LETTERS OF CONCERN AND PUBLIC TESTIMONIES

The following individuals and organizations provided comments with concerns or issues related to the proposed project. Their letters and public testimonies are followed by the County’s individual responses that attempt to address their concerns by providing additional information, clarifying previous statements, and presenting the findings of additional analyses conducted since the DEIS was issued.

- Commissioners, Diking Improvement District #5
- Gary T. Jones, Jones and Smith, Attorneys at Law
- Peter C. Ojala, Adams & Duncan, Attorneys at Law
- Merle Ash, Land Technologies, Inc.
- Naeem Iqbal, Hima Farms, Public Testimony
- Jamie Hillery, Buse Timber and Sales, Inc.
- Victor M. Loehr, Dagmars Marina
- Marv Thomas, Snohomish County Agricultural Advisory Board
- John Postema
- Ed Hussman, Snohomish County Farm Bureau
- Ed Moats, Snohomish County Farm Bureau, Public Testimony
- Steve Fogg
- Mark Convey, River Delta Ranch, Public Testimony
- Douglas G. Hennick, Washington Department of Fish and Wildlife

LETTERS OF SUPPORT

The following individuals and organizations are being acknowledged for providing comments and letters of support for the project:

- David Batker, Earth Economics
- Mike Blackbird, Pilchuck Audubon Society
- Laura L. Blackmore
- Jared Bond, Snohomish County Marine Resources Committee
- Jason Lehto, NOAA Restoration Center
- Betsy Lyons, Estuary and Salmon Restoration Program
- Kurt Nelson, The Tulalip Tribes
- Gerry O’Keefe, Puget Sound Partnership
- Casey Rice
- Mindy Rowse
- Erik C. Stockdale, Washington State Department of Ecology
- Elizabeth Walker, Snoqualmie Watershed Forum
- Terry R. Williams, Snohomish Basin Salmon Recovery Forum
DIKING DISTRICT NO. 5

Snohomish County Public Works
Transportation and Environmental Service
Attn: Mark Stamey, EIS Project Manager
3000 Rockefeller Avenue, M/S 607
Everett, WA 98201

July 5, 2011

RE: SMITH ISLAND RESTORATION PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT – JUNE 2011

Dear Mr. Stamey:

Diking District No.5, as a government entity established through various RCW's, has been provided authority to protect the dikes and should be considered to be the final authority in these matters.

As Commissioners for the Diking District, it is our fiduciary responsibility to protect the District itself from any adverse impacts. The restoration project proposed by the Proponents is too important for the District to provide adequate comments to the Draft Environmental Impact Statement without additional time to respond.

The proposed restoration project amounts to a major change to Smith Island which could affect existing drainage issues in the area, the potential for salt water intrusion into adjacent agriculture properties, water velocity increases in Union Slough (especially in consideration of the anticipated breach of dikes on the Beiringer property to the north) and channel depth.

Though we are elected Commissioners we also have other businesses we manage and do not have the needed time or the access to professional engineers to sufficiently respond to the various aspects of the Draft Environmental Impact Statement in the short time period allocated. As Diking District Commissioners, we do not want the restoration project to be a destruction project to other businesses within the District will not be able to approve this project under the present circumstances.
Additionally, in reviewing the referenced environmental impact statement, the following should be noted:

1. We disagree that the location of the footprint and alignment of the proposed dike will not create significant risk of reduced drainage, saltwater intrusion, flooding or other groundwater impacts to adjacent properties (page 6), that seepage will be minimized by incorporating impermeable materials into the dike (page 17), that the natural drainage ways are minimally affected (page 47) or that the project would have no significant adverse impacts on existing agricultural uses (page 49).

The dike design needs to meet the most recent Corps of Engineer's criteria with a minimum height of 14.25 feet after settlement occurs. This is needed as the proposed dike will experience tidal inundation on a daily basis instead of an occasional flood event.

Just constructing the dike using impermeable materials does not prevent saltwater from penetrating the adjacent groundwater and then seeping into the adjacent agricultural properties. The present dike is constructed along Union Slough whereas the proposed dike is to be constructed at the property line of the adjacent properties. Any saltwater penetration into the agricultural land could have a devastating effect on the deep tap rooted nursery trees now being grown in the area.

