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Subject: May 2, 2003 Skagit River Feasibility Study Status Report

**Date:** Monday, May 05, 2003 2:00:25 PM

Here is a status report for the week ending May 2, 2003 on key activities related to the Skagit River Flood Damage and Ecosystem Restoration Feasibility Study.

- 1. Schedule and Cost Change Request (SACCR). An interim SACCR for the feasibility study was submitted by the Corps on March 28 and approved by the Northwestern Division on April 8, 2003. The SACCR increases the study cost by \$400,180, from \$3,970,000 to \$4,370,180, and provides increased funding while a new Project Management Plan (PMP) is prepared to reflect recent and extensive changes in the scope of the project. A simple amendment to the Feasibility Cost Sharing Agreement (FCSA) is required to take advantage of the SACCR funding. The FCSA amendment was provided to Skagit County for signature on April 17, and will be effective upon signature of the District Engineer. The amended FCSA will also allow Skagit County to provide 100 percent of its study cost share as in-kind services from this point forward. Later this summer, a comprehensive SACCR will be submitted with the revised PMP, and a second FCSA amendment will be executed to complete the feasibility study and submit a recommended plan for authorization.
- 2. Completion of Existing Condition Hydraulic Model. The existing condition hydraulic model has been updated to reflect the results of the recent field examination of Skagit Diking District levees. Our soils engineer evaluated levee maintenance and related improvements since the previous such survey in 1996, and verified probable failure and non-failure points throughout the levee system. Diking District 12 just resurveyed their levees, and we are awaiting the new top elevation survey data so that our hydraulic model can be rerun with these new data points. Two weeks of computer run time, together with verification, will be required to then produce the new flood inundation maps for 10-, 25-, 50-, 75-, 100-, 250-, and 500-year events. With the lead hydraulic engineer scheduled for a conference in Portland next week, we anticipate having the existing condition model outputs available during the last week in May. We will provide CD copies of the model and the new mapping to Skagit County for their information and use.
- 3. Baseline Economic Report and Expected Annual Flood Damages. Discussions are underway with the economic study contractor, Tetra Tech, to run the flood damage appraisal model (HEC-FDA) and finalize the baseline economic study as soon as flood damage frequency curves are available from the existing condition hydraulic model runs described above. Expected annual flood damages will be calculated by economic study reach and by damage category. The baseline economic report should be available in late June. The Corps will input hydraulic design data to the HEC-FDA model to estimate reduction in damages attributable to alternative flood damage reduction measures. This iterative process will enable us to produce a hydraulic design of a given alternative measure (such as a diversion channel or levee improvements) that maximizes net flood damage reduction benefits. This screening will enable a plan to be formulated for physical design and cost estimating and further evaluation, and ultimate selection as the tentatively recommended plan.
- 4. Hydraulic Design of Alternative Flood Damage Reduction Measures. With

completion of the existing condition hydraulic model in late May, we will be able to aggressively resume hydraulic design modeling to formulate and evaluate alternative flood damage reduction measures.

- **5.** Phase II Geomorphology and Sediment Transport Study Contract. Draft final contract scope of work is being readied for a quick review and concurrence by the geomorphology technical reviewers who provided input to development of the Phase II study scope. A computer model will be selected and used to model and evaluate the response of our hydraulic designs of alternative flood damage reduction measures on geomorphic processes and sediment transport. These results will then be used not only to determine needed changes in hydraulic design, but provide valuable insight into evaluating and mitigating environmental impacts of alternative flood damage reduction measures.
- **6.** Padilla Bay and Skagit Bay Comprehensive Evaluation of Physical and Ecological Data. Battelle advises that their report has undergone an internal peer review and will be shortly mailed to the Corps for distribution and review.

Steve

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