

FINAL
CRCIP AMT Quarterly Meeting Notes
July 11, 2012

The CRCIP Adaptive Management Team held its quarterly scheduled meeting from 9:30 am – 3:30 pm on July 11, 2012 at the Robert Duncan Plaza. The following AMT members, technical support personnel, and invited guests participated in person:

Jessica Stokke, USACE	Rick Mraz, WDOE	Steve Bartell, Cardno
Greg Smith, USACE	Ben Meyer, NMFS	ENTRIX
Agnes Lut, ODEQ	Kathy Roberts, FWS	Blaine Ebberts, USACE
Noah Adams, USGS	John Plumb, USGS	Toby Kock, USGS

The following topics were addressed by the AMT participants during the July 2012 quarterly meeting:

January and April 2012 AMT Meeting Notes

Draft January and July 2012 meeting notes were provided to the AMT prior to the July 2012 meeting. Kathy Roberts (FWS) had some comments concerning the discussion of the reintroduction of deer to Cottonwood Island in the January 2012 meeting notes. Bartell will follow up with Kathy via email to make the necessary changes to the meeting notes. In addition, Agnes Lut offered several comments (via email) concerning the January meeting notes. Briefly, areas of shoaling (e.g., near Kalama) should be captured for tracking in relation to future O&M or channel deepening. Lut also reminded that a handout was provided at the January meeting (Plan to Reduce Stranding Risk) and that the AMT had suggested that fish stranding be incorporated into the Regional Sediment Management discussion as a means to reduce fish stranding through beach nourishment. Revised January meeting notes will be provided prior to the October AMT meeting for consideration and approval.

Lut offered comments on the April 2012 draft meeting notes: the locations of shoaling should be identified (e.g., mouth of the Cowlitz, Westport Bar at the upstream end of Puget Island). Lut also reminded that Noah Adams and colleagues at the USGS lab in Seattle will be providing a peer review of Dr. Pearson's fish stranding analysis. In addition, Dr. Pearson will provide comments to questions raised by the AMT concerning his analysis of fish stranding. The AMT will evaluate the acceptability of Dr. Pearson's reply to the AMT prior to implementing the review by the USGS. Revised April meeting notes will be provided prior to the October AMT meeting for consideration and approval.

O&M and Project Mitigation Update

Columbia River flows thus far in 2012 have been similar to flows in 2011. As a result, problems with shoaling encountered in 2011 have continued in 2012. Flow data suggest that flows of 380-400 thousand cfs and greater produce shoaling in the Columbia River. Thus far in 2012, shoaling has been widespread and particularly a problem in the middle portion of the river.

Recent work at Chumbley mitigation site has focused on the removal of poison hemlock from the site. Planted vegetation has become substantially developed and plant (grazing) protectors will be removed from Chumbley site this year.

Mitigation work on Cottonwood Island included mechanical weed removal (“weed-whacking”) around the planted vegetation. Additional mowing and spraying are planned for the fall of 2012.

The tide gates that control flows through the constructed wetlands on Webb Island have been constructed (Mark Dasso, USACE project contact). The wetlands were constructed as valuable habitat for waterfowl. However, the NMFS has not granted permission to operate the gates. As a result, additional construction might be required to provide an operational system if permission to operate is given. Mowing at Webb Island was delayed in 2012 to avoid potential impacts to ground nesting birds.

AEM Workbook 3rd Quarter Review for 2012

The relevant components of the CRCIP AEM Workbook were discussed at the July 2012 quarterly meeting.

MA-1 CORIE Analyses

The available data for the July AMT meeting reflect the previous and current status of the CORIE stations required for the MA-1 analyses:

- cbnc3: operational, but no telemetry; data download was scheduled for July 9; temperature and salinity for 2012, but now at 9 m, instead of 6.5 m
- grays: operational; data available through July 2012
- tansy: operational; temperature and salinity data available for May-July 2012
- woody: operational, but no telemetry; data download scheduled for July 3 or 5; no data available for 2012
- dsdma: not operating; maintenance scheduled for end of July 2012; no data available for 2012

Temperature

Water temperature data obtained from the tansy station for June 2012 were slightly elevated compared to pre-construction benchmark values, but well-within the decision criteria. Data for the first half of June were within the 20th and 80th percentile values calculated for the tansy station; data from the second half of June were within the 80th-95th percentile criteria.