A pump and lift station should become part of the project design to ensure the adjacent land stays dry and free of salt water.

In addition, the top width of the dike should be at least 20 feet to accommodate maintenance vehicles.

Public access should also be eliminated to prevent damage to the dike surfaces.

Not all water that is presently draining to the east can be diverted in such a manner to the west (as proposed) without causing numerous problems, especially if Washington State Department of Transportation's (WSDOT) culvert cleaning standards are in conflict with what actually needs to occur. The Proponents are depending on a 42-inch culver to carry much of the water under 1-5 to the west but WSDOT's present criteria of culverts being 75% or more full prior to cleaning will provide for a higher elevation in this culvert making it impossible to obtain proper drainage to the west. Before any proposed drainage plan is implemented there needs to be a requirement that WSDOT maintains their culverts to a higher standard.
Additional drainage to the west must not affect any existing permitting requirements or tideland leases now in place with operating businesses. Trying to design drainage to move west under 1-5 through adjacent land is of great concern to those businesses. Buse Timber has a stormwater pollution prevention plan in place that mandates that they control the water that leaves their facility no matter where it comes from. The water is tested on a regular basis with test results provided to Washington State Department of Ecology. Buse Timber is presently below established threshold levels but if the proposed project is constructed Buse Timber is faced with an introduction of potential pollutants from sources that are outside of their control. Buse Timber would have to bear the cost of removal if those potential pollutants resulted in levels higher than their existing threshold level. The Department of Ecology makes no allowances for where or how pollutants enter a site but hold responsible the party who controls the site just prior to those pollutants entering the waters of the state. Dagmars Marina is faced with a similar situation with respect to its existing National Pollutant Discharge Elimination System (NPDES) Boatyard General Permit with the Department of Ecology.

Newly created water volumes must be determined and additional storage areas created to handle huge rain events at the same time high tides may occur.

No "overtopping" of the dike should ever occur.

The channel depth of Union Slough must not be adversely affected.

The proposed breaching of the dike to the North (Beiringer Farm) must also be taken into account in these calculations.

The Proponents must be required to provide adaptive management practices to ensure that all adverse impacts to adjacent property owners will be acknowledged and immediately taken care of.

2. We disagree with the statement that in order for the Diking District to maintain eligibility in the U.S. Army Corps of Engineers' (Corps) Flood Rehabilitation Program (Corps PL84-99) that the dikes must be upgraded (page 14 and page 25) and if the proposed restoration project is delayed that Diking District No.5 may be required to complete upgrades to the dike at an estimated cost of $1.5 million (page 29).

Diking District No. 5 is enrolled in the Corps PL84-99 Flood Rehabilitation Program and per the Flood Damage Reduction System Inspection Report, dated March 14, 2011 will continue to be so with a few minor repairs to be accomplished.
With respect to the $1.5 million in upgrades, the Corps was working on the Rehabilitation of Flood Control Works for the Union Slough Levee to bring the dikes back to the levels prior to the January 2009 flood event. This project was to have been completed this summer. In correspondence received today from Lester Soule, with the Corps of Engineers, he stated that the Corps has not received the necessary engineering and design funds and in fact has been requested to shut down all projects that will not go into construction this year. This is due to the extensive flooding in the Midwest creating an urgent need for rehabilitation and flood fight funds. What this means is that construction will not occur this year and in all probability will not begin until 2013.

Based on that, even if this proposed restoration were to proceed, the timing is such that the $1.5 million still needs to be spent, with the Proponents paying their prorata share of such costs, to implement the upgrades recommended by the Corps. This work cannot be avoided whether the Proponents proceed with the project or not.

3. We disagree with the proposed restoration project providing public access to the diking system (page 12), and recreational opportunities (page 19), a dike top trail (pages 20 and 38), an increase in tourism due to greater fishing, bird-viewing and walking opportunities (page 39) and enhancement of public access (pages 45 and 46).

