13 April 1979

· NPDPL-PF MEMORANDUM FOR RECORD

THRU: Chief, NPDPL

TO: NPDPL Files

SUBJECT: Skagit River Levee and Channel Improvements Draft DM #1

- 1. Reference NPDPL-PF DF dated 23 March 1979, subject: Skagit River Levee and Channel Improvements, Draft DM #1.
- 2. On 3 April 1979, General Wells and NPD staff met with Seattle District staff to obtain a status briefing and discuss referenced NPD staff comments provided NPS on the subject Draft DM. A complete attendance list is attached.
- .3. General Wells expressed concern about the level of protection (100-year) recommended for the urban areas because of the possibility of catastrophic levee failure. Based on the information provided by the District, it was agreed that NPS would modify the recommended plan as follows:

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a. A control structure at Avon bend would be provided to discharge flows exceeding the 100-year event.

not agreed to

OK

b. At a minimum, the locals will be required to purchase flowage easements in the Avon bend area downstream of the control structure to prevent catastrophic flooding and future construction.

c. The freeboard on the right bank urban levee will be modified. The concept is to prevent catastrophic failure downstream of the weir which could pose a threat to life. This will be accomplished by reducing the freeboard immediately upstream of the Avon control such that the levee gradually fails and unravels upstream. In no event should the SPF overtop at

the east end of Burlington.

d. With the right bank levee failures, a modest increase in the left bank levee height may provide SPF protection for Mt. Vernon. NPS will investigate.

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OK.

- e. Further support for the recommended plan should include discussions of early flood warnings; project performance during events exceeding 100-year; minimal possibility of catastrophic failure; and limits to locals' financial ability.
- 4. The following paragraphs summarize the conclusions reached in the meeting after the identified paragraph in the referenced DF was discussed.
- a. Paragraph 1. NPS continues to feel that Alternative 3E is the best plan and will strengthen the rationale presented for selecting this plan. In this regard they noted that Alternative 3C did not include some substantial costs in the Avon reach to construct a control structure.

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b. Paragraph 2. The final GDM will contain a plan providing SPF protection to urban areas. Mount Vernon will be protected against SPF by virtue of failure points in right bank levee. NPS will perform a riverstage study for SPF based on Q verified by NPD. Doug Speers will look into possibility of furnishing updated estimated Q for a SPF. Incremental increase in height of levee for SPF condition will not be known until NPS makes SPF analysis. Burlington will not likely be protected against a SPF. Levees will be designed to permit backflooding at Burlington to prevent catastrophic failure.

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- c. Paragraph 3. NPS will revise the final GDM and EIS to present the analysis required to support staged construction. The entire project authorized and unauthorized work will be recommended as a plan. As needed, a brief PAC summary will be furnished with the memorandum. Three phases of construction are contemplated: Fir Island levees; North Fork and South Fork levees; left bank levee and right bank levee upstream to Bay Ridge with a spur levee; and the upstream unauthorized right bank levees. Time frame of authorization of new work may be such that the spur levee may not need to be constructed.
- d. Paragraph 6. The District indicated that within the existing time constraints on GDM completion, they cannot develop and display the relationships between the two flood damage reduction plans for Stanwood. NPD expressed some concern about stretching the authority of this project any furtha However, it was agreed some action is appropriate in response to the District Engineer's commitment to provide protection to Stanwood under the subject authority. NPS noted that the least expensive plan to provide protection for the Skagit may be a "cut off" levee that is south and independent of the authorized project. NPS will investigate alternative methods of protecting Stanwood from Skagit flooding in excess of the 50-year event. At a minimum they will consider an independent plan and one that is an integral part of the subject project. The most cost effective plan will be recommended. If that plan is an integral part of the subject project then it will be included in the GDM as incidental. If an independent plan is least expensive; then protection of Stanwood is viewed as an independent problem that should be addressed under continuing or survey study authority.
- e. Paragraph 18. The propriety of adding recreation at the subject project was discussed. NPD reiterated that a Federal interest must be demonstrated. We agreed that:

N/A

- (1) Recreation facilities would not be included in the "authorized phase" of the recommended plan.
- (2) NPS could recommend recreation development as part of the "unauthorized phase" of the recommended plan. The details and proper support for such a recommendation would be coordinated with Owen Mason (NPDPL).
- (3) NPS would seriously consider dropping the concept of adding recreation as a project purpose.

- Done . 5. The EIS will be separated from the GDM as desired by NPS in hopes that the authorization for the recommended plan will be expedited.
 - 6. The schedule for submittal of the Phase I/Phase II GDM will be delayed depending on the additional time required to complete water surface profiles and other features of work resulting from NPD comments and the above decisions The original schedule is attached.

JACK MOWREADER

NPDPL-PF

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- 1. Attendance List
- 2. Review Schedules

CF: NPDEN (dupe) NPDPL-EC

NPDPL-ER

ATTENDANCE

3 April 1979 Meeting

Skagit River Levee & Channel Improvements

General Wells
Deb Olson
Dan Nordhill
Jack Mowreader
Doug Speers
Dave Ross

Division Engineer Chief, NPDPL Asst Chief, NPDPL NPDPL-PF NPDEN-WC NPDEN-TE

Colonel Carpenter Dep. District Eng Sid Knutson NPSEN Pete Denny NPSEN-PL Vern Cook NPSEN-DB Dick Reagan NPSEN-HY Jim Towle NPSEN-DB Bill McKinley NPSEN-DB Forest Brooks NPSEN-PL Jim Smith NPSEN-PL Don Thompson NPSEN-PL Les Soule NPSEN-HY Larry Merkle NPSEN-HY Rich Worthington NPSEN

SKAGIT RIVER, WASHINGTON REVIEW SCHEDULES

Activity	Milestone Number	Current Schedule	Normal SPAC Schedule
Submit Draft GDM/EIS to NPD	26	8 Feb 79	8 Feb 79
Submit Draft EIS to Agencies and Public, and File with EPA	29	27 Apr 79	27 Apr 79
Complete 45-Day Review Period		11 Jun 79	11 Jun 79
Submit Final GDM/EIS to NPD	30	3 Jul 79	3 Jul 79
Division Engineer Notice (To OCE)	31	3 Aug 79	3 Aug 79
Final BERH Action	32		2 Nov 79
Submit Report/EIS to Agencies and Public	33		7 Dec 79
OCE Transmits Comments to District	34	-	7 Mar 80
Receipt of FEIS by OCE	35	<u> </u>	2 May 80
To Sec Army for OMB/WAC	36	-	6 Jun 80
Chief's Report to OMB	37	-	4 Jul 80
Receipt of OMB Letter .	38	-	5 Sep 80
To Sec Army for EPA .			19 Sep 80
To EPA (FEIS)	_ · · _ • · · ·	13 Aug 79	3 Oct 80
EPA Review Period Complete	-	13 Sep 79	7 Nov 80
Chief's Report to Sec Army for Congress	39 .	·	14 Nov 80
Sec Army to Congress (or to WRC,	40	20 0	11 11
If Applicable)	40	20 Sep 79	21 Nov 80

 $[\]frac{1}{2}$ Assumes additional legislation passed prior to 27 Apr 79. $\frac{1}{2}$ Assumes no additional legislation is passed.