Climate Change and Environmental Issues – Charette #2
July 9, 2020

Meeting Participants (from chat box):
Todd Bridges, USACE Engineer Research and Development Center
Bob Brown, Western States Petroleum Association
Seth Cohen, IWR USACE
Peter Dahling, Marathon Petroleum
Edwin Draper, Port of Oakland
Stan Ekren, Great Lakes Dredging
Sarabeth George, San Francisco Bay Regional Water Quality Control Board
Jim Haussener, CA Marine Affairs and Navigation Conference
Ryan Hernandez, Contra Costa County Water Agency
Mark Hughes, Industrial Association of Contra Costa County
Baily Keener, The Nimitz Group
Brian Nagy, The Nimitz Group
Cassie Pinnell, Montezuma Wetlands
Wendy Rocha, Foth Infrastructure & Environment
Brian Ross, EPA
Pascale Soumoy, BCDC
Renee Spenst, Ducks Unlimited
Dilip Trivedi, Moffatt and Nichols
Sara Azat, NOAA Fisheries West Coast Region

Meeting Organizers/Helpers:
Stu Townsley – USACE (Deputy District Engineer for Project Management)
Brian Gerrity – USACE SPN (Meeting Host)
Tawny Tran – USACE Project Manager
Priscilla Ouchida – Nikkei Environmental LLC (Facilitator)
Libby Claggett – Adanta, Inc. (Note Taker)
John Guenza – Adanta, Inc. (Facilitator)
Joe Schwennesen – Adanta, Inc. (Timekeeper/Note Taker)

The charette began at 8:30 AM PT. Priscilla Ouchida welcomed attendees to the meeting and began the presentation. Stu Townsley provided information regarding the purpose of the charette and background information. The overall purpose of the charettes is to shape the Project Management Plan.

Brian Ross, EPA, had a question about the voting process. He found Tuesday's charette voting frustrating since most people did not vote at all. With needing more than 50% of the vote in favor for address the comment in the Project Management Plan (PMP), it would not be a recommendation. In at least two cases, the voting was 4 to 3 in favor, but since most people did not vote, it was not considered as a recommendation. Brian Ross asked to keep in mind the number of people voting. Stu Townsley stated that there were changes made to the polling process in such that it is no longer a "yes" or no" vote. Priscilla added that there will not be a 50% majority voting now, and every vote will count. Brian Gerrity noted there are several USACE staff participants on the call who will not be voting.

General Comments Made During Meeting

8:43 AM from James M. Haussener to everyone: (this was after Stu Townsley's presentation)
Question - "bringing visibility to shallow draft harbors?" This was not in document released last year, why and what other changes have been made?

Response: To comment directly on the inclusion of a phrase cannot be determined at this time since changes to the PMP are still being made.

Previously Submitted Comments

Comment 1 Relating to Climate Change and Environmental Issues

> If the 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.

Jim Haussener asked if these facts are correct or opinions. Jim Haussener asked how much material will be dredged in a 10-, 20-, or 30-year period and will that make a different in the amount of material needed to protect the infrastructure (comment 1). Jim added the mailouts he received had this comment under Charette #4. There will be zoning disposal sites fighting over the material, and there should be more than on disposal site.

Stu Townsley added the Corps tried to capture the nature of the comments that were previously received. Jim asked what the annual in-bay dredging the Corps does. Stu Townsley stated it is 2.5M cubic yards a year.

Jim Haussener said his comment 3 that was emailed is not the same comment 3 that was on the slide, and Priscilla stated it was not the same.

Sarabeth George said the Water Board has had some staff turnover in the past few months; thus, if someone from the Water Board commented, she would not have that knowledge. Sarabeth George stated there is an economic benefit to the Bay economy for beneficial reuse.

Dilip Trived stated he does not agree that there is uncertainty regarding this subject. The need for beneficial reuse for raising marshes is essential. It is sediment from the Bay and needs to stay there and not be removed from the Bay. The last sentence said there is substation uncertainty. Dilip Trived said there is no uncertainty in his opinion. The removed material is much needed in the bay.

Renee Spenst commented that she agrees with the previous comments so far and that basically there are thousands of acres that were former wetlands that were reclaimed. However, the dredge materials are needed in the bay. Importing materials is a large cost due to transportation, and there is opportunity to be cost effective in achieving this restoration goal.

Sara Azat on the telephone, but not on the computer. She wanted to state that she is in support of beneficial reuse.

Comment 1 will be carried forward as a recommendation in the PMP.

At this point, Stu Townsley stated that he was going to change the direction of the charette into more of an audible/general discussion.

Comment 2 Relating to Climate Change and Environmental Issues

> 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.

