

SKAGIT RIVER FLOOD CONTROL COMMITTEE

MEETING MINUTES

November 17, 1983

A regular meeting of the Skagit River Flood Control Committee was held in Hearing Room B, Skagit County Administration Building, at 7:30 p.m. on November 17, 1983.

The meeting was called to order by Chairman Jess Knutzen.

Committee members in attendance were:

Chairman Jess Knutzen  
Secretary Arnold Hansen  
Robert Dean, Jr.  
Gerald Mapes  
Gwynne LeGro  
George Dynes  
Larry Kunzler  
Carl Vandersar  
William White  
Richard Smith

At the last meeting, Don Nelson was requested to investigate the legal owners of merchantable logs in the log jams on the Skagit River. Don reported that he had contacted the State Department of Natural Resources and had been informed that logs with brands were the property of the owner of the brand. All other logs were the property of the State of Washington.

Considerable discussion took place on the responsibility of the owners as to the removal of these logs.

A motion was made by Larry Kunzler and seconded by George Dynes that Don Nelson seek legal advise as to what the responsibility of the owners of these logs would be and report back to the committee.

Motion passed.

A discussion took place regarding the responsibility of owners of structures across the river and the removal of the log jams that accumulate on them.

A motion was made by Carl Vandersar and seconded that Don Nelson contact the owners of the Old Highway 99 bridge, the Burlington Northern Railroad bridge, the State Highway 9 bridge and the old Sedro Woolley Railroad bridge and call to their attention the accumulation of logs on these structures.

Motion passed.

The Chairman recognized Larry Kunzler. Mr. Kunzler passed out a letter he had received from F.E.M.A. and discussed the contents. (see Attached letter.)

The Chairman had asked Don Nelson to make a report to bring the committee up to date on several items.

Don Nelson reported that the proposed Samish River Drainage District had acquired the necessary petition and submitted this petition. The proposed district is at present awaiting review by the Boundary Review Board. Upon favorable review, the proposal would proceed to a public hearing.

Don Nelson also reported that a S.C.S. work crew has cleared the Samish River of trees and brush from Thomas Road downstream to Farm-to-Market Road. As the work program was mostly by hand work, progress has been slow but the results looked very favorable.

Don Nelson reported that considerable work had been done on acquiring the river cross sections requested by the committee. Work on this project is continuing at this time.

Don Nelson reported that he, Jess Knutzen, and Louie Parker have investigated the log jams on the Skagit River near the towns of Lyman and Hamilton. Access to these jams are very difficult. Don has set two boat trips to review these jams with the permit agencies. Both trips have been cancelled due to river conditions. It would appear that access and removal of these log jams are more difficult than first thought.

Don Nelson reported that several discussions had taken place with the U. S. Weather Service, U.S.G.S., and the River Forecasting Center regarding improvement of the flood warning system. Estimates have been put together to activate two river gage stations; one on the upper Skagit River and one on the upper Sauk River, at a cost of about \$10,000. each. Work is continuing on this proposal.

The Chairman asked the committee for input as to what goals the committee should make for next year.

A motion was made and seconded that the committee request the Board of Skagit County Commissioners to appropriate \$20,000. to proceed with implementing the necessary telemetering to acquire data from the two flood warning gages on the upper Sauk and the upper Skagit Rivers.

Motion passed.

A motion was made and seconded that the \$10,000. appropriated for log jam removal be continued into 1984.

Motion passed.

Larry Kunzler stated that he thought the committee should take another look at the Avon By-pass. Mr. George Dynes was requested to make a report on the old by-pass proposal at the next meeting.

Further discussion of budget requests continued. Bill White stated that we should not lose sight of our goal for a Sauk River Dam study. Mr. White felt we should not give up on this proposal even if the chances of ever obtaining a dam were poor.

A motion was made and seconded that the committee request \$10,000. to be appropriated for a Sauk River Dam study.

Motion passed.

At this point, the committee prioritized their budget requests in the following order:

1. Flood Warning Program -----\$20,000.
2. Carry over log jam removal-----\$10,000.
3. Sauk River Dam Study-----\$10,000.

The Chairman requested the comments from the committee on a meeting schedule.

A motion was made and seconded that meetings be called at the discretion of the chairman, about every three months.

An amendment was made to the motion that the committee meet no less than two times each year.

Amendment passed.

Motion passed.

The Chairman stated that he would call a meeting soon after the first of the year and that the committee should think about an election of new officers for the coming year.

Larry Kunzler stated that he would like to discuss the height of the levees at the next meeting.

Meeting adjourned.

