

Draft Meeting Notes
CRCIP AMT Quarterly Meeting
November 18, 2009

The CRCIP Adaptive Management Team held its quarterly meeting from 8:00 am – 5:30 pm on November 18, 2009 at the Port of Kalama, Kalama, WA. The following AMT members, technical support personnel, and invited guests participated in person:

Laura Hicks, USACE	Marci Cook, USACE	Agnes Lut, ODEQ
Jon Gornick, USACE	Dianne Perry, Sponsor Ports	Steve Bartell, E2 Inc.
Paula Ehlers, WA Ecology	Kathy Roberts, FWS	Robert Anderson, NMFS
Patty Snow, USACE	John Cannon, USACE	Karen Garmire, USACE

AMT participants met at the Robert Duncan Plaza at 8:00 am for a van pool to the Port of Kalama. The following topics were addressed by the AMT participants during the November 2009 quarterly meeting:

July 2009 AMT Meeting Notes

Notes for the July 2009 AMT meeting were approved without any changes. The notes will be marked as final and placed on the E2 CRCIP web site in the July 2009 meeting folder.

Project Construction Update

Laura Hicks provided an update on Project construction. Construction is essentially complete with the exception of the ongoing rock removal and some minor dredging. Completion of the blasting might take up to February 20, 2010 - the entire work window. There is no scheduled end date for Project construction, although construction will likely be done by the end of December 2010.

Laura also provided an update on mitigation underway at Cottonwood Island. Wetland areas are currently being prepared for planting riparian forest species in the spring of 2010. Water control systems are in place to regulate water in ~1,000 acres of wetlands. Depths up to 3 ½ feet can be controlled using this system for wetlands located within the dyking system. Salmon foraging habitat will be created through water regulation in these wetlands. In addition, Cottonwood Island white-tailed deer will be transplanted to the island and the Washington Department of Fish and Wildlife will work to facilitate this deer introduction to the island.

Webb Update – The Corps is placing water in the area for winter. If anyone is interested in visiting the site please let Marci or Laura know.

Rock Removal

John Cannon and Karen Garmire described the procedures being used to remove rock. Current efforts are underway near St. Helens, WA (CRM 87+25 – 88+25). Additional rock removal will be necessary at the Longview dredging area (CRM 65+00 – 67+05). The blasting contractor (J.E. McAmis, Inc.) attempts to perform two blasting events per day, although conditions sometime limit daily removal to a single blast. The process basically entails drilling a matrix of holes carefully located in the rock, filling the holes with an explosive (Hydromite), covering the holes with stemming materials, and detonating the explosives. When sufficient materials have been excavated by blasting, a separate dredge (Megan Renee) collects that rock fragments. The materials are currently being disposed at the Ross Island site. The presentation emphasized the many procedures used to ensure safety to the ~45 personnel directly involved in the blasting process.

In addition to worker safety, every attempt is being made to minimize the potential impacts of blasting on marine mammals, fish and other wildlife. Battelle Pacific Northwest National Laboratory is assessing the environmental impacts of blasting. Results of the environmental monitoring are summarized within hours of each blast. The environmental monitoring program is focusing on marine mammals, listed salmonids, Eulachon (smelt), and sturgeon. Spreadsheet calculations provide estimates of take based on numbers of observed mortalities. The results are posted daily to a secure website. To date, two sturgeon have been apparently killed by the blasting. Marine mammals (e.g., Stellar sea lions, harbor seals) have been routinely seen within the blasting area and the area is patrolled before and after blasting events to avoid or report impacts on these organisms. As of the November meeting, marine mammals had not been harmed by rock removal. The smelt migration has essentially run its course as of this November meeting. Thus, minimal impacts are anticipated for these fish in relation to the continued rock removal.

In addition to monitoring, Battelle is performing field experiments using caged hatchery fish to further quantify relationships between pressures produced by individual blasts, distance from the blast, and associated impacts on fish. The results of these studies will augment current understanding of the effects of pressure and negative effects on fish and increase the accuracy of take estimates based on observed mortalities.

The rock removal presentation also included videos of two blasts previously performed in the St. Helens area.

AEM Workbook 4th Quarter Review

The focus of the November 2009 AMT meeting was observation of rock removal in the vicinity of St. Helens. Therefore, review of the entire AEM Workbook was postponed to the January 20, 2010 meeting. However, there was time for presentation and discussion of the 4th quarter MA-1 monitoring results presented by E2 (Bartell).

MA-1 CORIE Analyses

Verified CORIE data for temperature and salinity were available through September 2009 at the stations of interest (tansy, grays, cbnc3, dsdma, and woody) for MA-1.

Temperature

Daily median temperature values were within the decision criteria for the 4th quarter period of interest (July – September) with the exception of several values at the end of September for cbnc3 and grays. E2 will further examine the potential temperature outlier values to determine a possible explanation. However, the spreadsheet summaries of monthly average temperatures used in the decision-making process were all within the decision criteria for all three stations.