Diking District No.5 is presently, and will continue to be, if the restoration project is completed, responsible for the ongoing maintenance of the dikes and thus has a substantial concern about allowing public access to the dikes due to the potential damage that could occur and the cost to repair that damage nor does the Diking District desire any responsibility for any liability issues that may surface if the dikes are made available for public use. In providing public access the additional costs of construction of the new dike (and potentially the existing dike) could increase substantially as construction of the top would also need to take into account access for emergency vehicles and additional impervious surfaces to eliminate problems during winter months when the dike top surfaces would be more susceptible to damage.

The Proponents must establish ongoing adaptive management practices and bonding requirements to ensure that money is available to the Diking District for damage control should it occur.

4. The draft environmental impact statement mentions potential mitigation partners (page 15), an opportunity to provide landowners and diking districts option to fulfill mitigation requirements of possible impact projects in the estuary (page 20), reservation of 150 acres for a compensatory mitigation program (page 21), mitigation strategy (page 21) and mitigation opportunities for BNSF and WSDOT (page 22).
P1-22
The Proponents must be required to provide a financial analysis of the entire project and the impact it will have on Diking District No. 5 and if it will be subject to any financial hardship due to the restoration project.

P1-23
There needs to be full disclosure on the compensatory mitigation strategy including which program is to be implemented. If this is to be an advance mitigation program how will that affect the opportunities for BNSF and WSDOT as they would probably be eliminated from any participation or if the mitigation program is to be an “in-lieu fee” what is the monetary value on a per acre basis which should include the compensation the Proponent (in this instance the County) is receiving from both BNSF and WSDOT, or others, and what is available to “other land owners, farmers and diking and drainage districts” and at what cost.

P1-24
As part of this analysis the dike ownership also needs to be considered which should include several alternatives such as Diking District No. 5 selling the dike easement area proposed to be breached to the County allowing for the money to be used to offset future existing dike maintenance costs, whether Diking District No. 5 assumes control of the new dike or if the County retains ownership and becomes responsible for the continued maintenance (this would need to include an adaptive management program to ensure that the Diking District was not placed in jeopardy of losing Corps PL84-99 enrollment due to lack of maintenance for this portion of the dike), if the Diking District shares in any of the revenue achieved if an "in-lieu fee" mitigation program is implemented, and determination of the long term financial commitment the County will have with Diking District No. 5.

5. We disagree with the statement that cleaning and possible slip-lining of existing culverts that drain west under 1-5 will likely be conducted by DDS in advance of the project (page 19 and page 90).

Diking District No. 5 will not be cleaning or slip lining any of the existing culverts that drain west under I-5 belonging to WSDOT. In that regards it is important that the Proponents thoroughly analyze the proposed drainage modifications to ensure positive drainage on all the properties adjacent to the new dike so that no negative impacts will result. The drainage modifications proposed include having areas on the east side of 1-5 presently draining to the west now draining to the east now draining to the west without addressing the potential adverse impact this will have if WSDOT does not maintain the culverts they are responsible for. A conflict in maintenance criteria between WSDOT and the higher standard needed for the proposed project must be eliminated for the proposed drainage modifications to work.

Again, the Proponent must establish adaptive maintenance practices to ensure that the restoration project performs as proposed, and if not that, there is money available for required repairs and compensation for those adjacent property owners affected.
6. We disagree that Snohomish County conducted maintenance of drainage facilities within their property with dredging in the west and east tidal channels to restore their full drainage function (page 84).

Though Snohomish County started the maintenance of the drainage facilities on their property the project was never completed and at this time will affect the drainage patterns on adjacent properties.

7. On page 14, the statement is made that "The City, County and DDS are coordinating on the new dike's design and alignment, drainage landward of the dike, public access, maintenance of the new facilities, breaching of the existing dike, and possible ownership transfer of the existing and proposed new dike."

Though some preliminary discussions have been had with respect to the above no determinations have been made at this time. It is important that the Proponents take into account all of the minimum requirements we have listed above in providing engineered drawings for this proposed restoration project and that money is made available to Diking District No. 5 to minimize its financial impacts in providing legal support for potential ownership changes and engineering consultation fees to review the design drawings along with specifications and construction drawings regarding drainage, hydraulics, and channel depths to protect the Diking Districts interests in this matter. It is necessary that the Diking District Commissioners feel adequately represented in these matters in order to provide the required approval of the project.

