

## MEASURES 4 & 5

### NOOKACHAMP AND HART SLOUGH STORAGE

### ISSUE PAPER PRESENTED TO ADVISORY COMMITTEE

By: Larry Kunzler, At Large Committee Member

April 20, 2009

#### REASONS TO GO FORWARD WITH MEASURES

- Project will induce more severe flooding depths into the artificial storage basin thereby lowering flood levels downstream. *(Source: Page 23 Skagit River Flood Reduction Feasibility Study, PIE April 2006)*

#### REASONS TO ABANDON THESE MEASURES

- Corps of Engineers has been telling us since 1897 to get our levees off the edge of the river. What do these projects do.....they put new levees on the edge of the river.
- There is a 12 foot drop in ground elevation between the Highway 9 Bridge and the Mt. Vernon gage. By taking 8,000 acres out of the floodplain for "minor" flooding events (i.e. narrowing the channel), you increase the velocity of the river in the channel.
- By narrowing the channel you increase the frequency and intensity of "minor" flooding events, (i.e. you would have 1975 to 1990 flood events, depending on the height of the levees on a more frequent basis).

- Between Highway 9 and Strawberry Bar the area is used by Pink (Humpy) and Chum (Dog) Salmon as a spawning area. By increasing the velocity and frequency of the flooding events the redds in those areas will be destroyed.
  
- Since these will be “new” levees the question has never been addressed as to who will own these levees. Who will maintain them? DD 12? DD 17? All the taxpayers in Skagit County? Perhaps the City of Burlington since they seem to be the only major proponent of the project? This despite the fact that allegedly all they want to do is certify their levees to the 100 year flood level.
  
- Project is cost prohibitive. Estimated to cost between \$116 million and \$135 million and that’s just the construction cost. Estimate does not include the cost for the real estate, flowage easements, environmental enhancement, or operation and maintenance cost. *(Source: Skagit River Flood Reduction Feasibility Study, PIE April 2006)*
  
- Project does not meet Corps of Engineers standards; therefore, no money from the Corps will be forthcoming. *(Source: Corps of Engineers Preliminary Measures Presentation August 18, 2008)*
  
- Project was looked at by Corps of Engineers in 1966 and again in 2001. Rejected both times, for many of the reasons stated herein but primarily because the project doesn’t work. You cannot drain the water fast enough out of the storage area in order to prepare for the second and in some cases multiple flood events that have historically been more severe than the first flood. Why, because the overbank storage is not available. Based on experience in the 1975 (130,000 cfs), 1979 (112,000 cfs), and 1980 (113,000 cfs) flood events, once Francis

Road went underwater, it took 4 days to be able to use the road again. A week or more for the water to leave the fields. You really think you can levee the “induced flooding storage area” and drain it more rapidly than it does under natural conditions? The project will have a severe impact to interior drainage.

- I take great issue with the following verbiage that I am assuming was handed out at the Dike and Drainage Sub-committee: *“The Nookachamps floodplain historically has provided various levels of natural storage, depending on the magnitude of the flood peak and shape of the hydrograph, to significantly reduce flood peaks.”* (Source: [Skagit River Flood Reduction Feasibility Study, PIE April 2006](#)) The truth of the matter is that there is very little that is “natural” about the storage in the Nookachamps as is demonstrated by the following hydrology graphic:



➤ In short the project violates all of the three E's.

- Environment - Detrimental to fish habitat.
- Economics - Cost prohibitive.
- Engineering - Doesn't work.