NPSEN-PL-RP 2 October 1978

MEMO FOR: RECORD

SUBJECT: Skagit Levee and Channel Improvement Project - Meeting to Discuss Problems on Downstream Levee Project

1. The subject meeting was held on 29 September 1978 in the Planning Branch Conference room. The following were in attendance:

Les Soule	Hydrology & Hydraulics Br
George Ristau	" "
Forest Brooks	Regional Planning Sec
Rich Worthington	" "
Bill McKinley	" "
Clyde Jump	Civil Design Sec
Larry Scudder	" "
Don Thompson	Econ & Soc Eval Sec

2. The discussion centered on problems and/or details associated with the downstream levee project.

a. Levee Design Criteria. Several weeks ago the 120,000 cfs profile + 6 feet case was selected for the top of levee. However, this did not include allowances for wave action and superelevation. This data has already been prepared by H&H Branch and has been converted from river mile to levee stationing. Mr. Ristau will check the previously prepared data with Mr. McKinley and provide it to Mr. Jump.

b. Riprap requirements. The riprap requirements have been previously provided to Mr. Jump by H&H Branch. Mr. Brooks asked that where a decision between two typical sections for a given reach is necessary, that a record be kept so that the information can be provided to ERS.

c. Fisher Slough. We discussed the problems involving Fisher Slough. There are several options available: (1) Place levee on outside of railroad, leave road and railroad as is and install pumping plant gravity drain through the levee; (2) raise existing levees on Fisher Slough as required and raise road and railroad to pass over levees (similar to the scoping analysis by the A/E); and (3) raise the existing levees on Fisher Slough as required, put gates/stoplogs and/or floodfight gaps at road and railroad levee crossings and modify bridges to reduce impediment to flow. Civil Design section will evaluate these measures to determine which one should be used by the A/E.

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d. Protection for Stanwood. We discussed the problems involved in providing protection to Stanwood from Skagit River floods. Mr. Soule said that he expected that the 500 year project would only have to be about 6 inches above the downstream levees. We decided that Les would prepare data to determine what the heights of a 100-year and a 500-year levee would be in that location. At that time we would meet again to discuss the levee height. We also discussed several options available to provide protection to Stanwood; (1)raise the cross dike at Milltown and provide a structure to pass overflows back to the river (this would involve closing the highway and railroad at two separate locations), (2) raise the dike on the south side of Fisher Slough, use the slough to pass the Skagit overflow back to the river and put a gate structure on the siphen under Fisher Slouth (this would involve closing the highway and railroad at only one location). Civil Design Section will analyze these options when levee heights are provided by H&H Branch.

e. Downstream end of project. We discussed how far toward the Bay our project should go. We decided that the levees improvements should end where we encounter the completely tidal influence, adjusted to insure the integrity of the project (e.g. we would progress into the tidal zone to insure a tie to high ground, etc.). Mr. Soule will determine the downstream end of river influence and we will then discuss the lineal extent of the project.

f. Channel cross sections. Mr. Jump requested prints of the Skagit River Channel cross sections. H&H Branch will provide these.

Brooks

BROOKS

cc:
Brooks/Worthington/Amador
McKinley
Newman
Jump
Cook
Ch, ERS
Ch, E&SE
Ch, FPMS
Ch, Plng Br
Ch, F&M Br
Ch, H&H
Ch, Des Br
Ch, Civil Des Sec
Ch, Hydrology Sec
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