8. The Draft Environmental Impact Statement states that the one purpose of the project is to provide a properly functioning and self-sustaining estuarine tidal marsh ecosystem that will provide critical rearing habitat for endangered Chinook salmon.

Though the purpose of the restoration project is commendable, the only project alternatives reviewed are proceeding with the restoration or taking no action whatsoever. There should be some discussion as to other alternatives that may be available including a project restoration in an area that does not face as many environmental or conflict in policy problems (such as the Growth Management Act and the Snohomish County Comprehensive Plan and in particular the Economic Development Objective 1.B, Land Use Policy 7.D.9 and the Natural Environmental Goal 4) or what would be the cost of providing a fish hatchery in lieu of the costs associated with this proposed project. We believe that the alternative sections of the draft environmental impact statement are not adequate and should be substantially expanded. This is too large of a project not to imagine if other options are available to achieve the same defined purpose.
The Proponents must be required to provide adaptive management practices to ensure that if the restoration project is completed that all future adverse impacts will be addressed and immediately taken care of. This should include maintenance and performance bonds that would require, at a minimum, annual inspections of the new dike to address any variation in top elevation, potential seepage problems, drainage problems to the west and Union Slough channel depths. There should be a time period covered to ensure that proper performance has occurred such as a set number of years or a set number of flood events (along with establishing criteria for what a flood event is).

Your attention to the above are necessary and will be appreciated.

Sincerely,

Victor M. Loehrer
Diking District No. 5 Commissioner

Asif Iqbal
Diking District No. 5 Commissioner

Jamie Hillery
Diking District No.5 Commissioner
Responses to July 5, 2011 Letter from Diking District No. 5

Response to Comment P1-1
Diking Improvement District 5 (DID5) was formed under Chapter 85.08 RCW in response to a petition from the Everett Improvement Company dated July 31, 1930. On August 18, 1930, the Board of County Commissioners formed Diking Improvement District 9. A short time later on January 13, 1931, the Board ordered that the District be designated and known as Diking Improvement District 5. A diking improvement district formed under Chapter 85.08 RCW is not a separate municipal corporation or governmental entity and remains under the auspices and control of the County which formed it. While the District Board of Supervisors is charged with the responsibility for maintenance and construction of a system of improvements, the final authority and responsibility for approving the proposed plans is vested in the County Council, which is the legislative body of the County (see RCW 85.08.220 and .540). Input from the Board of Supervisors will be important in determining the feasibility of the proposed improvements.

Response to Comment P1-2
Snohomish County agreed to conduct additional technical studies in response to DEIS comments for more analysis on key issues and have taken the time to work cooperatively with DID5. The studies cover existing and proposed drainage patterns, saltwater intrusion and groundwater conditions, potential overtopping of the dike during flood events, hydraulic impacts to Union Slough, and setback dike erosion protection recommendations.

Response to Comment P1-3
The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond.

The project will not result in an increase in the amount of water draining through the 24-inch culvert under I-5. This culvert conveys the southwest tidal channel and approximately one-third of the drainage from the IFF property that is south of the west tidal channel.
The County has conducted a number of investigations to determine the potential for the proposed project to cause saltwater intrusion on adjacent properties, including the County’s 2012 Geologic and Hydrogeologic Field Investigation Report, Tetra Tech’s 2013 Saltwater Impact Study, and Shannon and Wilson’s 2012 Groundwater Flow and Seawater Impacts Assessment and 2013 Groundwater Report Update. These studies determined that the soils and groundwater in the alluvial sands aquifer and surface water, both on and around the project site, currently have salinity levels above drinking water and agricultural irrigation water standards. Under existing conditions, the Snohomish River provides a greater source of groundwater recharge to the underlying aquifer, with a potential minor input from groundwater sources from the south, than Union Slough. When the existing dike is breached along Union Slough and the project area receives daily tidal inundation, Union Slough will become the more predominate source of groundwater recharge. As Union Slough has a lower salinity level than the Snohomish River, the restored marsh areas is expected to also have a low salinity level, and aquifer source recharge to be lower in salinity than existing conditions. See the Water Resources section and associated technical reports in the Appendices for more information.

