

Skagit River General Investigation Study

Public Outreach on Preliminary Range of Alternatives

April/May 2012

We want to hear from you!!

Please take the time to respond to the questions below. You can provide your comments by:

- ✓ Leaving this form with us today or at Skagit County Public Works
- ✓ Putting a stamp on this form and sending by regular mail
- ✓ Contacting Daniel Johnson at daniel.e.johnson@usace.army.mil or at (206) 764-3423

What are your thoughts regarding the preliminary alternatives for the Skagit River Basin?

My thoughts at this stage of the on-going 18 year process to develop the “preliminary alternatives” are based on over 37 years participation and research into the flooding issue of the Skagit River. I have authored and co-authored 5 books on the history of flooding in the Skagit River Basin and have authored many “Issue/Whitepapers” on the subject as well as many thought provoking editorials. River Issues &

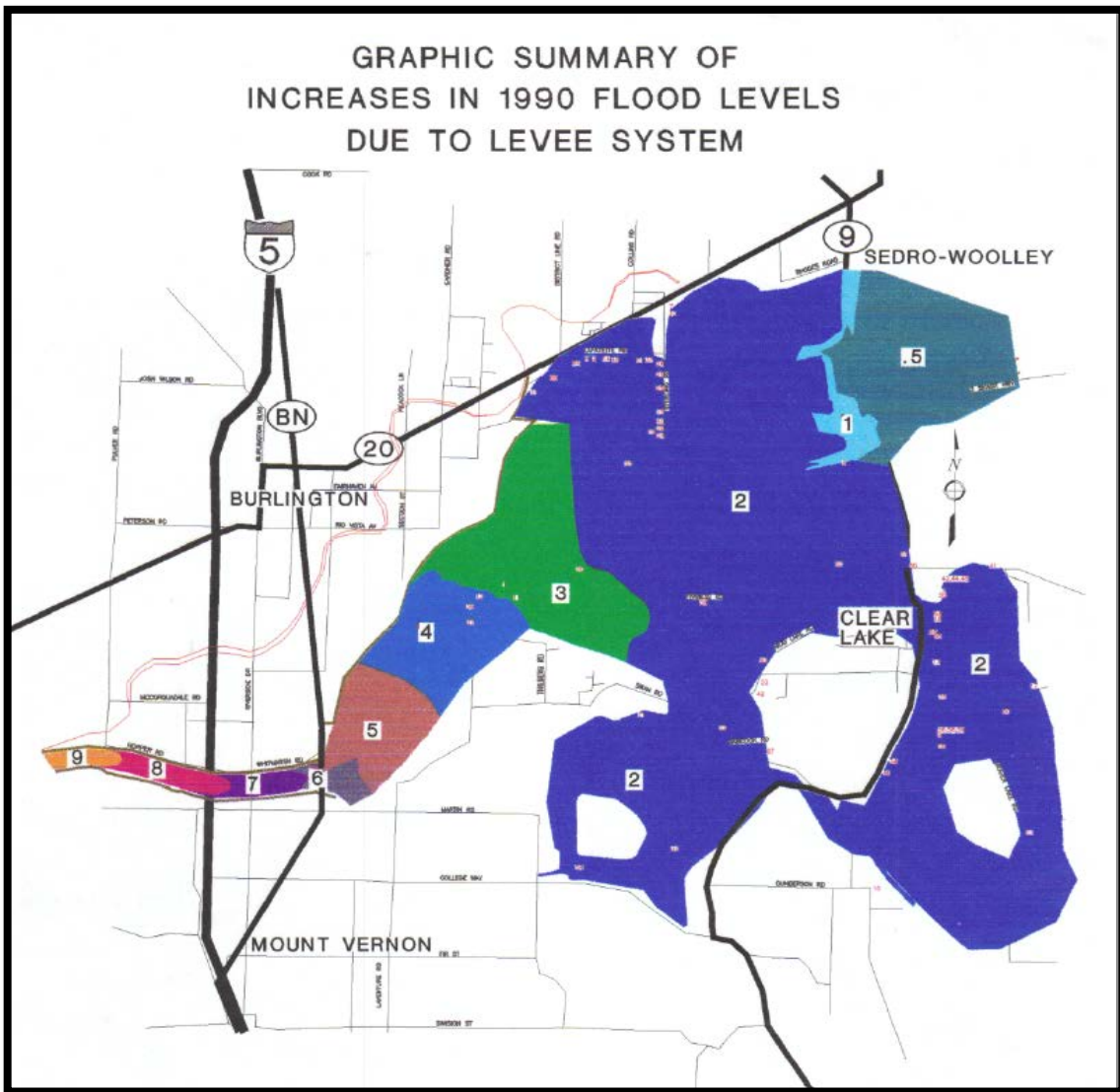
Ask the Angry Citizen

I would be remiss in my thoughts if I did not express my feelings that it appears to me that an awfully lot of money has been wasted by the Seattle District Corps of Engineers. The meetings on May 7, 2012 and August 18, 2008 are I believe classic examples of the Corps wasting public money. All those staff people (10-12) and most of them do not say a word during the overall presentation. The public should not have to pay for 3 hours of travel time, meals, per diem, etc. when one person could have given the oral presentation and the rest of the staff could have been video conferenced in to answer any questions that the public would have. Even little ole Skagit County has modern technology and people who know how to run it. It should be utilized to its maximum to save taxpayers money especially since it was the taxpayer who purchased it for you.

I am also somewhat dismayed that since 1993 the Corps “*preliminary alternatives are conceptual at this stage*”. One has to ask what have the millions of dollars spent so far on this GI Study been used for?

Throughout these comments submitted for your consideration I will refer not only to the questions asked herein but the project manager’s statements made at the May 7th meeting, presentation materials, as well as comments received by the Corps from the audience.

The first comment is on the graphic titled “Skagit River Flood Discharge Diagram.” It gives the impression that very little water is “forced” into the Nookachamps while a great deal of water travels out Sterling. Top of the next page is a graphic showing the amount of water being “forced” into the Nookachamp basin by the levees prepared by nhc:



Graphic Summary of Increases in 1990 Flood Levels Due to Levee System