DEN:bjs



# Federal Emergency Management Agency

Washington, D.C. 20472

AUG 22 1983

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Larry J. Kunzler  
[REDACTED]

Dear Mr. Kunzler:

This is in response to our recent telephone conversations and the materials you sent to me in support of a floodway designation for Gages Slough on the Skagit River Delta.

For the purposes of the National Flood Insurance Program (NFIP), a floodway is defined as the channel of a stream, plus any adjacent flood plain areas, that must be kept free of encroachment so that the 100-year flood can be carried without increasing the flood heights by more than 1.0 foot. This concept was designed for typical river valley situations, where the channel represents the lowest point in the flood plain and the most effective conveyance area is immediately adjacent to the channel. As you know, the Skagit River Delta area deviates greatly from this general situation. The limited channel capacity of the Skagit River results in bank and levee overtopping and subsequent overland sheetflow flooding across the delta itself. One path that some of the overland flooding can take is along Gages Slough. You have proposed that we designate Gages Slough and adjacent areas as a regulatory floodway under the NFIP. FEMA will not designate a regulatory floodway for Gages Slough for the reasons outlined below.

In our analysis of flooding conditions for the Skagit River Delta, the 100-year discharge of 240,000 cubic feet per second (cfs) developed by the U.S. Army Corps of Engineers was adopted downstream of Sedro Woolley. Of this total discharge, it is estimated that approximately 130,000 cfs will flow through the overbank areas north of the Skagit River levees. Because of the lack of adequate topographic mapping and field survey data, it is not possible to determine the distribution of floodflows between Burlington proper (Gages Slough and overbank areas) and the agricultural area north of Burlington. Without an accurate determination of the flows along Gages Slough, a floodway cannot be developed. The 63,000 cfs discharge identified by John E. Norman for Gages Slough in the Cascade Mall Environmental Impact Statement is not supported by any scientific or technical data and must be considered as speculation. The carrying capacity of Gages Slough and the overbank areas is also not known due to a lack of adequate topographic and field survey data.

Additionally, the actual carrying capacity of the Skagit River channel at various locations cannot be accurately determined due to the uncertainties of levee overtopping and failures. Overtopping and/or breakouts will occur along the levees during a 100-year event contributing to the overbank flows in Burlington. The location of breakouts and the amount of overtopping cannot

be accurately determined. Quantification and location of this overflow would be necessary to develop a floodway in the Gages Slough area.

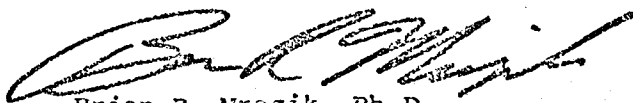
In our discussions, you indicated that all overbank flooding north of the Skagit River levees would only cross Interstate Highway 5 in a low area between the first two interchanges north of the Skagit River. Our analysis, which included a review of the Interstate Highway 5 profile and grading plans, indicates that weir flow would occur for approximately two miles along Interstate Highway 5 in the vicinity of Burlington. Exceptions to the weir flow condition would be at elevated portions of the highway, such as road intersections, and where openings allow flow under the highway.

Your concerns over the need for a floodway have been seriously considered and are greatly appreciated. From a qualitative perspective, we agree with your conclusion that Gages Slough is a conveyance area which should be protected. However, as outlined in this letter, a quantitative floodway analysis is not possible due to the limited data available and the uncertainties of flow conditions created by the numerous possible modes of levee failure and overtopping.

Despite the fact that the Federal Emergency Management Agency (FEMA) has not designated a regulatory floodway, it is still recognized that there is a need for development to be regulated in order that flood hazards are not significantly increased. Section 60.3c of the Code of Federal Regulations is designated for areas where 100-year flood elevations have been established but no regulatory floodway identified. The City of Burlington and Skagit County will be required to adopt ordinances which comply with the requirements of Section 60.3c in order to maintain participation in the NFIP. Part of this requirement will be to ensure that no new construction, substantial improvements, or other development (including fill) is permitted within Zones A1-A30 on the Flood Insurance Rate Maps, unless it is demonstrated that the cumulative effect of proposed development, when combined with all other development, will not increase the water-surface elevations of the base flood more than 1.0 foot at any point within the community. While it is recognized that this determination will be difficult for reasons discussed in this letter, good faith efforts on the part of these communities will be expected by FEMA.

Thank you for your interest and support for the NFIP. Should you have any further questions or comments regarding this matter, please contact me in Washington, D.C., at (202) 287-0230.

Sincerely,



Brian R. Mrazik, Ph.D.  
Chief, Engineering Branch  
Natural Hazards Division

cc: Raymond Henry, Mayor, City of Burlington  
Bud Norris, Chairman, Skagit County Commissioners  
Chuck Steele, FEMA Region 10