANAGEMENT PLAN (RDMMP)**

**PMP PLANNING MEETING 4
RELATING TO ECONOMICS, SOCIAL STUDIES AND POLICIES
JULY 16, 2020**

The purpose of this meeting is to identify guidelines for a sustainable Project Management Plan (PMP) through an open public process.

TOPIC	AGENDA ITEMS	START TIME
WELCOME Stu Townsley	<ul style="list-style-type: none"> • 	8:30 AM
OPENING	<ul style="list-style-type: none"> • Introduction of Speakers and Facilitator Team • Explanation of Charrette Process • Review of Meeting Protocols • Questions Regarding Charrette Process 	8:35 AM
OVERVIEW Stu Townsley	<ul style="list-style-type: none"> • Summary of PMP • Meeting Objectives • Overview of Meeting Theme 	8:50 AM
COMMENT OVERVIEW Brian Gerrity	<ul style="list-style-type: none"> • Introduction of Comments to Be Discussed <ul style="list-style-type: none"> • LTMS Goals • Efficiency 	8:55 AM
COMMENTS RELATING TO LTMS GOALS	<ul style="list-style-type: none"> • Discussion on Comment 1 • Polling on Comment 1 • Discussion on Comment 2 • Polling on Comment 2 • Discussion on Comment 3 • Polling on Comment 3 	9:05 AM 9:25 AM 9:45 AM
BREAK		10:05 AM
COMMENTS RELATING TO EFFICIENCY	<ul style="list-style-type: none"> • Discussion on Comment 1 • Polling on Comment 1 • Discussion on Comment 2 • Polling on Comment 2 • Discussion on Comment 3 • Polling on Comment 3 	10:15 AM 10:35 AM 10:55 AM
ADDITION OF NEW COMMENTS	<ul style="list-style-type: none"> • Open List for Addition of New Comments • Stakeholder Polling on Addition of New Comments • Close List of Comments to be Discussed 	11:15 AM
CLOSING STATEMENT Stu Townsley		12:25 PM

Webex and Audio Protocols

- Please log on **5 minutes** before the start time to allow time to log in and dial in.
- On WebEx, please type your full name and organization in, for example: (Brian Gerrity-Army Corps of Engineers, SF District).
- Please select the “**call me**” option when connecting to audio and provide a phone number for WebEx to call you.
- While presenting, all microphones will be on mute, once it is time for discussion the facilitator will call upon participants to speak by name, and the participant will press *6 on their phone to mute and unmute themselves.
- The WebEx link for each meeting will be sent at 8PM the night before each meeting.

Regional Dredged Material Management Plan Virtual Charrette

Read-Ahead



Charette #1 Toxicology-July 7th

Charette #2 Physical Processes-July 9th

Charette # 3 Economics, Social Studies and Policies-July 14th

Charette #4 Climate Change and Environmental Issues-July 16th

Charette #5 Other issues, parking lot, wrap up-July 21st (no comments yet generated)

Thank you for taking the time to review this read-ahead in preparation for the series of virtual charrettes. The five charrettes include: Toxicology; Climate Change and Environmental Issues; Physical Processes; Economics, Social Studies and Policies; and Summary and Next Steps.

USACE received many comments from a wide variety of stakeholders, and the charrette topics reflect the variety of the topics received. It is important to note, that in most cases there were several comments relating to similar topics (e.g sea level rise). For each topic area, USACE staff has selected comprehensive, representative comments to reflect the entirety of thoughts received from all stakeholders who provided written comments on that topic area. The following comments are the ones that will be used as the basis of discussion at the charrettes. If you do not see listed here the exact comment you submitted, it is likely because your comment was similar to and is encompassed by a comment selected to represent the topic. All comments that were submitted, whether or not they are listed here, will be considered by USACE in development of the PMP. All participants are encouraged to discuss these comments, expand on them, and enter new comments during the charrette.

The following pages reflect the comments that will be used as the basis of discussion during the charrettes. There are context statements provided for some comments to help provide additional detail related to the comment if necessary.

Charrette #1 Toxicology

Toxicology Comment #1

The environmental impact statement (EIS) should describe the multi-year sediment testing plan that has been developed in coordination with the interagency Dredged Material Management Office. A summary of past sediment quality testing results for each federal channel should be presented in the DEIS. In addition, the DEIS should address how the Corps will manage any maintenance dredged material that may be found to be unsuitable for unconfined aquatic disposal, or beneficial re-use at particular sites (for example, due to chemical contamination or toxicity to aquatic organisms).