The reason this is important is that the project manager (“PM”) stated at the meeting “we lose some water at the Nookachamps and a little bit of inflow from Nookachamps Creek.” . . . Later in the presentation the PM stated that the “Nookachamp/Sterling area “naturally backwater”. There is nothing “natural” about the “backwater storage”. The amount of water that is being stored in the Nookachamp Basin has long been recognized by the Corps of Engineers as equal to or greater than the amount of water flowing overland through Sterling. The Nookachamps Basin is an artificial storage basin created by the levee system of Dike Districts 12 and 17. The depths of water created by that levee system is shown on the graphic above. With respect to the comment that the Skagit receives inflow from Nookachamps Creek I would submit to you that from the point that the Skagit River begins to flood until long after the crest is past the Mt. Vernon gage, that Nookachamps Creek puts no water into the Skagit main system, that in fact the water from the Creek is forced back into the Beaver Lake area. I make that statement having observed the Skagit during 3 flood events (1975, 1979 and 1980) when I watched Skagit River water run upstream in Nookachamps Creek, and having spoke to Beaver Lake residents who have told me that even when the Mt. Vernon gage had crested the water continues to get deeper in the Beaver Lake Basin. Nookachamps Creek is not contributing any flows into the Skagit during a flood event and there is nothing natural about the backwater artificial storage in the Nookachamp/Sterling area.

Please rank the preliminary alternatives 1-6, with 1 being your most favorable preliminary alternative and 6 being your least favorable alternative.			
5	No Action -Alt. 1	2	Swinomish Bypass –Alt. 4
1	Non-Structural -Alt. 2	6	Urban Area Protection-Alt. 5
3	Joe Leary Slough Bypass –Alt. 3	4	System-wide Levee Setbacks –Alt. 6

Based on the above rankings, which preliminary alternative(s) did you favor and why?

Non-Structural – Alternative 2

The non-structural alternative is one that takes care of a lot of the problems that man (not Mother Nature) has created. ([See The Realities of Flood Control in Skagit County](#)) Nookachamps/Sterling area people would not have flood waters in their homes due to the actions of Burlington and Mt. Vernon dike districts. Additional storage and/or modification of dam operations is the one component of the GI Study that should be given priority over all other alternatives due to the fact that it is the one component that will benefit everyone in the floodplain. Key in this study will be to answer the question did the Corps of Engineers use the wrong hydraulic figures in computing the Ross Lake amount of storage and should storage begin in October. ([See 8/14/1953 Corps document](#)) While we are on the subject of hydraulic figures, paramount to the completion of the GI Study should be a serious consideration that when the Corps changed its computations from Extreme Low Water to Mean Sea Level did the Corps fails to adjust the gage readings appropriately for historical flood events? ([See Low Low Water in Puget Sound vs. Mean Sea Level](#))

