

## Draft Meeting Summary

### Coastal Sediment Management Workgroup Meeting

August 17, 2016

Location: USACE, 1455 Market Street, Lobby Conference Room, San Francisco, CA

USA Toll-Free: 877-336-1829

Access Code = 2322795

Security Code = 1111

Webmeeting:

<https://www.webmeeting.att.com>

Meeting Number = 877-336-1829

Access Code = 2322795

Host = 9707

**Attendees:** Mark Johnsson, Chris Potter, Anne Sturm, Heather Schlosser, John Dingler, Megan Whalen, James Zoulas, David Cannon, Leslie Ewing, Joe Dux, Casey Caldwell, Phyllis Griffman, Jon Warrick, Brenda Hayden, Jim Haussener, John Smith

#### 9:35 Welcome and introductions (Chris Potter and Anne Sturm)

- **Announcements (all)**

**These items have been carried over from the April, May, and June Agendas:**

- Discuss implementation funding for RSM and ideas to get it going (David and all): To be discussed at the August 17, 2016 meeting (today).
- Funding opportunities for unsolicited sand resource assessment proposal (BOEM) status: A separate meeting was held to cover this item.
- Updates on Eureka RSM and other RSM plan status (David, John, Clif): Will be discussed at August 17, 2016 (today)

#### 9:40 Review of meeting minutes and action items from previous meetings (Megan Whalen and Chris Potter) April, May, and June Meeting Summaries have been distributed for review.

#### 10:00 Presentation: New from the Old - Measuring Coastal Change from Oblique Aerial Photos (Jonathan Warrick, USGS)

##### Jon will provide link to research

- Structure from Motion Photogrammetry Method: Using images to build a 3D model of something. This method has traditionally been done by software. Many archeologists have used this in labs to construct sites. Some of the software is available on a free-trial basis. Fort Funston was used as an example because of its location close to Ocean Beach. All datasets get combined to perform 4D analysis. The metadata for each position is geo-located.
- Department of the Interior flight services was used to obtain imagery
- Photo Scan and AGIS were used in this study; other software exists to perform the same analysis. JPEG and TIFF files can be used and you can use a phone to take the pictures as long as you do not omit the metadata or raw photo information.
- Color (RGB) and point (X, Y, Z) information is needed. Cloud Compare (free software) was then used to look at changes over time. 20-30cm accuracy for point data is estimated.
- Weaknesses: It cannot see through vegetation and objects must be stationary between photos. LIDAR can penetrate through vegetation to some extent
- The time of day that the images are taken is important and that the light is similar, in the afternoon (West Coast) during low tide is usually the best condition.

Questions:

Brenda: Are you going to include San Francisco Bay in this effort? No, historic photos do not exist that can be overlapped.

Chris: What is the frequency of the coastal records acquisition? 2-3 years, can be more frequent in some areas, Northern California has 4-5 datasets.

Mark: Can you take two photos and do this? Yes, but more photos make for better accuracy and use a control point.

David: Is this faster to do than a LIDAR survey? It depends if you have the instrumentation. You can also use a drone, quad, or plane mounted/pilot to collect imagery.

James: Can you get armored rock, jetties, groins, and smaller boulder movement information? Yes, you can get to that level. Often these are cut off in imagery.

John D.: Can you do vertical perspectives? Yes and oblique.

Jim: Can we pin-point problem areas? Yes, it adds to the data

Chris: Did you get a grant to do the work, or what was the impetus to do this? It was realized that the work could be done quicker, more cost effective, and with ease using this method. The paper is meant to help other people learn that this is an option.

Chris: What is the scale of effort for the entire coast? It is not known at this time what it would take to do the whole CA coast. Images are taken in September/October time frame. Old photos could be used, but it is unclear what would need to be done to clean them up; it could be expensive to resource intensive all of these photos.

#### 10:45 Federal updates and announcements

- **USACE, LA District and SF District:** SF District received Authority to study three areas of erosion in Pacifica. James briefed on CCLEAN <http://www.cclean.org/wp-content/uploads/2014/07/CCLEAN-2014-2015-annual-report.pdf>, a multi-agency effort, developing a model to determine the average amount of particulate matter. This could be problematic in that it could counter findings from actual samplings. It was discussed that the Monterey Bay National Marine Sanctuary should be included in October meeting. Chris will follow-up with Karen Grimmer on this. San Lorenzo River, along the coast in Santa Cruz, study is being resurrected (75 cubic yards of sediment removal).
- **USGS:** Expert review panel may call upon CSMW for future **Continental Shelf Study**. Nearshore workshop in North Carolina will take place as a follow-on to Duck workshop to talk about the evolution of USGS and future activities, October 18-24, 2016.
- **OEM, NPS, and USEPA:** No one present from these agencies.

#### 11:10 State updates and announcements

- **State Parks-DBW:** State Parks is going through a reorganization, to become more responsive to stakeholders, and is looking for suggestions on how to be more useful in the future, comments are due by the end of September. The FY17/18 applications are currently being reviewed by DBW staff. FY18/19 grant guidelines should be coming out very soon.
- **Coastal Commission, BCDC:** CEMEX was subject of public comment at the August Coastal Commission meeting in Santa Cruz. Residents are upset that sand is being sold from the mining facility CEMEX in Marina. No regulatory action yet from the Coastal Commission.
- **CDFW, SWRCB:** No one present from these agencies.
- **CMANC, CalCoast:** Nothing to report.
- **Tijuana Estuary Fate and Transport Study:** Coastal Conservancy is funded to do a report to determine impacts. Deltares will send out final memo and Everest (SWIA) has been awarded the contract. Phase II of the Tijuana Recovery needs to be developed.

