From:	Larry Kunzler
То:	<u>Sky Miller</u>
Cc:	Ed Capasso; Chuck Bennett; Mike Scuderi; Malmgren, Ronald L NWS; JacquelineVander Veen
Subject:	Review of 7/18/2000 Working Group Minutes
Date:	Saturday, August 26, 2000 7:52:28 PM

Sky:

I have reviewed the first set of minutes from the Skagit Flood Risk Management Working Group's meeting on July 18, 2000 and would like to offer the following comments on the draft minutes.

Page #	Speaker	Comments
2	Jackie Vander Veen	 Re: County involvement in 1980's. There are documents in the file that prove that the County Public Works Department did not want to do anything with respect to flood control after the voters turned down the flood control project. Specifically a late 1980's memorandum mentioning that Don Nelson and Gene Sampley recommended to the County Commissioners that the County do nothing in lieu of the vote. It wasn't until Mt. Vernon City Engineer John Wiseman had a chance meeting with a FEMA employee that the ball started rolling again for flood control in Skagit County after the 1990 flood events. Mayor Ray Reep was going to go forward with his own plan and put pressure on County Commissioner Ruth Wiley and then only because the Fed's were recommending to "let Fir Island flood" did she start the ball rolling. Re: "Elevation data was collected and photographs were taken for the flood plain from Sedro Woolley to the bay." Does this comment include the Nookachamps/Clear Lake/ Sterling area? If not then the comment should be clarified to state from the BNRR bridge to the bay.
	Sky Miller	Re: Railroad Bridge. As was proven in <u>Halverson v. Skagit County</u> by the hydraulic engineers analysis submitted by both the County and the Plaintiff's the railroad bridge itself has very little if any impact on upstream flooding. It is the location of Dike 12's and Dike 17's levees. If you have not read or reviewed that testimony I would be happy to provide you with electronic copies of both. I have already provided the Corp with hard copies of both. Re: All flood events Nookachamps completely fills with water. I
6		Re: An nood events Nookachamps completely mis with water. I think I know what you were trying to say here but the statement begs challenging. From a 50 year flood to any event exceeding a 50 year flood the Nookachamps is full. That is correct. However, the Nookachamps does not completely fill with water during all flood events. I also feel that it is very important that the County and the Corp acknowledge the fact that the Nookachamps is serving as an "artificial storage basin" because as we all know during any flood event (28 ft elevation) there is anywhere from 1 foot induced flooding at the Sedro-Woolley sewage treatment plant to 6 feet induced flooding at the BNRR bridge. I would also caution you that one of the reasons people turned on the 1979 flood control project was that the County Public Works Dept. did not request the Corp to study Clear Lake and the Nookachamps. Once that study was forced upon them by public pressure the Public Works Dept. and the Corp lost all credibility. If it is perceived that the County has left out the Nookachamps AGAIN from a thorough study the results will be the same. At a minimum you

		need this data to analyze the amount water lowering in this area as the dikes break. You also need the info to analyze cost benefit ratio for mitigation caused by any proposed project.
6	Fred Buckenmeyer	Re: modeling if flood fight doesn't work. Fred is right on target here. I know this is a sore spot with the Corp but if we are to "thoroughly" analyze the flood plain and meet the cost benefit requirements and most importantly put together a flood management plan then flood fight efforts must be considered. It would show us the impacts of flood fighting and thus could be part of the project by prohibiting flood fighting in certain locations. The Corp needs to revisit this issue and get a legal opinion as to how this will impact a NEPA review.
7	Richard Smith	Re: Dike breaks in 1951: Caesar is right. There were a total of 9 dike breaks in 1951. 6 on Fir Island, 2 in Conway and 1 on the North Fork near Pleasant Ridge.
7	Sky Miller	Re: Impacts of BNRR bridge on 100 year event. The Herzog report clearly states that the BNRR bridge will fail if Burlington ever raises it dikes which we all know that since 1922 they have been substantially changed (i.e. moved, raised). Again, the impacts of the bridge are directly attributable to the location of the levees. Substantially widen the channel and the bridge span and the bridge will no longer be a problem, realized or perceived.
		<u>Re: Conveyance under I-5 and Highway 99.</u> This has got to be a misquote. No data in either the 1979 study or the Gilborough recognizance study supports this statement.
8	Will Roozen Chuck Bennett Ed Cappaso	Re: Impacts of Fir Island Dike Break: I would only add that during the 1990 flood event the water levels in the Nookachamps and Sterling areas continued to rise for 12 hours after the levees (they don't have dikes on the river) broke on Fir Island. This little jewel of information needs to be widely circulated in order to combat old wives tails about the impacts of a break on Fir Island.
		Re: 500 year flood event: In 1979 the 10-50-100 and 500 year flood event was calculated at 132,000, 200,000, 229,000 and 309,000 cfs respectively. The Standard Project Flood (SPF = maximum flood that could occur) was 395,000 cfs. (<i>Source: Volume 1 GDM 1979 page 4-9</i>) You stated 350,000 for the 500 year event. What changed the calculations since 1979? Did the SPF change as well? Is the SPF calculated purely on rain on snow events or can it also include volcanic events?
8	Sky Miller	Re: Flood Flow Paths: You emphasized the 500 year as going through Burlington through Gages Slough to Padilla Bay. I think it would be beneficial if you used this same emphasis on the 50 and 100 year flood as well. Previous testimony of Jess Knutzen and other old timers including but not limited to the Robert Herzog and James L. Stewart reports substantiate this fact. I also think it would be beneficial to equate the word "slough" with "previous channel of the Skagit River." Gages Slough is much larger then most locals, including the Mayor of Burlington realize. It includes two church's, several homes and the Mayor's business on Highway 20.
8	Chuck Bennett	Re: 500 year storm: The Corp can answer his question. In 1979 the Corp stated that the SPF storm event was 14 inches of rain in a 3 day storm. <u>(Source: 1979 GDM Appendix D at page D-18)</u> This was based on a 1950 study updated with 1966 data that probably needs to be revisited. What the Corp did not tell people in 1979 was that every 10 inches of snow equates to 1 inch of rain so that you could generate a 500 year

	storm with only 10 inches of rain coupled with 3 feet of snow in the mountains. Also, I would have to do further research but I think we had over 12 inches of rain during one of the 1990 storms. If that is so then clearly the Corp needs to revisit their calculations.

All in all the meeting at least on paper seemed to be far more productive then I was first led to believe. Since I was not asked to be a member of this committee or even interviewed by either the facilitator or the Public Works Department I hope you don't mind me participating in this manner. The next meeting should focus on what cannot be done in order the committee doesn't waste any time. The Sauk Dam is out, dredging is out, raising the levees higher is out. That leaves only a "by-pass" concept or lowering the levees to provide for overtopping or moving the levees back. The by-pass will be the most controversial, and expensive however is the only project that will "stop it from flooding". Over topping and setbacks makes the most sense however as we both know will not be welcomed with open arms by the farmers. This is one of the reasons that I support a vote by the people. If everyone is going to pay for it then everyone should have a right to vote on what is best for the County.

I still have not received the "packet" provided to committee members as I requested at the last committee meeting, by sending in the "blue card" and by e-mail to you. I am also still waiting for the invitation to give my presentation to the Public Works and Planning Departments. Hope you had a good weekend.

Larry Kunzler

'The quality of our lives is dependent on the quality of our environment, which is largely dependent on the quality of our land use.' (William B. Honachefsky)