Swinomish Bypass/Floodway – Alternative 4

As was appropriately noted by the PM at the May 7, 2012 hearing/meeting, this proposal has traditionally been referred to as the Avon Bypass. The conceptual nature of this project has been kicking around Skagit County since 1921. First presented to Skagit County not by a government agency but by a hydraulic engineer named Robert Herzog of the GNRR (currently BNSF RR). ([See 9/26/1922 GNRR letter and Robert Herzog Report \(1st Avon By-Pass Proposal\)](#)) In 1935 the Corps of Engineers determined that the construction of the Bypass “was the most feasible method of flood control in Skagit County.” ([See 8/22/35 Argus](#)) In 1936, the U.S. Congress authorized the building of the Bypass at a cost of \$4,982,000. ([See 11/5/36 MVDH](#))

Construction of the Bypass has and remains “conceptual”. The idea of the Bypass which is the only project that will “stop it from flooding” in the lower valley was last killed by the Skagit County Public Works Department in 2002. ([See County e-mail killing diversion channel efforts](#)) However after reviewing all the documents posted at [Avon Bypass](#), the cost of actually constructing a “big ditch” project is way beyond the economic means of Skagit County. The environmental/fish/eel grass issues would probably be enough to kill this project even if Skagit County could come up with the money. Previous Corps project managers have estimated the cost of a structural project to be in excess of \$300 million dollars.

However, given that a designated floodway is part of this “conceptual” project, this is something that I could strongly endorse so long as there was an agricultural exemption that would allow construction of agricultural outbuildings and the rebuilding of damaged farm houses. Getting the flood water past the City of Burlington and I-5 and getting rid of it before it gets to Mt. Vernon by allowing the floodwaters to go onto the floodplain in its “natural channel” is the most sensible, engineering possible, environmental friendly, economically achievable approach that the Corps and Skagit County could take. As can be seen on the home page of www.skagitriverhistory.com, the designated floodway would be where the water is going to go anyway when

the levees upstream break or Sterling is overtopped. I have been discussing and writing about this concept for several years now. The editorial I authored in 2006 is still very true today:

Emergency Overflow Spillway/Floodway: If we are successful in obtaining accurate hydraulic data and the 100 year flood flows are adjusted downward as the historic record strongly suggest they should be, and if we could achieve the added protection of additional storage either through voluntary or compensation means, then I feel that the cheapest, most environmental friendly and engineering feasible project we could build would be an emergency overflow spillway in the Avon area. This spillway would only be activated when flows reach 145,000 cfs at the Mt. Vernon gage. In the last 82 years the spillway would only have had to be used once and possibly twice (1990 and 1995). The flood waters would then flow naturally towards Padilla Bay which is where they are going to flow anyway during a major flood event. It's not like we would be spilling the entire flow of the river. During the 1990 flood event the spillway would only have been spilling water for a period of 11 hours for an average of 5,100 cfs per hour. Granted, during a 100 year event the spillway could be spilling as much as 30-50,000 cfs but what is the alternative, to have the water flow through the City of Burlington or be forced into the Samish River Basin? Both of those alternatives are unacceptable.

There would be many benefits to the spillway/floodway approach:

- a. It would allow the flood waters to pass the City of Burlington and spill onto the floodplain in a safe manner before it reaches the City of Mt. Vernon thus saving the Urban areas from catastrophic flooding.
- b. By allowing the farmland to be subject to flooding (once in the past 82 years) it would preserve the farmland from urban encroachment.
- c. By designating the area as a floodway it would prohibit further development in the natural corridor where under current conditions the floodwaters are going to go anyway thus decreasing future damages. Further, it would keep the floodway designation out of the Urban areas which under current conditions in all likelihood it will be placed.
- d. Out of all the projects looked at, this could be the most affordable; provide the most benefits, meet the three E's, perhaps even be acceptable to the majority of the voters who should have the final say in any proposed project. Admittedly, the people living in this floodway corridor would object, but what they must realize is that if we do nothing, which is what we have done for the last 100 years, during any catastrophic levee failure or even if the levees hold under current conditions the water will end up in that corridor as they have in so many floods in the past.
- e. What about the fish you ask? Wouldn't providing an emergency overflow spillway put fish out onto the floodplain? The simple answer is yes. Once in the last 82 years we would have impacted some fish. In the last 82 years there have been many levee failures. The most recent on Fir Island in 1990. How many fish were impacted by the levee failures? If there were no levees, how many fish are stranded on the floodplain? The fish issue like any other adverse impact can be mitigated if given a chance.

(See The Realities of Flood Control in Skagit County)

Another added benefit is that Mt. Vernon would not need a floodwall because Dike District's 12 & 17 would not be forcing unnatural flood waters at Mt. Vernon's downtown area. A savings of millions of dollars. Conway and Fir Island would not be subject to catastrophic flooding, again a savings of millions of dollars.