#### 11:35 Discussion: SMP Stakeholder Outreach and Plan Formulation (David Canon, Everest Consultants)

Next Steps on Plan Formulation and Outreach with Everest and what our last effort should be. It was discussed that we could meet in San Francisco or San Diego.

- David indicated that he has three deliverables remaining in his contract that need to be completed by September 30, 2016. The three deliverables are: (i) attendance at a final stakeholder meeting, (ii) preparation of a sediment management activities list, and (iii) preparation of an Implementation Framework for the Sediment Master Plan. The Implementation Framework is to form the basis of an Implementation Strategy to be developed in the future.

He informed the attendees that he submitted a draft sediment management activities list to some of the CSMW members on Tuesday, August 16 and he is seeking input on the draft.

- David said he was looking for CSMW input on the Implementation Framework in terms of content, structure, format, and distribution. David said that in prior a discussion with a small subset of the CSMW the final meeting was targeted for October, possibly partnering with the **California Shore and Beach Preservation Association (CSBPA)**. This small subset of the CSMW identified the target audience for this meeting as project proponents (e.g., BEACON, SANDAG, ports). David said that five potential topics were identified for possible inclusion in the Implementation Framework as summarized below.
  - The Implementation Framework could “champion” regional sediment management as a sea-level rise adaptation measure with a tie-in to LCP amendments being conducted throughout the state.
  - The Implementation Framework could propose utilizing the USACE Regulatory Program (e.g., CWA Sec. 404 permits) as a regional sediment management implementation tool. For example, permits could have check boxes to identify whether or not a proposed activity is consistent with an approved/adopted/final regional sediment management plan.
  - The Implementation Framework could put forth an outreach program for materials developed under the Sediment Master Plan umbrella that would focus on getting the right materials to the right people (e.g., biological impact references to resource/regulatory staff, funding source information to project proponents) to facilitate implementation of regional sediment management activities.
  - The Implementation Framework could be summarized in a brief (two to six pages), glossy brochure for distribution to various stakeholders. Alternatively, a glossy brochure could be prepared for distribution to stakeholders that would summarize the major work products prepared under the sediment master plan umbrella.
  - The Implementation Framework could include a summary of funding sources (e.g., USACE CAP, USACE New Project/Feasibility Study, State Public Beach Restoration Act) that local governments/organizations could utilize for regional sediment management activities.
- Originally, it was thought that the last meeting would wrap up regional efforts and summarize how we would implement projects, programs, studies, policy, and governance measures developed through the regional sediment management planning efforts. However, there was a lengthy discussion regarding whether this should be the focus of the Implementation Framework or if the Implementation Framework should focus on a “top-down” Statewide approach to implementation. Some people feel strongly that the Implementation Framework should include information for local governments (e.g., coastal cities, counties) regarding funding sources and suggestions for organizational partnering (e.g., CBSPA, ASBPA), while others indicated that the focus should be on helping state agencies/departments become better organized and funded – local focus vs. state focus.
- Issues in the San Francisco Bay were not deeply explored because it was thought that separate efforts could do this and that Master Plan should cover the entire State and not just one region. Central and Northern California needed more effort than Southern California, so the meetings were organized in a way that could help “catch up” the areas that needed more work. **Chris/Heather will follow-up with Brenda about San Francisco Bay.**
- There is a desire to have a larger discussion and meet in San Francisco, while still meeting in San Diego. The goal is to have agencies that have done RSM successfully to help others who are having difficulty.
- USACE has been pursuing this effort (CA Sediment Master Plan) through a partnership with the State for the past 15 years and its coming to a point where the USACE needs to come to a resolution on this effort, put forth strategies and a framework, and determine other ways that the USACE can still collaborate. It was mentioned that the USACE intends to utilize Section 204 of the Continuing Authorities Program to assist the State with implementation of regional sediment management.
- BEACON has developed an implementation strategy for their adopted RSM Plan that could serve as a model for other RSM plans. Cost, schedule, and other important areas were covered in this plan. Under this approach each region would have to develop their own implementation plans and do environmental analysis on a project level basis.
- Is there any possibility of doing a half-day workshop and include higher-level people to help champion the effort? Invite OPC, Coastal Conservancy, and others? It was recognized that there is a need to pull all of the agencies together.
- It is more difficult to do studies in smaller areas that are not beach adjacent because they have less visibility and economic support.
- Chris is interested in getting a meeting with OPC early next year. Jim suggested that we can also do some legislative work in Sacramento.
- Brenda mentioned that they did not get much feedback on the San Francisco Central Bay shoreline report. A second look will occur, and the North and South Bay will be next effort. More will come in late in 2016.
- October 17<sup>th</sup> is OPC meeting, perhaps we could have a meeting close to that date; tentatively October 4<sup>th</sup> in San Francisco, Chis will check on two potential meeting locations: Oakland State Building and US EPA Office.

**12:25 Confirm date, location, and agenda for future meetings**

- **Dates and topics for future CSMW meetings (Chris Potter)**

\*\*September 21<sup>st</sup> 2016, possibly in-person depending on confirming presentation of CoSMoS by Patrick Barnard from USGS.

**12:35 Adjourn**