

**Final
CRCIP AMT Quarterly Meeting Notes
April 13, 2011**

The CRCIP Adaptive Management Team held its quarterly meeting from 9:00 am – 3:30 pm on April 13, 2011 at the 10th Summit Room, Robert Duncan Plaza. The following AMT members, technical support personnel, and invited guests participated in person:

Marci Johnson, USACE	Jon Gornick, USACE	Steve Bartell, E2 Inc.
Kim Larson, USACE	Robert Anderson, NMFS	Patty Snow, ODFW
Mark Dasso, USACE	Agnes Lut, ODEQ	Doris McKillip, USACE
Jessica Stokke, USACE	Juna Hickner, DLCD	Paula Ehlers, WDOE
Laura Hicks, USACE	Greg Smith, USACE	Gretchen Smith, USACE
Perry Lund, WDOE	Dale Blanton, DLCD	Antonio Baptista, OHSU
Daniel Bottom, NOAA Fisheries		

CRCIP AMT Celebration

Prior to conducting normal AMT business, Marci Johnson and Laura Hicks arranged an informal celebration of the completion of CRCIP Project construction. The celebration included a sumptuous breakfast prepared by Marci and her daughter Rochelle. Laura discussed the history of the AMT activities with the accompaniment of a presentation. Laura also presented letter of thanks and pieces of Columbia River bedrock collected during the rock removal phase of construction to AMT participants.

The following topics were addressed by the AMT participants during the April 2011 quarterly meeting:

October 2010 AMT Meeting Notes

The AMT meeting notes for the October 2010 quarterly meeting were approved. The final version will be uploaded to the E2 CRCIP web site.

Project Construction

Jessica Stokke confirmed that CRCIP channel construction was completed on November 3, 2010. The channel improvement activities will continue as Operations & Maintenance.

Project Mitigation Update

Jessica also provided a brief update on Project mitigation efforts underway on Cottonwood Island. Mowing, tilling, and spraying are continuing during 2011. Planting of native species of riparian vegetation has been scheduled for November 2011.

Translocation of white-tailed deer to Cottonwood began in August 2010. Fifteen deer have been introduced to the island. Seven left the island and were killed by automobile traffic. Of the remaining 8 individuals, 6 continue to occupy Cottonwood Island. Two individuals have been observed to migrate back and forth from the island to the mainland.

Riparian vegetation planted at the Chumbley site continues to be managed and monitored. The site will be mowed in summer 2011, however the plants are becoming well-established and future actions will likely be limited to monitoring of plant growth and distribution.

AEM Workbook 1st Quarter Review for 2011

Relevant components of the AEM Workbook were discussed at the April 2011 quarterly meeting.

MA-1 CORIE Analyses

Only minimal verified CORIE data for temperature and salinity were available from January through March 2011 at the stations of interest (tansy, grays, cbnc3, dsdma, and woody) for MA-1 analysis. Essentially all stations, except grays, were either not in operation or recording data internally that will have to be physically collected at some future date. Therefore, the MA-1 analysis for the April AMT meeting was constrained to data available for the grays station.

E2 will work with the CORIE network staff to determine which data might be retrieved and analyzed to fill in the missing gaps in the 1st quarter MA-1 analysis.

Temperature

Daily median temperature values were generally within the decision criteria for the 1st quarter 2011 period of interest (January - March) for the grays stations. Several daily values in February were slightly colder than the decision criteria. However, the spreadsheet summaries of monthly average temperatures used in the decision-making process were all within the 20th – 80th percentile decision criteria for the grays station based on the available data.

Temperature data were not available for the woody station during the 1st quarter. Therefore, the normalized temperature plots were not produced for the grays station.

The overall conclusion from the analysis of water temperatures was that no discernible impact of Project construction was evident for grays station during the 1st quarter of 2011.