Stu Townsley said there were several comments received that related to doing something now in lieu of losing an opportunity. Stu Townsley said he agreed in many instances that it is important to get ahead of the curve on sea level rise. However, should the Corps rush to deliver a PMP that does not have the public process include to act faster. Sarabeth George said that sea level rise will be accelerated one the next decade and that dredge material should be used where is can help with sea level rise. Stu Townsley asked

how that relates to the timing of the PMP. Sarabeth George said the timing is something that is being urged by the Water Board to the Corps and other agencies to reuse sediment out of the bay.

Jim Haussener said it should not take 5 years to develop a PMP. Brian Ross and Jim Haussener attended the original Long-term Management Strategy (LTMS), which was multiple years. A baseline was developed, and dialog created; thus, the process is going to long if there are not face-to-face meetings with all the players to hash out the details. Jim Haussener asked where the additional places are where the sediment can be placed and where should the material go first; this is a community decision.

Renee Spenst asked if it is worth doing an abbreviated timeline because of the critical need to accelerate reuse of sediment for restoration. Renee Spenst stated it does take a long time to plan and permit these projects, but there are currently sites that are permitted and ready to accept material. There are many opportunities for restoration.

Dilip Trived said he is of the opinion that any discussion about beneficial reuse cannot happen without the discussion about the federal standard, contracting strategies, and regional/supplement funding to supplement the beneficial reuse. These topics needs to be address or the beneficial reuse discussion will be lacking. Stu Townsley added that there has been discussion about how to use a more costly local vendor versus the less costly option.

Cassie Pinnell wanted to response to the comment about the pricing structure and tipping fees. The Montezuma project's tipping fees were not supplemented with public funding. The same logic applied to privately funded projects should be applied to publicly funded projects. Stu said he agreed, but one action is to get enough input to reflect a broader public consensus about the cost of achieving wetland restoration activities with the fill placement.

Jim Haussener stated the Port of Oakland upfronted $8 million to Montezuma and Measure AA funds sent over $1.6 million. There is funding available to the federal government. If the federal standard needs to be changed to have the Corps to beneficial reuse and dredging of all it, it will take new taxes or new funding to address sea level rise. That is why the dredge material needs to be used for the beneficial work.

Comment 2 will be carried forward as a recommendation in the PMP.

Brian Ross stated the EPA vote should have been no opinion (hit the wrong button).

Comment 3 Relating to Climate Change and Environmental Issues

> Sediment is key to addressing subsidence that occurs in the Bay and sediment cannot be wasted. There are restoration projects (Montezuma, Bel Marin Keys, Eden Landing and Cullinan Ranch) that represent about a decade of capacity for USACE's O&M dredging program. These projects must be considered moving forward to help the Bay Area adapt to climate change.

Stu Townsley said the Corps received a fair amount of comments stating to continue or begin utilizing beneficial use locations with respect to the dredging program. Stu Townsley agrees the Corps should, but the question is if to only use one or to use several.

Brian Gerrity commented the RDMMP will start with actual volumes over the years; but in reality, there has not been 40% going to the ocean. The amount "lost to the system" is not as large as people seem to think.

Jim Haussener asked if dredging over 10 years is 25 million cubic yards, is the capacity of these four sites 25 million cubic yards? Cassie Pinnell said their site does have the capacity to take the yardage and the other sites are even larger. Cassie Pinnell added it needs to be known what kind of sediment, how much, and where the sediment is from. There is room for in the state for multiple sites to handle the project.

Renee Spenst wanted to clarify that these are not the only sites where beneficial use of sediments is needed. These are the sites that are currently permitted or will be permitted in the near term.

Dilip Trived said the three comments did not seem controversial. Will the DMMP consider the restraints to beneficial reuse that have not resulted in as much beneficial reuse that was expected? Contracting strategies is the potential for bundling projects so that expense equipment can be kept busy during a standby day on one project and used at another project. Can there be a contract in place with option years?

Jim Haussener asked what is cost per acre of wetland restoration at these various sites? His understanding is that the Hamilton project (not the dredging portion) was about $150K per acre. Should we be looking at less expensive projects or systems? If the goal is restoration, should we maximize the bang for the boat. If the goal is wetland protection, does the money matter? Jim Haussener said the comments seen today do not address putting the material back in the bay.

Stu Townsley wanted to ensure Jim Haussener's comments were acknowledged. The cost per acre for wetland restoration is more focused to the Corps. Unless it is a Corps project, there is no actively owned, managed, or construction to the wetlands for the Corps, so the cost per acre is not a direct issue for the Corps. Jim Haussener feels it is a Corps issue because the cost is being paid to the contractor via tipping fees or some other manner. Per Jim Haussener, it becomes a less than obvious cost to the dredging program and should be considered in the DMMP. Stu Townsley asked if anyone had a contrary position to this statement, and no one responded. Mark Hughes said his understand is that the plan did not include the costs and if there was a wetland restoration that wanted some of the dredging materials, they would be required to pay for the transportation of the material. Stu Townsley stated this is a tough question to answer. As a result of permitting requirements developed through the LTMS process, the Corps has agreed to beneficially reuse 40% of the material in upland sites; thus, the Corps has a responsibility of 40% of the cost.