The plots of daily median temperature values of all three stations versus the temperatures recorded for the woody station demonstrated that the data available through September 2009 were consistent with the relationships established using the 1996-2004 pre-Project construction data.

The overall conclusion from the analysis of water temperatures was that no discernible impact of Project construction was evident for the period analyzed since the July 2009 AMT meeting.

Salinity

Analysis of the available salinity data for tansy, grays, and cbnc3 during the period of July – September demonstrated that the daily median values were within the decision criteria, except for two days of higher salinity recorded for cbnc3 at the end of August and end of September. E2 will further examine the outlier values for salinity. Spreadsheet calculation of the monthly mean salinity values showed that the results were within the decision criteria values or zero for the three MA-1 CORIE stations.

Plots of salinity for the three sampling locations versus the reference values reported for dsdma failed to produce any points that were inconsistent with the relationships previously demonstrated for these sites.

The salinity results are consistent with those of the temperature data analysis and further suggest that the Project construction was producing no measurable impact on salinity.

Depth

The daily median values of depth calculated for the grays CORIE station were all within the decision criteria. Values for all but one day were within the 60th percentile range (narrower range of decision values). The mean monthly values were within the same 60th percentile range.

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

Post-Project Adaptive Management

The July 2009 meeting of the AMT witnessed the recognition by team participants that the Project construction would be completed in 2010. Upon completion, the CRCIP would move from project status to an operations and maintenance (O&M) phase. The AMT agreed to discuss possible modifications to the channel improvement adaptive management program in relation to this change in status. Future meetings would address each of the AM program components in relation to possible modifications. The CRCIP Adaptive Management Plan would be amended to reflect any changes in AM program. The AMT agreed to address MA-1 and MA-6 at the November 2009 meeting. Brief summaries of these monitoring activities were assembled and communicated to the AMT prior to the meeting.

Discussion of Future MA-1 Monitoring

The benefits and limitations of continuing the MA-1 monitoring activities were discussed. The main limitations are logistics, costs, and the recognition that MA-1 results obtained to date have not demonstrated any impacts on temperature, salinity, or depth that could be attributed to channel improvement. The terms and conditions of the biological opinion specify continuation of MA-1 for 3 years following completion of project construction. Experience demonstrates that the CORIE stations are difficult to maintain, which results in gaps in available data as well as at least a one-month time lag in obtaining the most recent data in relation to the quarterly scheduled AMT meetings. AMT participants noted the opportunity for the MA-1 analysis to be relevant to other management efforts underway in the Lower Columbia River. Participants also expressed concerns over a possible lag effect in terms of observing Project impacts in relation to construction. Another suggestion was to perhaps reduce the number of stations included in MA-1.

Following discussion, the consensus decision of the CRCIP AMT was to continue the MA-1 monitoring through the December 31, 2013 or 3-y post construction. This decision will be documented in the AEM Workbook for MA-1.

Discussion of Future MA-6 Monitoring

The USACE suggested that the results of follow-up fish stranding studies would likely recommend beach nourishment as a remedy for any demonstrated increases in fish stranding. If this is the case, why not simply go ahead with beach nourishment and forego the follow-up experiments? It would be more economical to use the post-construction fish stranding study funds to do the beach nourishment. It was further noted that one of the prime sites for nourishment (Barlow Point) was also one of the stranding study sites. Using this site for beach nourishment would remove it from the three pre-project study locations. Several AMT members were concerned that the proposed beach nourishment would not be able to move forward pending completion of the follow-up stranding studies.

The USACE could not guarantee that beach nourishment would be permitted in exchange for not completing the post-construction phase of the stranding studies. Following discussion, the consensus decision of the CRCIP AMT was to perform the post-project fish stranding studies. This decision will be documented in the AEM Workbook for MA-6.

Field Trip to Observe CRCIP Rock Removal

The main purpose of the November 2009 AMT meeting was to observe the CRCIP rock removal operations on the Lower Columbia River. The AMT was instructed about safety procedures before departing on two USACE boats to the location of rock removal at the St. Helens dredging area. The AMT separated into two groups: one group had various obligations to return early and was not able to stay for the actual demolition, the second group stayed to observe one of the blasting events. The Corps representatives working on rock removal described the overall procedures while navigating within the vicinity of the drillboat Macy Renee. The overall rock removal procedures emphasize (1) safety for workers and anyone navigating in the area at the time of blasting, and (2) minimizing potential environmental impacts of blasting. Several smaller boats were on site. These boats were identified as performing the pre- and post-blasting monitoring for marine mammals, fish and other wildlife. Local sheriffs also patrolled the area to control access by boaters in relation to rock removal activities.

One group of the AMT departed prior to the late afternoon demolition. The second AMT group witnessed the blast and departed after the all-clear signal was given. The blast was visually similar to the video presentations shown during the meeting prior to the field trip. Both groups returned to the RDP by van.

The November 2009 meeting adjourned at 5:30 pm.