Salinity

Salinity data were available for only the grays stations for the months of January – March 2011. The daily salinity values at grays were within the decision criteria for this period. Monthly average salinity values at grays were essentially zero psu's.

Salinity data were not available for the dsdma (salinity reference station). Therefore, the normalized salinity plots and analysis were not possible.

The overall conclusion based on the limited analysis of the January – March salinity data was that salinity intrusions for the monitored grays stations were not evident in relation to the Project construction.

Depth

Depth data were available for the grays station between January and March 2011. The daily values are nearly centered within the 20th – 80th percentile decision criteria during this period. The corresponding monthly mean values are similarly between the 20th – 80th percentile decision criteria.

The results of the April 2011 MA-1 analysis have been posted in the MA-1 folder of the AEM Workbook on the E2 CRCIP web site.

MA-2 Construction and Disposal of Dredged Materials

Jessica Stokke reviewed the Project construction summary spreadsheets.

The spreadsheets have been included in the draft 2010 CRCIP AEM Annual Report. The draft 2010 report can be accessed for review and comment at the E2 website (*.doc and *.pdf files are available). The April AMT began the 30-d period for review and comment of the 2010 annual report.

MA-3 Crossline Surveys

No new information was presented concerning the MA-3 crossline surveys for 2011. When the analysis has been completed for 2011, the results will be presented at a future AMT meeting.

MA-4 Habitat Analyses

Drs. Daniel Bottom, (NOAA Fisheries), and Antonio Baptista (OHSU) were invited to provide additional background information to support discussions by the AMT regarding completion of the MA-4 activities.

Dr. Bottom described and summarized the results of field sampling and analysis of data describing the distribution and habitat utilization of various ESU's in the lower river and estuary. Bottom emphasized the substantial spatial and temporal variability in the data that describe utilization of the river and estuary by juvenile salmonids.

Dr. Baptista described advances in the ability to obtain monitoring data (e.g., temperature, velocity, water elevation, salinity) that might be useful in quantifying habitat quality and availability for juvenile salmonids. Baptista also discussed improvements in a physical model that might be used to simulate habitat capacity and habitat opportunity for pre- and post-Project conditions.

Steve Bartell briefly described the Comprehensive Aquatic Systems Model (CASM). The CASM is a dynamic bioenergetics-based aquatic ecosystem model that could be used to translate changes in the physical-chemical environment to corresponding changes in the production (e.g., biomass) of modeled populations in a food web representative of the lower river and estuary.

MA-5 Sediment Contaminants

Jessica Stokke indicated that the report from the Project Review Group (PRG) anticipated for the April AMT meeting had not yet been provided to the USACE. This remaining MA-5 issue will be addressed at the July 2011 AMT meeting.

MA-6 Fish Stranding

Considerable discussion ensued concerning the implications of Dr. Pearson's recent statistical analysis of pre- and post-Project fish stranding. The implications of Dr. Pearson's results are two-fold: (1) except for large outbound container vessels that are fully loaded, current navigation and CRCIP channel modifications suggest that the post-construction probability of fish stranding will generally decrease and (2) the variability characterized by the analysis suggests that several hundred observations would be required to statistically demonstrate the magnitudes of change in stranding probability produced by Dr. Pearson's model.

The AMT does not intend to accept Dr. Pearson's results as justification for not performing post-Project stranding studies. The studies remain part of the terms and conditions in the BiOp. However, the results of Pearson's analysis might be used to carefully design a subset of the originally stipulated follow-up studies to verify the empirical model and draw inferences concerning the effects of channel modification on fish stranding.

The path forward to completion of the MA-6 requirements will be taken up again at the July 2011 AMT meeting.

July 2011 Agenda Items

The following were identified as possible items for the July 13, 2011 AMT meeting:

- Continued discussion of post-construction MA-4 activities
- Discussion and resolution of MA-6 post-construction actions in relation to Dr. Pearson's analysis of fish stranding

The April 2011 AMT meeting adjourned at 3:25 pm