Joe Leary Bypass/Floodway – Alternative 3

While much in principle that was said about the Avon/Swinomish Bypass could also be said about the Joe Leary proposal, I believe that the "mixing of fish" and cost issues would kill this proposal. Besides, the Samish River will more likely than not be flooding at the same time as the Skagit and the last thing the Samish River farming communities will want is more water "sheet flow flooding" into their basin. All one has to do is look at the 1979 opposition to the 1979 Levee improvement Project to confirm their opposition. (See **1979 Levee Improvement Project Historical Index**)

Based on the above rankings, which preliminary alternative(s) did you least favor and why?

Urban Area Protection – Alternative 5

The main reason I do not support all of this alternative is that certainly Burlington and Mt. Vernon have known about the flood danger since the late 19th and early 20th century. (See [Sterling Dam Presentation](#) and the [10/21/1895 The Skagit News](#) article titled “Memorial to the Senate and House of Representatives). Flood control/risk reduction measures should not be the reward for recklessly endangering the lives and property of residents and businesses just so they can create a tax base for local government employees. I have said it before and will say it here again; Mt. Vernon and certainly Burlington have arguably the worst land use planning in the history of floodplain management. Mt. Vernon and Burlington officials have already stated that they want 100 year protection in order that they can allow new development to build flat on the ground. All levees/floodwalls have one thing in common. Eventually they fail. Allowing building flat on the ground is nothing short of irresponsible and possibly in conflict with EO 11988 and Corps policies since 100 yr. protection would be promoting more irresponsible development of the floodplain. Just because someone has 100 year protection does not remove them from the reality that their property is still part of the bottom of the river.

The levees around Clear Lake and the Sedro Woolley sewage treatment plant, communities that have suffered at the hands of Burlington’s Dike District 12 for decades should be built. Also, the proposed “stop-gap” levee for LaConner should be built.

System-wide Levee Setbacks – Alternative 6

Although the Corps of Engineers has been telling Skagit County to move the levees back since at least 1897, (See [Capt. Harry Taylor Annual Report](#)), the dike districts have responded by actually moving the levees closer to the edge of the river. Setting the levees back has been opposed by the local farming community due to the loss of prime farmland required, estimated at between 5,000 to 8,000 acres. As part of this alternative there appears to be a levee at Sterling. The impacts of this as was told to the local residents in 1979 would be to add another 3 to 4 feet of height in flood water levels to the Nookachamp Basin which in turns makes a deeper lake upstream of the Burlington Urban Area. If part of the project is to widen the 3 bridge corridor then that amount of water (estimated 40-50,000 cfs) would be forced downstream thus increasing the cost of any levee and/or bridge replacement project.

Are there any additional features or concerns that should be considered in the study? Please be specific.

Comments PM received at the Public Hearing

Storage behind Lower Baker Dams component: Storage at Lower Baker Dam and a change in the seasonal operation of the drawdown for Upper and Lower Baker Dam as well as an imminent drawdown clause. While I strongly support hard storage and a change in the seasonal operational changes to the drawdown dates, one of the adverse impacts of imminent drawdown is that it will fill up the overbank areas, which is okay if the weather man has it right however if a second storm hits there will be no overbank storage or at least a much diminished area which could have catastrophic impacts. The Corps is in a Catch-22 position. Sort of a damned if you do and further damned if you don’t position.

Dredging: See the Dredging issue page on www.skagitriverhistory.com including but not limited to 2/5/2006 [Historical Dredging On The Skagit River \(1920-1966\)](#), 7/20/2007 [Why Dredging Won't Work](#) and 1/20/2009 [Skagit River Dredging: The Perception vs. The Truth](#).

Flowage Easement: See [Flowage Easements](#)

Dredging the Mouth of the River. Doing this would help drainage on adjacent farmland at low tide however it would have no impact on floodwaters at high tide since the tides impact the river all the way up past Sterling. See 7/20/2007 [Why Dredging Won't Work](#) & 1/20/2009 [Skagit River Dredging: The Perception vs. The Truth](#).

Keeping I-5 open: I-5 was designed by WSDOT to overtop from Gages Slough to just north of the Target Store and again north of BEHS to Cook Road during a serious flood event. The Corps told them not to do that but they did it anyway.

Interior Drainage: An absolute necessity in any floodway concept. You won't be able to sell the floodway concept without helping the farmers impacted with interior drainage the flooding will cause.

Do you reside within the Skagit River Basin? Yes No

Would you like to be added to the Skagit River General Investigation Study mailing list? Yes No

If yes, provide us with your contact information so we can add you to the project mailing list (please print):

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For more information or to submit other comments, please contact Daniel Johnson, U.S. Army Corps of Engineers at daniel.e.johnson@usace.army.mil or at (206) 764-3423. Please send your comments no later than May 24, 2012. Thank you!

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Please fold form in half and tape closed to mail