Dilip Trived said the in-bay disposal needs to be qualified that the present disposal sites are not necessarily the best in-bay disposal option. Dilip Trived feels the net needs to cast wider for aquatic disposal sites. The site should be closer to the need for where the sediment is and not the existing dump sites. Stu Townsley responded being beneficial for the overall health of the bay, there needs to be a better understand of the sediment transport patterns within the bay so different locations can be targeted; however, there is not a tool or easy path forward for this. There do need to be alternatives for cost and effectiveness. Jim Haussener (maybe jokingly) commented that PN 68-1 should be repealed.

Stan Ekren asked for upland placement of dredge material, should the USACE consider a multi-year contract for offloading services? The only offload contract for the Corps appears to be a sole-source contract. Stu Townsley said it is not sole-sourced and the only specific in the contract is that the material needs to go upload and it is up the contractor to provided that. Stu said the Corps will be looking at the long-term management of the dredging program to review the costs. Stan added that there is currently only one loader in the bay area for offloading, and others should be considered.

Brian Ross stated the USACE did a V-E Study (I think in about 2010) looking at a wide range of efficiency measures. RDMMP should reflect that and not needlessly reinvent wheels (unless the answers would be different today than they were then. Example, bundling contract, supporting offloaders, etc.). Brian Ross wanted the team to be aware of the V-E Study.

Comment 3 was not polled.

New Comments

Stu Townsley stated that the Corps is supposed to look at three sea level rise curves in developing their plans. The state has two additional curves between the Corps medium and high curves. The state would also like projects to look at their high curve as well. Stu Townsley has not heard anything or seen any comments regarding the impact of a higher sea level impacting the dredging program. Will the same amount of material be dredged, or will the extra feet just make the dredging be deeper?

Jim Haussener asked if Stu Townsley was talking about the Ocean Protection Council's Strategic Plan and their SLR # for 2050, which other agencies are supporting. Stu Townsley said yes it was from that plan.

Jim Haussener said the plan is so new that he does not know of any agency that has incorporated into their permit. Jim Haussener said he believed it was 3 ½ feet in the draft document. The commission chair thought the footage was too low and wrote a letter on letterhead stating the number should be 5 feet. Stu Townsley said the reality is that all curves increase over a 20-year period. The large surface elevation will continue to rise during the planning period; thus, there is no magic number to look at. Jim Haussener said the Protection Council has conducted studies regarding probable sea level rise; thus, the curve is not the same as probability.

Pascale Soumoy responded that she works mostly with dredging and has less exposure to upload projects, but stated when public access is considered, base flood elevations are considered with various sea level scenarios applied. Pascale Soumoy said she could ask to see if there is further information on this, and Stu Townsley said that would be good.

Stu Townsley stated that sediment transport will reduce the amount of material dredged from 2 to 2.5M cubic yards annual to less than 1M cubic years. How should the Corps be looking at reconciling the tension about sea level rise. Brian Ross said typically when a channel is deepened, there is more dredging to be done and not less. It would be important to include the modeling in the DMMP. Changing sedimentation patterns and the increase of sea level in the production of sediment should be addressed. There has not been any modeling to show there would be less material dredged by using sediment. Adequate disposal capacity for the future should also be addressed in the DMMP.

Todd Bridges stated that another mechanism that could influence sediment processes and transport under higher sea levels is that higher water levels could contribute to accelerating shoreline erosion; thus, releasing more sediment into the Bay could contribute to sedimentation in channels.

Stu Townsley said he was trying to have discussions to gauge looking at long-term sediment budgets in the Bay given the dredge material will be an important resource in the future.

Stu Townsley asked if anyone believes that without better sediment model and science, we will be able to appropriately capture a 20-ear future with the amount of dredge material for beneficial reuse. Brian Ross stated it can be partially answered with the information on hand today, but it would be better to have the scientific information. Tim said that he is not sure over a 20-year period how much more science is needed to determine how much more material is in the channel that needs to be dredged within ± 80%. Dilip Trived agrees with Brian Ross, but right now the effort needs to go into the redistributing of sediment in lieu of the effects of sea level rise; however science is needed to determine if the sediment is going in places where it needs to go.

Stu Townsley asked how much science is needed to make a policy level execution.

Renee Spenst commented that it would be great to also study additional in bay mudflat placement in different locations in North and South Bay. There have been a couple of areas studied, but it would be great to find locations where this would be effective.

Stu Townsley stated that he believes this is the most important Corps project in the district. There are many issues that will need to be addressed collectively in the future.

The meeting was closed at 10:53 AM PT.