Attachment #4 Attachment #A-2.1 (7/20/09) Support for Measures Identified as part of a Skagit River CFHMP and the Army Corps of Engineers Skagit GI Study Draft

Additional Baker River Storage.... An Interlocal agreement has been signed by the County, Cities, Towns, several Dike and Drainage Districts and the Hospital District in support of implementing flood control provisions of new license recently issued to PSE by the FERC including paragraphs 4.1.1 and 4.1.2 of the Settlement Agreement and continued analysis of additional Baker Storage by the Army Corps of Engineers. (This measure was removed by action of the AC on 6/15/09). (Total Cost Estimate: Unknown at this time but not cheap.)

Hamilton Relocation and Property Buy-out... The community has

been working on this for many years. This project is vital to the continuing survival of the community and will provide salmon habitat restoration benefits. (Total Cost Estimate: 30,000,000+ - (Source: Skagit Valley Herald, "Moving a town" by Ralph Schwartz, 4/4/2009))

Ring Dike - Sedro Woolley Waste Water Treatment Plant

Makes sense. Keep the raw sewage in the plant. Keeps Sedro Woolley's city sewage system functioning? Total Cost Estimate: \$1,374,059 – (*Source* Skagit County Public Works, "What Will Flood Control Cost?" 6/3/2007)

Ring Dike - United General Hospital... Design needs to include access to the hospital during an emergency. Needs additional hydraulic modeling. (???)

Burlington Levee Certification... Design will not remove City from 100-year flood plain but will reduce base flood elevations within City limits and the flood risk to critical infrastructure with the least amount of impact to the environment. Water running through the city and then back to the river or the sound... not good. Life and property!!!!!!

Dike 12 and Burlington have an interlocal agreement and have hired PIE and Golder Engineering as primary consultants. They are in the process of completing the geotechnical engineering and hydraulic modeling work; work is 60% complete. Dike 12 has been actively purchasing right of way for this project. (Cost Estimate: Study by PIE underway to determine cost of improvements – the study is contracted to Pacific International Engineering for \$621,320. (*Source Skagit Valley Herald*,

"Firefighters' pay derails Burlington budget talks" by Adam Rudnick 11/6/2008) (P/C Burlington official "very rough estimate **\$30,000,000**"))

Three Bridge Corridor Levee Set Back and Certification...

This project ties into the Burlington Levee Certification project. Project is currently in NEPA review utilizing Federal Highways Administration funding. Skagit County is the lead agency in cooperation with the Cities of Mount Vernon and Burlington and Dike Districts 12 and 17. Current design will set levees back 200 – 500 feet from bank of the river between the BNSF and the I-5 bridges and increase conveyance. Dike Districts 17 and 12 have invested several million dollars for purchasing right of way for this project since the 1995 flood and the City of Burlington has established a 600' building moratorium for this project to help insure its success. (Total Cost Estimate: \$58,463,613 – (*Source* Skagit County Public Works, "What Will Flood Control Cost?" 6/3/2007))

Ring Dike - Anacortes Water Treatment Plant... This is a vital

facility providing the water supply for the City of Anacortes, Oak Harbor and LaConner as well as the Anacortes refineries and Whidbey Island Naval Air Station. Water surcharge has been put in place by the City of Anacortes to fund facility improvements including flood control. (**Total Cost Estimate:** \$1,480,693 – (*Source Skagit County Public Works*, "What Will Flood Control Cost?" 6/3/2007))

Down Town Mount Vernon Flood Wall and water front

redevelopment... Project includes 9,300 linear feet of floodwall and levee to protect historic downtown Mount Vernon and the Mount Vernon Waste Water Treatment Plant (MV WWTP). The project is designed using the COE hydrology and the FEMA FIS FLO-2D model. As designed, the flood protection measure will remove select areas from the 100-year floodplain. Benefits of this project include protection of County and City essential public facilities; portions of I-5 and State Rt. 536, freight, passenger and commuter corridors through the protection of I-5 and the BNSF rail line. Flooding will also be reduced for several square miles south of downtown Mount Vernon. Preliminary engineering design, environmental review (SEPA, EIS and NEPA), Shoreline Substantial Development permit and the Hydraulic Project approval have been completed. With more than 50% of the funding in place, five of the required seven right-of-way properties have been acquired and the final design is currently under contract. (Total Cost Estimate: \$33,300,000 – (*Source* Skagit Valley Herald, "MV Plan Stalled by Feds" by Ralph Schwartz & Elliott Wilson, 7/7/2009))

Ring Dike – La Connor...Existing levee will be expanded and improved to keep flood waters out of the Town of LaConner. (Total Cost Estimate: \$1,000,000 – (*Source* Skagit County Public Works, "What Will Flood Control Cost?" 6/3/2007))

TOTAL COST ESTIMATE: \$155,618,365 CORPS OF ENGINEER GI ESTIMATE: \$200,000,000