In 2013, the County finalized the Union Slough Hydraulic Model Study (Appendix J) which addresses potential impacts to Union Slough to include conditions post-construction of the Blue Heron Slough project on the former Biringer Farm property. The results indicate a minor increase in flow velocity and shear stress on the existing Union Slough dikes downstream from the proposed restoration area. This increase may also cause an enlargement of the inner channel within Union Slough, however, it is not considered a problem unless it damages the dikes such as through undercutting or oversteepening of the dike front.

The potential for erosion will be monitored during annual inspections by the Corps or monitoring by the County. If new areas of erosion appear on the downstream dikes following project construction, additional bank protection materials will be added to the dikes by the County, in cooperation with the District, to increase their resistance to erosion.

Additional hydrodynamic modeling and design studies have been performed by the County in 2013 that evaluate the potential for tidal channel development and erosion in the marsh area. These studies indicate some minor risks for tidal channel erosion, however, the expansion of existing tidal channels and creation of new tidal channels is an expected and desired outcome of project implementation. These studies also indicated only a low risk of damage to the Puget Sound Energy (PSE) natural gas pipeline from soil erosion. The County is coordinating final project plans with PSE to ensure the pipeline is protected.

The hydraulic model results did not indicate significant sediment deposition within Union Slough, although flow velocities upstream of the downstream dike breach will decrease. This could cause minor localized sediment deposition in eddies immediately upstream and downstream of the downstream breach. There may also be a small amount of sediment deposition in the Union Slough reach between the two breaches. The ability of Union Slough to transport sediment, especially the fine-grained nature of the sediment load in this reach, will not be impaired. The County will monitor for possible sediment deposition through bathymetric surveys, and correct any deposition as a result of decreased flows adjacent to the project site. The County is prepared to submit permit applications in order to maintain Union Slough navigability for Buse Timber’s log rafting operations.

Response to Comment P1-4
Please see response to comment P1-2.
Response to Comment P1-5
Please see response to comment P1-3 regarding several technical studies the County has completed to address issues of existing and future drainage, saltwater impacts, and hydraulic impacts to Union Slough. The setback dike design will include a low permeability core to minimize seepage, and a drainage trench on the landward side of the dike to intercept seepage through and under the dike. The seepage flows will be redirected northward to a new drainage storage pond. A backflow preventer may be installed in the trench to limit backwater flooding from the pond. In addition, the dike will be subject to U.S. Army Corps of Engineers’ PL84-99 maintenance standards which address seepage problems.

Response to Comment P1-6
The County has reviewed the dike top elevation with the City of Everett and DID5. The project will construct a setback dike that will connect to the new City of Everett dike. It will be constructed to an elevation of 15 feet NAVD88, which corresponds to a 1% Annual Chance (100-year) flood event, and it will be constructed to a significantly higher standard than the existing dikes.

Response to Comment P1-7
Please see paragraph 3 of the response to comment P1-3. As mentioned in that response, Shannon and Wilson’s 2013 Groundwater Update found that when the existing dike is breached along Union Slough and the project area receives daily tidal inundation, Union Slough, which is less saline than the Snohomish River, will become the more predominate source of groundwater recharge, including to Tidal Channel B. Seepage will also be prevented from reaching the tidal channel by the new dike’s drainage trench that will direct any flow towards the new drainage storage pond.

Response to Comment P1-8
The project design includes a pump to assist drainage through a relocated tide gate to Union Slough during periods of heavy rainfall and high flows in Union Slough.

Response to Comment P1-9
The County proposes a dike top width of 15 feet which is consistent with the City’s proposed dike top width. The new dikes will connect at 12th Street NE. A width of 15 feet is adequate for vehicular access and maintenance. The DID5 commissioners have concurred with this design parameter. The dike top will be wider where turnarounds are located.