Daily median values of water temperature obtained from the grays station generally within the 20th-80th decision criteria for most of April, May, and June 2012. However, daily values in the early weeks of each month were mainly within the 5th-20th percentile decisions criteria. Several daily temperature values in early April were ~1-2 degrees C less the 5th percentile values; however, these temperatures subsequently increased throughout the remainder of April and were consistent with pre-construction data for the grays station.

The absence of data from the woody station precluded the development of the normalized water temperature plots for 2012.

The post-Project construction CORIE data available through 2012 continue to suggest that the channel improvements did not have any measurable impact on water temperatures recorded at the MA-1 stations.

Salinity

The June 2012 salinity data available for the tansy station were generally distributed around the 20th percentile decision value.

Salinity data available from April-June 2012 for the grays station were mainly distributed between the 5th and 20th percentile decision criteria. These comparatively low salinity values at the grays station are consistent with the high Columbia River flows observed thus far in 2012.

The absence of data for the dsdma station did not permit the construction of normalized salinity plots for the individual CORIE stations in 2012.

The post-Project construction CORIE data available through 2011 continue to suggest that the channel improvements did not result in any significant saltwater intrusions at the MA-1 stations.

Depth

Depth data were available for the grays station through June 2011. Daily median depths were well within the previously established AMT decision criteria. The monthly average values calculated for April through June were within the corresponding 20th and 80th percentile decision values.

Extended Time-Series Plots

Shyam Nair (E2) continued the multi-year time series plots of temperature, salinity, and depth for stations the CORIE stations. These plots were presented at the July 2012.

The results of the July 2012 MA-1 analysis will be posted in the MA-1 folder of the AEM Workbook on the E2 CRCIP web site.

MA-2 Construction and Disposal of Dredged Materials

MA-2 has been completed as a component of the CRCIP AEM Program. Future reporting of volumes and placement of dredged materials will be in accordance with regular annual O&M procedures.

MA-3 Crossline Surveys

MA-3 activities were not scheduled for the July 2012 AMT meeting. It is anticipated that results from analysis of the most recent crossline surveys will be presented at the October 2012 AMT meeting.

MA-4 Habitat Analyses

Greg Smith (USACE) provided the historical context of the MA-4 activities within the CRCIP AEM Program. This review provide a context within which the AMT discussed a proposal by Drs. Antonio Baptista and Dan Bottom to essentially repeat their pre-construction assessment of juvenile salmonids habitat opportunity for conditions (i.e., bathymetry, salinity, flows) associated with channel modification. The intention is to identify increases or decreases in habitat opportunity for juvenile salmonids as the result of channel modifications. The proposal includes review wand analysis of the technical literature in addition to simulations using an updated physical model of the Columbia River and additional data describing habitat requirements of juvenile salmonids.

The AMT discussed the proposal from the perspective of how the results of the proposed study would address the AEM requirements of MA-4. Questions were raised concerning the summarization and presentation of the modeling results in relation to the MA-4

requirements. A resulting action item was to invite Baptista and Bottom to the October AMT meeting for further discussion of the proposed efforts.

The Baptista-Bottom proposal had been previously posted to the E2 CRCIP web site as read-ahead material for the July 2012 AMT meeting.

MA-5 Sediment Contaminants

MA-5 was not on the agenda for the July 2012 AMT meeting. No new information for MA-5 was presented.

