

MEETING NOTES

Columbia Near-Shore Project Partners Meeting

Monday, April 17 – 10:00 AM
OSU Seafood Lab, Astoria

In attendance:

Dave Hunt, CRCC
Dale Beasley, CRCFA
Greg McMurray, DLCD
Cathy Tortorici, NOAA
Jon Allen, DOGAMI

Bob Burkle, WDFW
Dan Jordan, Col. Bar Pilots
Doris McKillip, USCOE
Steve Greenwood- NPCC

I. Report on Congressional Meetings

Steve Greenwood reported on recent meetings with the Oregon and Washington congressional delegations regarding a \$700,000 Congressional appropriation request for the Columbia Nearshore Project in FY 2007. The funding would go to NOAA and the Corps of Engineers budgets in equal amount (\$350,000) to pay for the Phase II Demonstration for the Nearshore project.

Steve reported that the Congressional staffers were well-acquainted with the project, and very supportive. They understood the importance of the long-term goal to keep sand within the littoral zone, and were encouraged by the successful completion of the 2005 demonstration.

II. Announcements from Corps of Engineers

Doris began her report by talking about the South Jetty Repair, which had a separate appropriation for FY 2006. She said that this was a bad year, and there was a loss of 50 feet of the jetty's length due to winter storms this winter. Repair work will begin at the end of May.

Doris also announced two upcoming conferences: On August 29-31 there will be a conference on Watershed and Sediment Management conference at the Doubletree at the Lloyd Center in Portland. Also, there will be a free Estuary Conference later in the year that will focus on status and trends on the lower

Columbia. Walt Pearson will be talking about Dungeness crab at this conference.

Doris said that the Corps will be carrying over the unspent \$1.4 million for the Southwest Washington Littoral Drift Project (Benson Beach) and they will be looking at alternatives.

Walter Pearson is currently conducting the second phase of a study on crab mortality, utilizing laboratory testing on Dungeness crabs, including molting crabs. The completion of the study is anticipated by December of this year. (*note: Bob Burkle suggested that the study include sand that is similar to the MCR, to ensure the results will be applicable to the nearshore project.)

The Corps is also working with USGS to complete development of a Delft model on currents in the nearshore MCR area. This model development will be useful to the Nearshore project, and is utilizing data collected a few years ago.

III. Review of 2006 Columbia Near Shore Work Plan – Presentation and Discussion.

Steve Greenwood handed out a draft 2006 Nearshore Project Workplan, based upon the work of two technical subcommittees: one dealing with biological issues, and one dealing with wave, current, and sediment migration issues. The ideas for the 2006 Workplan were initially generated by the project team at its November 2005 meeting.

Because the 2006 funding went to the Corps, that agency will be the one contracting with scientists to conduct the various studies. It was noted that with other studies going on, including the completion of the Delft model for the area, most, if not all, of the work can be done through modeling, rather than requiring additional field work.

The key information to be derived from the various studies outlined in the workplan includes answering some key questions about the next phase of the project:

- ◆ Will material placed at candidate site(s) disperse to feed the littoral budget, i.e. will the material behave as intended?
- ◆ What is the rate and direction at which placed material moves?
- ◆ What effect do various mound geometries have on the ambient wave/current field?

- ◆ What is the deepest water depth that dredged material can be placed south of the south jetty and still have a beneficial effect on the littoral sediment budget (on a 1-5 year to basis)?
- ◆ Where is the best location to initial a Phase II pilot study (distance offshore, distance from south jetty) for the purpose of evaluating the transport of placed dredged material toward shore?
- ◆ Can placement of MCR dredged material south of the south jetty stop the rate shore profile erosion? How much material will that require (per year)?

Proposed FY 2006 Workplan

1. Conduct wave amplification and impact analysis and develop recommended monitoring needs for 2007 Phase II Demonstration project (Wave models to include SWAN, REF-DIF, DEL Bouss) – To be conducted by OSU. Estimated cost \$60,000
2. Conduct wave estimate for wave amplification and impact analysis and recommended monitoring needs for 2007 (models to include STWAVE, WABED, Bouss-2D, M2D, ADCIRC, M3D) – To be conducted by ERDC-NWP - Estimated cost \$50,000
3. Conduct a circulation, sediment transport potential, and morphology change analysis and recommend monitoring needs for 2007 (Using Delft 3D) - To be conducted by USGS. Estimated Cost: \$60,000
4. Model dredged material placement for Phase II and longterm configurations (Using MDFATE) – To be conducted by NWP. Estimated Cost: \$10,000.
5. Monitor nearshore bathymetry at area of proposed phase II site for MCR-Nearshore Beneficial Use Project (2006 and 2007)- To be conducted by OSU. Estimated Cost of \$20,000.
6. Conduct lab testing of Razor Clam impacts from sediment disposal. To be conducted by PNNL. Estimated Cost: \$98,000
7. Assess the detailed sediment budget south of south jetty 1885-1958, 1958-2003, future conditions – To be conducted by Washington DOE. Estimated Cost: \$10,000.

Total Cost for proposed studies and workplan: \$308,000

Considerable discussion and feedback ensued on the workplan:

Wave amplification studies

- ◆ Make sure that those testing different models are talking with one another (C.Tortorici)
- ◆ The actual geometries used in the modeling are very important...don't just look at one presumed geometry. (Beasley)
- ◆ Suggest that the scenarios to be tested be run past the NOAA Science Center (Tortorici)
- ◆ RCP should be one of the 9 wave models used (Beasley)
- ◆ Long periods waves should be used for modeling...this is what crabbers are most concerned about (Beasley)
- ◆ Make sure that impact to the jetty is part of the study and that we aren't "focusing" wave energy on the jetty (*note: this is part of tasks #1 and #2 above)
- ◆ The acceptable limit of wave amplification should be 10% (Beasley)
- ◆ One should broaden the geographic scope of the study to ensure impacts are looked at beyond just the immediate area (Beasley)
- ◆ Focus on areas of problems...don't need to look at northwest waves, focus on south/southwest. (Beasley)

Sediment Transport and Modeling

- ◆ Geo-Sea study should be considered for some of this work (Beasley)
- ◆ Need model the geometries over time (several years?) to see what long-term impacts may be. (Beasley)
- ◆ Need for joint conference calls to coordinate among scientists and studies going on (Tortorici)
- ◆ Look at Site A as an example of what might happen (Beasley)

Other comments

- ◆ What are the underlying numbers that will be used in the studies...would like to see them. (Beasley)
- ◆ Razor clam study value questionable...razor clams don't go out that far (35-70 ft depth)
- ◆ Let's make sure Dales concerns are shared with the scientists and contractors (Tortorici)

The Corps will move ahead with the workplan as proposed, and will utilize the comments received in specific research design. The comments of the group will be shared with the scientists involved in the project.

Further, the group would like to be informed of the choices for the geometry scenarios intended to be used for the modeling of wave impacts.