Response to Comment P1-10
No public access is proposed on the County’s portion of the new setback dike, which will run parallel to IFF’s property (Hima Farms) and the River Delta Ranch horse boarding operation, so no damage would occur to the dike surface. The City of Everett is proposing a trail on its dike south of 12th Street NE which will connect with an existing trail at the northeast corner of its wastewater treatment plant.

Response to Comment P1-11
The proposed project does not rely on cleaning of the 42-inch culvert by WSDOT as it will not cause areas that presently drain to the east to drain to the west under I-5.
Response to Comment P1-12
Please see the first paragraph of the response to comment P1-3 for information on the drainage analysis conducted for the Smith Island project. Post-construction, areas currently draining to the east through the cross-ditch between the west and east tidal channels will primarily drain north to a new drainage storage pond. Therefore, the levels of water draining under I-5 will remain the same if not less, and the NPDES permits granted to Buse Timber and Dagmars Marina will not be jeopardized.

Response to Comment P1-13
Please see the first paragraph of the response to comment P1-3.

Response to Comment P1-14
The County’s Union Slough Hydraulic Model Study examines the potential impact of the project on 100-year flood levels. New modeling was conducted to provide the necessary comparison with existing predicted 100-year flood levels. The new dike will be constructed to an elevation of 15 feet NAVD88, which is taller than the existing dike. As the study concluded that the project would not raise flood levels, it is not anticipated that the new setback dike will be topped by rising waters more frequently than the existing dike.

Response to Comment P1-15
See response to P1-3.

Response to Comment P1-16
The County is currently in discussions with the Diking District to provide assurances to any concerns the District has regarding the project. The County has already been responsive to a number of concerns by incorporating a pump into the new drainage system so that DID5 can manage unforeseen drainage impacts. It is also prepared to apply for permits to dredge Union Slough as needed so that unforeseen impacts to the depth of Union Slough can be mitigated.

Response to Comment P1-17
Comment noted, and discussion of PL84-99 has been revised.

Response to Comment P1-18
Comment noted. Text regarding costs of repair work by DID5 in the Summer of 2012 and 2013 has been revised and cost implications for dike maintenance have also been addressed.

Response to Comment P1-19
Snohomish County understands DID5’s concerns regarding public access and recreational activities. However, public access is not proposed on the County’s portion of the new setback dike north of 12th Street NE. A trail is proposed on the City’s dike that will run south of 12th Street NE to the northeast corner of its wastewater treatment plant, where it will connect to the City’s existing Smith Island loop trail that originates at Langus Riverfront Park. The City has informed the County that it has a current agreement with DID5 for dikes south of 12th Street NE that has transferred the responsibility for dike improvements, maintenance, repairs, and associated trails to the City.
Response to Comment P1-20
See response to P1-16.

Response to Comment P1-21
Comment noted. The project will provide mitigation for other projects by WSDOT, BNSF, IFF Holding, and the City of Everett. The breached dike footprint provides for future mitigation of DID5 projects.

Response to Comment P1-22
The County, as a landowner within DID5, must file a petition pursuant to RCW 85.08.540 to conduct proceedings for the purpose of evaluating the feasibility of the proposed alteration to the existing system of diking and drainage improvements as set forth in the proposed project. A comparison of existing and future costs has been discussed with the DID5 supervisors, and will be included as part of the feasibility evaluation. The project will replace a dike constructed in the 1930's, which has failed portions requiring significant repair. The new dike and associated toe ditch, of shorter length, will require less maintenance than the existing system of improvements. Assessments for DID5 are to be established in accordance with RCW 85.08.

Response to Comment P1-23
Since the issuance of the DEIS, two changes have happened to the Compensatory Mitigation Element for the Smith Island Project:

1. The County has decided that it no longer plans to propose an advanced or in-lieu fee mitigation program for future projects. Per an agreement already in place with BNSF, the County proposes to provide mitigation acreage for their Delta Yard project. The County is also engaged with WSDOT on an agreement to provide mitigation acreage for their SR 529 bridge project. The County has also offered to provide mitigation for IFF Holding’s project impacts.

2. The County and DID5 have discussed the future use of those lands the County holds for the benefit of DID5. At this time, those conversations have centered around DID5’s interest in benefiting from these lands through the use of compensatory mitigation for future DID5 projects. This or an alternative arrangement will be confirmed following further discussion between DID5 and the County.