MA-6 Fish Stranding

The evaluation by the AMT in meeting the AEM requirements for MA-6 continued at the July 2012 meeting with (1) a description of the peer-review of Dr. Pearson's stranding model and scenario analysis and (2) an update on the USACE internals analysis of fish stranding locations and potential opportunities for beneficial management actions that might reduce stranding:

External Peer Review of Pearson Analysis

The peer review of Dr. Walter Pearson's statistical model and analysis of post-construction fish stranding will be performed by technical staff at the USGS Western Fisheries Research Center, Cook WA. Three USGS representatives (Adams, Plumb, Kock) attended the July AMT meeting and described their peer-review process. The process will address the peer-review issues developed previously by the AMT. The review will focus on the structure of the Pearson statistical model, its associated parameter estimates, and the results of the navigation scenarios addressed in the Pearson report. The USGS will also consider alternative model formulations and examine the technical literature to potentially identify similar or alternative analysis of fish stranding. The USGS will work collaboratively with Dr. Pearson during the peer-review process. The USGS will present a progress report on the peer review at the October 2012 AMT meeting.

In follow-up discussions, Agnes Lut (DEQ) asked whether the results of the review process would address the AEM requirements of MA-6 concerning fish stranding. Noah Adams (USGS) stated that the results of the review process might recommend some field measures to verify the results of the stranding analysis. Lut further asked if the results of the review might help identify physical characteristics of beaches where management actions might reduce fish stranding. In related discussion, Adams suggested that future MA-6 work might focus on the potential impacts of stranding on the resources (i.e., fish populations) instead of the probability of stranding.

In performing the peer review, Noah Adams (USGS) will serve as the project contact. The Principal Investigator is John Plumb (USGS). Much of the technical work will be performed by Toby Kock (USGS).

The USGS presentation that described the intended peer review process will be uploaded to the MA-6 portion of the electronic AEM Workbook located at the E2 CRCIP web site.

In addition, Jessica Stokke informed the AMT that a multi-agency (e.g., USACE, NOAA, USGS, others) fish stranding meeting is scheduled for July 23 hosted by the Port of Vancouver.

USACE Internal Analysis of Fish Stranding Locations

The USACE has been performing an internal evaluation of possible locations of sites that might benefit from management actions aimed at reducing fish stranding. Jessica Stokke (USACE) had been examining drawings of protective berms suggested to reduce fish stranding in a report produced by Environ. During the course of this investigation, it became understood that the drawings of these berms or shielding features had no underlying engineering or analysis. There seems to be no technical basis for the location and shape of the features included in the report. Stokke will follow up. However, the usefulness of the conceptual maps and drawings for guiding future management actions in relation to fish stranding remains to be determined.

The report by Environ and associated maps including conceptual designs for shielding features will be uploaded to the E2 CRCIP web site.

Blasting Plan Monitoring Results

Blaine Ebberts (USACE) summarized the biological monitoring of the CRCIP rock removal efforts, which included underwater blasting. Ebberts provided the AMT with a one-page summary that outlined the monitoring program and its results. The following summary results of the biological monitoring are quoted directly from the meeting hand-out:

“No marine mammals were within the 500-ft safety zone at the time of any of the blasts. The estimated take of adult salmon was 0.00 fish. A total of three dead sturgeon and no dead marine mammals, listed salmon, or eulachon were observed during post-blast surveys. ...The compliance monitoring data confirmed that the USACE blasting operations met the standards set forth in the permit granted by the regulatory agencies.”

The entire one-page summary will be uploaded to the E2 CRCIP web site. The full report had been previously posted at the web site as read-ahead material for the July 2012 AMT meeting.

In follow-up discussions, Kathy Roberts noted that gulls were observed to foraging on surface fish following the blasts. However, this feeding activity was apparently not included as part of the monitoring program. For clarification, the three dead sturgeon were 3-4 ft long white sturgeon.

October 2012 Agenda Items

The following were identified as potential items for the October 11, 2012 AMT meeting:

- Presentation of MA-3 crossline survey results
- Participation of Drs. Baptista and Bottom in continued MA-4 discussion
- Progress report on the USGS external peer review of Dr. Pearson's MA-6 analysis of fish stranding
- Continuing USACE internal analyses of potential river locations for beach nourishment in relation to MA-6
- Report on outcomes of July 23 multi-agency fish stranding workshop

The July 2012 AMT meeting adjourned at 3:15 pm PDT.