Specific Mentions of Santa Fe Channel and San Rafael Contamination.

Context: Santa Fe Channel has not been dredged in the past due to contamination. Previous scoping letter provided to USACE indicated the concern regarding the sediment testing plan. USACE needs to incorporate a management plan for each channel and for dredge materials that is found unsuitable.

Toxicology Comment #2 The projects that are associated with the Regional DMMP will involve the use of dredging equipment, use of heavy equipment for off-loading, and truck transport of dredged material. These activities could have short and long-term impacts on air quality - particularly emissions of nitrogen oxides (NO_x - an ozone precursor), particulate matter less than 10 microns in size (PM₁₀), and carbon monoxide. The EIS should discuss the general air quality impacts of the projects associated with the Regional DMMP, and discuss options for mitigating these impacts.

Context: Scoping letter provided to USACE previously, and EPA still has concerns about toxicology as a result of dredging equipment and would like mitigation efforts and suggestions discussed in the RDMMP.

Toxicology Comment #3 Known sources of contamination such as sewage treatment plants and permitted industrial discharges as well as non-point sources of contamination such as

Superfund and RCRA sites, urban runoff, and landfill leachate. The contaminant classes considered must include PCBs, dioxin/furans with 2,3,7,8 substitutions, organochlorine pesticides related to DDT and chlordane, PAHs, and the metals cadmium, mercury, and methyl mercury.

Context: Overall concern about sediment transportation modeling and especially contamination transportation modeling. Need a sampling program and model studied to understand the full scope. Commenter also cited the 7/19/19 kick off meeting regarding the overall concern from other attendees regarding the possible toxins in the dredged materials.

Charrette #2 Physical Processes

Subcategory #1 Sediment Transport:

Sediment Transport Comment #1 SF-8 placement site refers to beach nourishment when it should refer to littoral cell support. For SF-9, disposal limited by LTMS and that mounding is occurring. SF 10- refer to LTMS, SF-11 refer to LTMS. Note the role that LTMS and EPA play in SF-DODs.

Context: PMP needs to take into consideration the uses of the current placement sites and issues related to them as well as take note of the LTMS goals.

Sediment Transport Comment #2 A hydrodynamic model of the bay that includes sediment transport, organic carbon production, contaminant fate and transport, and bioaccumulation is fundamental to understanding the environmental impacts of this dredging project. The model must identify and account for all external sources of contamination. These sources must include known sources of contamination such as sewage treatment plants and permitted industrial discharges as well as non-point sources of contamination such as Superfund and RCRA sites, urban runoff, and landfill leachate. The contaminant classes considered must include PCBs, dioxin/furans with 2,3,7,8 substitutions, organochlorine pesticides related to DDT and chlordane, PAHs, and the metals cadmium, mercury, and methyl mercury.

A fate and transport model of the bay is only as good as the data provided. An extensive sampling program is required and way overdue.

Context: Contamination is an important factor that needs to be studied for any plan related to dredged material and beneficial reuse. The PMP should prioritize studying how toxins are transported with sediment.

Sediment Transport Comment #3 Study sediment transport flows and mechanisms to help evaluate the carrying capacity to better understand future dredging needs for USACE. Need to

reevaluate whether or not the LTMS 20% in bay placement limitation and 40% ocean disposal allowance is the most environmentally sound approach.

Context: USGS study reporting a reduced suspended sediment load emanating from the Delta and therefore, the 20 percent placement in bay may no longer be the most environmentally sound approach to dredged material management.

Subcategory #2 Beneficial Reuse Sites:

Beneficial Reuse Sites Comment #1 SF Bay is a priority landscape for ecosystem restoration, especially habitat restoration for waterfowl. Ecosystem restoration provides many social, economic and environmental benefits. Waterfowl habitat should be prioritized with the RDMMP.

Context: Waterfowl habitat should be a priority for the RDMMP and the PMP should reflect the importance of waterfowl habitat when addressing possible beneficial reuse sites.

Beneficial Reuse Sites Comment #2 USACE should include habitat restoration, wave attenuation and endangered species benefit into the cost benefit calculation of beneficial reuse.

