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**To:**

**Subject:** June 6, 2003 Skagit River Feasibility Study Executive Committee Status Report  
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Here is a status report for the week ending June 6, 2003 on key activities and accomplishments related to the Skagit River Flood Damage Reduction and Ecosystem Feasibility Study.

**1. FCSA Amendment.** Amendment No. 1 to the Feasibility Cost Sharing Agreement (FCSA) was signed by Colonel Ralph Graves on 16 May 2003. The amendment revises the study cost estimate from \$3,970,000 to \$4,370,180, an increase of \$400,180. The amendment also takes advantage of the provisions of Section 225 of WRDA 2000, enabling Skagit County to provide their remaining share of study costs as in-kind services. The additional study funding will be used to revise the Project Management Plan (PMP) and submit a comprehensive Schedule and Cost Change Request (SACCR), complete the hydraulic model and baseline economic report, conduct technical evaluation of additional flood control storage at the Baker River Hydroelectric Project, and initiate design and preliminary cost estimates on the three-bridge corridor and diversion channel measures, as well as initiate the Phase II geomorphology and sediment transport study.

**2. Existing Condition Hydraulic Model.** The existing condition hydraulic models (UNET and FLO-2D) have undergone independent technical review (West Consultants, Inc). Levees throughout the system were recently field inspected and reanalyzed based on new survey data, resulting in significant changes in probable levee failure and non-failure elevations. This revised information has been inputted to the hydraulic models. Accordingly, new inundation maps for the 10-, 25-, 50-, 75-, 100-, 250-, and 500-year events are now being formatted and are scheduled to be completed this week. Results will be coordinated with Skagit County prior to providing the new frequency curves to economics and providing CD copies of the model to the county. Significant shifts in levee failure elevations and locations were detected throughout the system, when compared to the 1997 levee failure analysis. Changes by damage category and reach will be reflected in the baseline economic report.

**3. Final Baseline Economic Report.** Contracting is processing a delivery order to Tetra Tech, Inc. to recalculate without project expected annual flood damages and incorporate the results into the baseline economic report. The Corps will provide to the contractor new risk and uncertainty data related to the discharge/frequency relationships under existing conditions. The contractor will reanalyze agricultural flood damages, assign previously derived transportation damages to appropriate study reaches, perform risk-based flood damage analysis, re-run the HEC-FDA model, and produce a draft (5 weeks from notice to proceed) and final (7 weeks from ntp) baseline economic report. Award of the work order in the amount of \$28,157 is

in accord with the SACCR approved 8 April 2003.

**4. Consideration of Additional Flood Control Storage In Conjunction with FERC Relicensing of Baker River Hydroelectric Project.** District staff have developed a detailed technical scope of work for in-kind services to be provided by Skagit County in evaluating optimal flood control storage at the Baker River Hydroelectric Project. The draft scope is undergoing in-house technical review and will be discussed with Skagit County officials and their hydraulic engineering consultant on 10 June. If Skagit County commits to perform the required hydraulic engineering analysis, a negotiated cost for the in-kind service and a schedule will be established. Seattle District will arrange for hydroelectric power losses to be computed by Northwestern Division, and perform economic evaluation to establish if additional flood control storage may be economically justified. Note that the benefit-to-cost ratio calculated at this stage will not include associated environmental costs. Skagit County intends to seek to have additional flood control storage included as a condition of Puget Sound Energy's new FERC license for the Baker River Project. Once the technical evaluation is completed, the County will work with Puget Sound Energy and the FERC licensing process to perform environmental studies and determine environmental costs associated with a proposed change in flood control operation. Once associated environmental costs are known, economic justification for additional flood control storage can be verified.

**5. Hydraulic Design of Alternative Flood Damage Reduction Measures.** We will resume hydraulic design effort following review of existing condition hydraulic model outputs with the Sponsor later this month. Previous hydraulic design work on the diversion channel, three-bridge corridor and setback levees will be updated, enabling refined ten-percent design and cost estimates to be prepared and move us into the formulation and evaluation phase of project development.

**6. Phase II Geomorphology and Sediment Transport Study Contract.** Technical reviewers external to the Corps are reviewing the Phase II scope of work, as well as the contractor's responses to technical review comments on the Phase I report. District staff will coordinate reviewer comments with the contractor in anticipation of negotiating a fee proposal and issuing a work order for the Phase II work in early July. This work is in accord with the approved SACCR.

**7. Comprehensive Evaluation of Physical and Environmental Data Related to Skagit Bay and Padilla Bay.** Draft report prepared by Battelle Marine Sciences Laboratory is under review. Battelle previously recommended a phased series of environmental studies to determine the potential impacts of a Skagit River flood diversion channel on the ecology of the Padilla Bay National Estuarine Research Reserve. The current draft report evaluates existing data sets for applicability to the diversion channel measure, identifies data gaps, and provides recommendation and priority ranking for future studies.

Steve

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