See updated text in the Proposed Action Alternative sections of the FEIS for further details on why project areas are discussed as mitigation or restoration and how the project is self mitigating.

Response to Comment P1-24
The land on which the existing dike is constructed was transferred from Thomas and Mary Spencer to Snohomish County for the benefit of DID5 by quit claim deed dated March 18, 1931. Title to the 50-foot wide strip of land on which the dike is constructed is held by Snohomish County. It is anticipated that the new dike to be constructed will form a part of DID5’s system of improvements and the land beneath it will be held by the County for the benefit of DID5. This or an alternative agreement will be confirmed following further discussion between DID5 and the County. The existing dikes meet the Minimally Acceptable standard of the Corps' PL84-99 program. The new dike would be constructed to a higher standard than the
Response to Comment P1-25
The proposed drainage revisions account for all water from the project area and the EIS text has been revised accordingly with regard to WSDOT’s culverts. None of the drainage studies conducted since the DEIS issuance have accounted for water passing through WSDOT’s 42-inch culvert under I-5. The project’s drainage design includes two tide gates and a large drainage storage pond with a pump to assist drainage through the tide gate during periods of heavy rainfall and high flows in Union Slough. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. Drainage from I-5 that may flow to the project area will be accommodated in the project design.

Response to Comment P1-26
DID5 has specified that it is responsible for cleaning of all toe ditches and that individual land owners are responsible for cleaning other ditches located on their property. The ongoing and future ditch maintenance activities on Smith Island are outside the scope of this project. DID5 members (including the County) are coordinating with federal, state and local regulatory agencies on a Drainage Maintenance Plan to ensure drainage maintenance activities can be performed on a programmatic basis, and are consistent with each agency’s respective regulations.

Response to Comment P1-27
The County agreed to assist DID5 with the cost of hiring an independent consultant of its choice to provide an independent review of the findings of the technical studies that have been prepared. Please see response to comment P1-3 regarding the findings of the studies. As the project design continues to be developed, the County will provide DID5 with the opportunity to review the latest design elements.

Response to Comment P1-28
The search for suitable locations for salmon habitat restoration projects has taken place over the past 35 years and involved evaluations by state agencies, local jurisdictions, tribal governments, and a range of environmental organizations. Over two dozen sites were studied and ranked in the 2001 Salmon Overlay to the Snohomish Estuary Wetland Integration Plan (SEWIP Salmon Overlay) and all but ten of the sites consisted of designated agricultural lands. The study ranked the Smith Island project area among the top three potential restoration sites in the estuary along with the Biringer Farm area (known as the Blue Heron Slough Project) on North Spencer Island, and the North Tip South Ebey Island Project, which are also planned for restoration. The location of a specific site for the project is limited due to the primary goal of the project. The Snohomish River estuary area, with its mix of saltwater and freshwater, has been identified as critical to habitat restoration because it is where salmon adjust physiologically to transitioning as juveniles from a riverine (freshwater) habitat to open water (saltwater), and later as an adult returning to spawn in upstream river habitats. This movement between different environments is an integral part of their life cycle, and it can only take place within an estuary.
A discussion of setback dike alignment alternatives for the site has also previously taken place. Three alternatives were proposed in the April 2009 SEPA Environmental Checklist, and they had associated restoration-mitigation areas ranging from 262 acres to 479 acres. During the public comment period, the majority of comments received favored the maximum restoration alternative. However, this would have required purchasing adjacent properties and the owners were not willing sellers. The alternative proposed in the DEIS falls between the medium and minimum restoration alternatives presented in the Checklist, so the County has already significantly reduced the restoration area.