Beneficial Reuse Sites Comment #3 Federal, State and Local agencies are currently in a massive effort to restore wetlands and sediment is key to addressing the subsidence. Cullinan Ranch, Montezuma, Bel Marin Keys and Eden Landing all representing a commitment of over \$153 million of non-federal expenditures to date for land acquisition, planning, design and site prep. Sediment must be prioritized to these existing sites to prevent the subsidence and the RDMMP should consider these issues.

Context: A desire to continue to protect these listed sites as sites to continue to receive sediment from USACE dredging.

Subcategory #3 Dredging Practices

Dredging Practices Comment #1 USACE should use clamshell dredges in all bay channels/ USACE is not prohibited by the federal standard to beneficially reuse sediment or from using mechanical dredges in all in bay channels.

Dredging Practices Comment #2 Ports are concerned about maintaining dredging for operations, given the increasing cost. Implementing better beneficial reuse practices to help protect from sea level rise is a highly important topic in the region. Early coordination with LTMS and non LTMS agencies is important to discuss current dredging operations.

Context: The PMP should provide clarity about the current maintenance dredging practices and methods moving forward regarding the increasing cost and coordination.

Dredging Practices Comment #3 Mechanical dredgers have been used at Suisun Bay Channel due to endangered species entrapment. Mechanical dredgers make it easier for dredged materials to be transferred to beneficial reuse sites. Dredging practices should be given consideration into the PMP.

Charrette #3 Economics, Social Studies and Policies

Subcategory #1 LTMS Goals:

LTMS Goals Comment #1 USACE needs to incorporate the goals established by the LTMS and Management Plan into the RDMMP PMP. The LTMS and Management Plan represent interagency coordination for a 50 year period. The LTMS is not mentioned enough in an appropriate way throughout the PMP.

Context: The long term management strategy includes USACE as a partner for an interagency coordination program regarding dredging and sediment management.

LTMS Goals Comment #2 USACE should beneficially reuse 40% of the dredged sediment but instead USACE plans to dump dredged material at in bay disposal sites or deep ocean disposal sites. USACE should honor the commitment to LTMS and reuse the 40 percent.

Context: Current LTMS goals state that 40 percent of dredged materials should be reused beneficially and that this should be given consideration in the PMP.

Subcategory# 2 Efficiency:

Efficiency Comment #1 USACE needs to take the lead in identifying future placement sites for dredged material beneficial reuse. Find closer sites to dredging to lower costs while also helping respond to sea level rise.

Context: To help beneficial reuse fit within the Federal Standard, USACE must research more sites that could help lower the costs of beneficial reuse, in order to help combat sea level rise.

Efficiency Comment #2 There is concern regarding efforts dedicated to RDMMP could diminish efforts towards maintaining ongoing O&M dredging projects.

Context: Concern that USACE effort towards Operation and Maintenance dredging projects could diminish due to the RDMMP effort and that the diminished effort would have negative implications for current ports, navigation channels etc.

Efficiency Comment #3 There is a need for better narrative about the need for resource agencies to participate in the process and a narrative about the possible staffing issue in the region as this could be a constraint relevant to all the agencies.

Context: The RDMMP is a huge effort to be undertaken that involved USACE and partner agencies. Staffing for all relevant agencies is a concern as many agencies are understaffed and adding more coordination for this project could be difficult for the region.

Charrette #4 Climate Change and Environmental Issues

Climate Change and Environmental Issues Comment #1 If USACE does not beneficially reuse more dredged materials, sea level rise impacts will be exacerbated. For example, the rate at which sediment will accrete into former salt-production ponds that would be opened to tidal flows and whether this accretion and eventual marsh formation will keep pace with sea-level rise. There is substantial uncertainty regarding these critical aspects of successful marsh restoration, in the SBSP Restoration Project and many others.

Context: Concern over the implications of sea level rise combined with a lack of natural defenses by beneficially reuse.

Climate Change and Environmental Issues Comment #2 USACE must ensure that the RDMMP complies with the Coastal Zone Management Act

Context: In some cases, disposal is subject to additional regulation by state governments through state water quality certification and coastal zone consistency under the Federal Coastal Zone Management Act. EPA and USACE strive for coordination and consistency in selecting dredged material management alternatives on the basis of cost and environmental impacts.

Climate Change and Environmental Issues Comment #3 Time is running out, we have 10 years left to implement measures to adapt to predicted sea level rise. The timeline in the PMP for the RDMMP will take 5 years, which is too long to delay implementation.

Context: Concern regarding the timeline of the PMP with sea level rise considerations. PMP should take into account sea level rise curves and account for the timeline and respond accordingly.