

SKAGIT COUNTY DIKE DISTRICT NO. 1  
17208 BRADSHAW ROAD  
MOUNT VERNON, WA 98273

August 5, 2014

Ms. Hannah Hadley  
U.S. Army Corps of Engineers  
CENWS-EN-ER  
P.O. Box 3755  
Seattle, WA 98124-3755

VIA EMAIL: [skagit.river@usace.army.mil](mailto:skagit.river@usace.army.mil)

**Re: Skagit County GI Study Draft FR-EIS – Public Comment; Skagit County Dike District No. 1**

Dear Ms. Hadley:

I am the Chairman of the Board of Commissioners of Skagit County Dike District No. 1 (the "District"), and on the District's behalf, I make the following Comments regarding the Skagit River GI Study Draft Feasibility Report and Environmental Impact Statement.

#### I. BACKGROUND

Dike District No. 1 manages flood protection operations in its district in Skagit County. DD1 provides flood protection for the City of Mount Vernon, west of the Skagit River, as well as other outlying County areas. The Dike Districts located in Skagit County have statutory duties and powers as Special Purpose Districts and play a vital role in flood protection of hundreds of millions of dollars of property value and over 110,000 Skagit County residents. The Districts also deal with debris in the river, and issues relating to river contamination, erosion, fish habitat, and numerous other environmental issues included in District operations and maintenance.

Dike District No. 1 is also a member of the Skagit County Dike and Drainage District Flood Control Partnership which is a group of five Dike Districts, including Skagit County Dike District No. 1, 3, 12, 17, and 22. The Districts are continually involved in maintenance, prior to flood season in October, November and December of each year, along with flood-fighting efforts during high water in these months. The rest of the year is spent performing maintenance activities, and construction projects.

There can be no greater single impact on life and property, than management of the river to control a catastrophic flood. A catastrophic flood will destroy every other program, management practice, or effort to maintain environmental features or habitat. A catastrophic flood will sweep away everything in its path, will inundate aquatic resources, contaminate water systems, submerge sewage treatment plants, farms, chemical and petrochemical facilities, and introduce human waste, chemicals, gasoline and oils, and toxic materials into otherwise clean waters.



Toxic flood waters will destroy water quality and aquatic resources. There is no more important endeavor than to protect life, property, the environment and habitat from the ravages of floods.

The DD1 Commissioners are in support of this GI Study proposal with selection of the CULI, Comprehensive Urban Levee Improvement. The District has worked with the Cities of Mount Vernon and Burlington and with Skagit County for many years in support of the GI Study. The District complements the Corps for the diligent work and effort, which appears to be bringing the study to completion over these past many years.

A significant advantage of the current study proposal is that it finally represents a detailed county and system-wide proposal for reducing flood risk, life safety threats, and damages to the Skagit River Basin as a result of flooding. The Skagit River Basin experiences frequent floods, of minor to major intensity, resulting in substantial damage to the community and putting at risk urban and rural infrastructure and economic activities of the Skagit County.

The study has examined more than 20 different measures over the last 15 years including structural and nonstructural options, which have culminated in the current Draft Feasibility Report and selection of the CULI. The selection of the CULI Alternative was determined to be the most viable and cost-effective project to meet the objectives of reducing flood risk to life safety. All of the other action alternatives, including three which would have provided similar levels of flood protection at the 100 year level, were determined to have considerably higher construction costs, real estate costs, or greater environmental impact. The CULI Alternative is the least problematic as far as environmental compliance, and provides the most protection for the greatest population in the Skagit River Basin. It would also be the most likely to receive federal funding.

Although this is still a Draft Feasibility Report, it appears to be a solid step forward to provide protection to the greatest number of people and the largest geographic area, both urban and rural, and with the best cost-benefit ratio. More importantly, from a local standpoint, this is a system-wide approach which appears to provide several proposals for flood protection for various other Districts and municipalities. In that regard, Dike District No. 1 supports the Skagit River GI Study Draft Feasibility Report and Environmental Impact Statement, with the following comments, concerns, and additional considerations.

## II. COMMENTS, CONCERNS, AND ADDITIONAL CONSIDERATIONS

Dike District No. 1 supports the effort to move forward with the Comprehensive Urban Levee Improvement Alternative (CULI). As noted on pages 48-51, the CULI provides not only for improvements and work within Dike District No. 1, but also provides many other system-wide improvements and County-wide benefits: 1) a flood wall or ring dike around United General Hospital, 2) ring dike and the flood wall at the Sedro-Woolley Wastewater Treatment Plant, 3) improvements at the Three Bridge Corridor, 4) improvements in the area of Dike District 17, 5) a riverbend cut-off levee and crossing, 6) a Lions Park connector, 7) a flood wall in Dike District 3, and 8) raising of the levee with installation of a floodgate in Dike District 1.



The CULI also provides for other beneficial structural and nonstructural components: 1) BNSF railroad crossing improvements, 2) debris management of the river bridges, 3) work on evacuation routes, 4) outlook structures in sea dikes, 5) installation of additional gauges, 6) flood warning systems, 7) real estate acquisition, 8) relocation of structures, elevation of structures, and flood proofing of buildings.

The Draft Feasibility Report and CULI are therefore a major step towards providing for a system-wide, comprehensive program of flood protection measurements throughout the County and throughout several Districts and municipalities, that might not otherwise be possible to coordinate. When funding is obtained, it is expected that a substantial amount of federal funding would be available for use by the numerous entities on these projects. This would significantly reduce the cost to the local sponsors, who would likely pay a 35% share with the federal government paying 65%, or some other percentage of cost sharing to be determined.

