NPSEN-PL-BP 15 October 1976

MEMO FOR: RECORD

SUBJECT: Skagit River, Washington - Levee and Channel Improvements

1. On 15 October 1976, a study initiation coordination meeting was held for the Skagit River Levee and Channel Improvements study. Meeting attendance is listed in Inclosure 1.

- 2. The study title to be used for all correspondence associated with subject study will be, "Skagit River, Washington Levee and Channel Improvements". Mr. Cook summarized the study's history to date noting that the project was authorized in 1966 (House Document No. 483, 89th Congress, 2nd Session). Both Vern Cook (Design Branch) and Bob Daniel (Planning Branch) have a copy of the document and additional copies may be ordered if desired. NPD has approved a combined Phase 1 and Phase 2 General Design Memorandum (GDM) and agreed with NPS proceeding with subject study despite the failure of Upper Baker storage project to be included in the recent Omnibus Bill. For the Phase I effort, Design Branch (Cook) will provide overall project management, while Planning Branch (Daniel) will be the study manager.
- 3. The authorized plan of improvement was described by Mr. Daniel and includes the following elements: (a) raising low spots on riverbank levees to provide a minimum of 2 feet of freeboard, (b) increasing top widths to a minimum of 10 feet, (c) flattening overly steep side slopes to a maximum of 1 vertical to 2 horizontal, (d) the addition of riprap at critical locations, and (e) channel widening improvements at three locations to remove obstructions to flood flows.
- 4. Based on October 1976 prices and an interest rate of 6 3/8 percent, the current total project cost is estimated at \$14,330,000. Mr. Thompson advised that with area redevelopment benefits, the project's BC ratio is 1.6 considering future conditions (1.4 under existing conditions).
- 5. Preparation of a plan of study is being initiated. Local officials will be contacted as part of this effort and a study schedule, including aspects of public involvement, will be prepared.
- 6. Providing a minimum of 100-year protection for urban areas will be considered with a possibility of higher protection provided by Upper Baker storage or other measures. Mr. Sellevold suggested that an interim document using available information be prepared prior to completion of GDM formulation.

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- 7. Mr. Daniel advised that total funds of \$100,000 are available in FY 77 for the GDM efforts. Study activities this fiscal year will focus on updating available information and identifying the additional data needed. Primary work units involved are anticipated to be Survey Branch, F&M Branch and Water Control Section, with some input by ERS and Economics Section. Heavy participation will be required of most work units the first quarter of FY 78 since GDM formulation is scheduled to be completed in April 1978 and completion of GDM is scheduled for December 1978.
- 8. Preparation of "requests for study cost estimates" are anticipated by the end of October, with FY 77 work requests to be issued shortly thereafter.

DANIEL

1. L.M. . "

1 Incl

as

cc: with incl:

Ch, Engrg Div

Ch, Plng Br

Ch, Des Br

Ch, F&M Br

Ch, Survey Br

Ch, Wtr Cont Sec

Ch, ERS Sec

Ch, Econ Sec

Ch, BP Tech Engrg

Ch, Civil Des Sec

Ch, Estimator

Ch, FPMS and US Sec

Ch, BP Sec

Cook, Des Br

Daniel, BP Sec

BP Sec file

ATTENDANCE LIST

Study Initiation Coordination Meeting - 15 Oct 76
Skagit River, Washington Levees and Channel Improvements

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NAME

Vernon E. Cook
Don Thompson
Gerald Gardner
John Andrilenas
Forest Brooks
D. F. Hogan
Ken Graybeal
Jack Erlandson
Dick Regan
Bob Daniel
Dick Sellevold (part time)

ORGANIZATION

Design Branch
Econ Section
FPMS
Specs and Est Sec
Basin Plng Sec
Planning Br
F&M
Survey
Water Control
Basin Plng Sec
Engineering Division