

## MEMORANDUM FOR RECORD

SUBJECT: Bradford Island Technical Advisory Group Meeting Minutes, 9 Oct 07

1. Attendees: Mark Dasso, USACE; Mike Gross, USACE; Carolyn Schneider, USACE; Ken Duncan, USACE; Carlton Morris, USACE; Frank Salber, USACE; Ben Hansmann, USACE; Ron McDonald, USACE; Jeff Wallace, URS; Chris Moody, URS; Bill Winter, URS; Jamie Shamreldin, URS; Jeff Lockwood, NMFS; Bob Schwarz, DEQ; Paul Seidel, DEQ; Keith Johnson, DEQ; Steve Sander, BPA; Jeremy Buck, USFWS; Monty Knudsen, USFWS; Taylor Aalvik, Cowlitz Tribe; Brian Cunninghame, Confederated Tribes of Warm Springs; Mike Karnosh, Confederated Tribes of Grand Ronde; Mark Hallock, HAI; Miles Strampe, Rain for Rent.
2. Meeting Location: Bonneville Dam Auditorium.
3. After attendees were introduced, Mark Dasso opened the meeting with a brief summary of the goals for the day's meeting. The primary goals are to review the ongoing sediment removal action, demonstrate the water treatment system, and visit the work site. A brief update on other ongoing project elements will be presented.
4. The Contractor is HAI and their primary subcontractors are Global Diving and Rain for Rent (water treatment). The Contractor mobilized to the site on 30 Sep 07 and began sediment removal at RA3 on 3 Oct. Contractor completed work at RA3 and moved to RA2 where they began dredging on 8 Oct. Water treatment began immediately and discharge turbidity (0.2 NTU avg.) has been consistently well below the ambient river turbidity (2.5 NTU avg.). URS collected the first of the discharge water samples on 4 Oct. Results are pending.
5. One dead adult 20 pound unclipped Chinook salmon was found on the river bottom adjacent to RA3. Although the notification process did not go as planned, project biologists were able to identify the salmon, determine it had been dead too long to be affected by the work, and returned the fish to the river. No live fish have been observed in the work area. Adult fish passing the dam are still above the 1000 fish threshold needed to reduce attraction water and dive at RA2.
6. URS has also placed a set of SPMD samplers in the river on 2 Oct prior to beginning the dredging. If the dredging goes beyond 3 weeks in duration, the SPMDs will be replaced with another set. URS previously collected the pre-removal SPMDs for 21 days in September, leaving them in the same locations for three weeks. The SPMDs all have 6 week analytical turnaround time. URS also collected pre-removal samples in the removal areas only, collecting sediment and clams. Insufficient clams were collected in the western removal area (RA2). The clams will not be deperated prior to analysis.
7. Post removal sampling will occur in February. Reference area fishing for small mouth bass occurred in early October but has not been successful to date.

8. Rain for Rent was asked by USACE to provide a demonstration and discussion of the water treatment system. The original design called for a large settling basin prior to sand filter and activated carbon. The contractor proposed Rain for Rent's standard construction storm water treatment system with minor modifications. This system includes the dewatering boxes for the bulk of the solids (fitted with 130 micron filter fabric), followed by injection of Chitosan flocculant, secondary settling in three settling tanks, followed by additional settling in three weir tanks. The decant is then sampled for turbidity and pH and sent to the sand filters, 5 micron bag filters, 0.5 micron cartridge filters and then the granular activated carbon. It is sent through the monitoring station again for pH and turbidity sampling and discharged if it meets criteria. Some tweaking of the system has occurred to date, but it is functioning and is programmed to recycle water for more treatment if it does not meet criteria. This has not occurred. Decant from the weir tanks is averaging about 17 NTU and the discharge decant is averaging 0.2 NTU.
9. The Chitosan flocculant was discussed. It is a polymer from crustacean shells. The initial dose of 0.25 ppm is much lower than the 1.5 ppm Chitosan dose used at other sites and is working with good results. The entire water treatment system is designed for 1000 gpm and is being operated at 300-500 gpm. It is an automated system.
10. The following individuals visited the dredging and treatment barges to observe active dredging: Bob Schwarz, Jeremy Buck, Brian Cunningham, Jeff Lockwood, Steve Sander, Bill Winter and Jamie Shamreldin.