The result of rejecting the study and CULI would be to deprive Skagit County, Districts and municipalities of potentially millions of dollars in federal funds, and a system-wide plan of flood risk protection, for all of the residents, cities, and rural and urban areas in Skagit County. This study provides funding for a framework of mutual benefit for many entities in the County, with critical life and safety implications for its constituents. Lack of teamwork, cooperation, and rejection of this plan will only serve to drive away federal funding, federal assistance, and protection that the people of Skagit County need. This provides an inclusive framework for all entities to work together to resolve differences and complaints to achieve a plan that works for everyone.

The proposed plan will provide both Rural and Urban levels of protection. DD1, being mostly rural, is therefore concerned that their entire District continues to receive at least the current level of protection, without landowners being burdened by additional flood waters in a flood event. DD1 believes this must include raising the District levees proportionally to the proposed increases in river stage that will occur throughout the rest of Dike District No. 1.

The District supports the proposals in the Feasibility Report for raising the levees and adding a floodgate at pages 38-41. However, it appears that further information is needed regarding floodgate specifications and that hydraulic analysis will be required to determine the effects of the project on the District in times of flooding. The CULI Alternative modeling and design needs to further clarify when the proposed Westside floodgate would be used and how this would affect flood levels in Dike District No. 1. Dike District No. 1 is concerned that the purpose of the floodgate would be to release additional waters into the Westside Mount Vernon. Criteria for use of the floodgate needs to be clarified and the impact of its installation and use needs to be carefully studied and considered before plan approval.

It is important to DD1 that additional analysis and study be undertaken to quantify the extent of flood effects on DD1 and proposals to protect DD1 from damages before study approval. All parties need to work together to control and manage risks in their community in the framework of this plan and obtain from residents of DD1 the best flood protection possible for any level of flooding below and including the 100 year level.



Another significant and ongoing issue for Dike District No. 1 is the bridge approach as the SR 536 roadway intersects with the Westside Mount Vernon Bridge. The roadway at the bridge approach intersects the levee perpendicularly, below the levee crown, creating a "notch" in the levee. During flood events, it has been necessary for the Dike District to fill in this "notch" with an earthen berm to maintain the integrity of the levee system, and to prevent flooding of Westside Mount Vernon and farmland from Mount Vernon to La Conner. The resulting problem, however, is that the roadway is completely blocked and the entire community of west Mount Vernon is isolated from access and cut off from all urban and community services. The residents of Westside Mount Vernon remain isolated until the floodwaters recede and the "notch" is reopened. Correcting this condition would require modifying the approach or bridge structure to span the west end of the existing bridge to the top of the levee with addition of a culvert-type structure to pass flood flows. Further engineering and analysis is needed, which may provide other beneficial options. This matter has been previously discussed with WSDOT, but funding has not been available. The GI Study and CULI present an opportunity for funding and getting WSDOT involved in planning a fix and discussing potential alternatives

The CULI Alternative modeling and design also needs to carefully consider potential seepage issues resulting from a proposed enlarging of the levee structure. Underseepage and/or appearance of sinkholes or sand boils have been observed on landward properties in areas along Dike District No. 1's levees. Specifically, issues have been observed in prior years at Jackpot Lane and along Moores Garden Road, in the areas of RM 14 and RM 15 as shown on Figure 3-12, page 48, of the draft FR-EIS. To avoid potentially aggravation of seepage issues in those areas and to ensure that those levees hold in a flood event, it is critical that the CULI incorporate seepage berms, widening of the levee, or installation of sheet piling, at least in areas of concern, to ensure that proper protection is provided. Where widening the levee or installing a berm is not feasible, the CULI should incorporate sheet piling as needed to strengthen the levee structure and prevent underseepage issues. It of course would not make sense to raise the levee structure only to have it fail due to increased seepage through the levee. A comprehensive analysis needs to be provided in that respect.

As a related matter, the District would also urge that both upstream and downstream drainage issues be addressed in further details in the study. The District being downstream from the proposed improvements at Dike District No. 12 will receive more waters by virtue of being downstream, as will Districts downstream of DD1, and when flooding occurs, it is important that flood waters be drained from property as soon as possible to protect farmland, and rural and agricultural areas. More analysis is needed to determine the flood effects on DD1. DD1 would urge that proposals for improvements in benefits to drainage both up and down the river be further addressed by the Corps in this study and provided within this system-wide framework for flood protection.

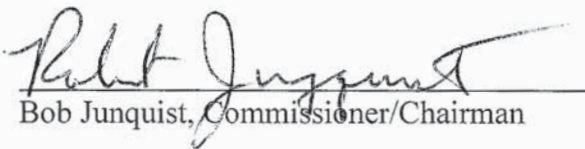
Finally, there is concern amongst the Districts that the estimated construction window of 2 years is not realistic. Typically, levees are not worked on during the flood season nor are the existing levee soils able to be worked on in the winter months. Typically we have a two to three month work window each summer to do our levee work. A more realistic construction window to accomplish the improvements should be included in the EIS.

Ms. Hannah Hadley  
August 5, 2014  
Page 5

The District Commissioners otherwise support and urge adoption and approval of the Draft Feasibility Report and EIS and final approval of the CULI, consistent with the above comments, concerns, and considerations.

If you have any questions in that respect or wish to discuss further, please feel free to call. We would also invite you to join us at any of the District's meetings, which are typically held the third Thursday of each month.

SKAGIT COUNTY DIKE DISTRICT NO. 1

By:   
Bob Junquist, Commissioner/Chairman