The Land and Shoreline Use section of the DEIS evaluated or provided information to show compliance with the three General Policy Plan objectives/policies that you reference in the Snohomish County Comprehensive Plan. Economic Development Objective 1.B states that Snohomish County shall balance economic and environmental concerns – recognizing that a healthy environment is essential to quality of life. In keeping with this objective, the County commenced the Sustainable Lands Strategy (SLS) initiative in 2010 to resolve issues that have arisen from the Comprehensive Plan’s conflicting goals, objectives, and policies as they relate to agriculture and habitat restoration. The goal of the SLS process is to develop Comprehensive Plan amendments and County Code provisions that will ensure net gains for agriculture and habitat restoration, as well as for tribal cultural matters that relate to increasing healthy salmon stocks. Policy amendments proposed for the Land Use and Natural Environment chapters of the Comprehensive Plan were adopted by the County Council in October 2012 (Amended Ordinance 12-047).

Land Use Policy 7.D.9 states that the County shall investigate programs that have the potential to convert farmland for habitat restoration, mitigation, or flood storage and their resulting long-term effects on agriculture. This investigation shall provide the basis for a subsequent analysis of the effects of such programs on farmland and shall be followed with appropriate policies and regulations to protect designated commercial farmlands. In the DEIS, we stated that there are no adopted regulations to implement this key policy, however, the SLS process has begun to address this resource management issue.

Natural Environment Goal 4 calls for balancing the goals of protecting elements of the natural environment while promoting the long term viability of commercial agriculture. As mentioned previously, the goal of the SLS process is to develop Comprehensive Plan amendments and County Code provisions that will ensure net gains for both agriculture and habitat restoration.

The question of relying on salmon hatcheries as a substitute for the conservation of wild populations is risky as a long-term conservation strategy. Hatchery salmon do not have the same resilience or genetic diversity as wild salmon, which makes them more susceptible to disease, less able to respond favorably to changing environmental conditions such as warmer or cooler sea temperatures, and they have significantly less reproductive capacity.

Response to Comment P1-29
Please see response to comment P1-16.
Jones & Smith

Attorneys at Law

July 6, 2011

Mark Stamey
Snohomish County Public Works Dept.
3000 Rockefeller Avenue
5th Floor
Everett, WA 98201

Re: Smith Island Restoration Project, RR 49206 DEIS

Dear Mr. Stamey:

These comments are being made on behalf of a special purpose district formed in Snohomish County as Snohomish County Diking improvement District No.5 and in place since 1931. Like other special purpose districts, the District follows Chapter 85.38 RCW setting forth methods of election and governance.

The District's comment is that insufficient time has been allowed for responding to the draft Environmental Impact Statement. WAC 197-11-550 puts the burden on both consulted agencies and not consulted agencies to be specific about any additional information or mitigation measures the commenting agency believes are necessary or desirable to satisfy its concerns. The Snohomish County Dike Improvement District No. 5 has not had sufficient time to engage fish biologists or hydrogeology consultants to independently review the Smith Island Restoration Project and project studies, which are assembled in the draft Environmental Impact Statement.

The volunteer/laymen who serve as supervisors/commissioners of the District have individual knowledge and concerns about their district as well as their ownership of land within the district. They are alarmed by the conclusions stated about impacts to adjacent properties appearing at page 6 and page 7. They find the facts set forth in the Environmental Impact Statement regarding drainage to be erroneous in several particulars, including the presence of DOE approved wells, the direction, and quantity of flows in particular drainage ditches. Consequently, the conclusion stated at the bottom of page 6 requires further investigation:

“Since no negative impacts to drainage functions, flood protection, or groundwater quality on adjacent properties are expected to result from this project, no mitigation is proposed.”
The commissioners want a qualified professional to review the statement also appearing on page 6 under the heading “Impacts to Adjacent Properties” as follows:

“A current hydrologic analysis of the proposed dike design, footprint, and alignment did not find significant risk of reduced drainage, saltwater intrusion, flooding, or other groundwater impacts to adjacent properties due to construction of the new setback dike or from restoration of estuarine tidal marsh to the project area.”

A survey of Skagit County restoration projects, including the Fomsby Slough Project on Swinomish Channel, the Wiley Slough Restoration Project on Fir Island near the south fork of the Skagit River, and The Nature Conservancy Fisher Slough Restoration Project on Fisher Slough all demonstrate unanticipated consequences to adjoining land. Mitigation measures have been taken at each site after the fact at great expense and pending claims are being processed by the Washington Department of Fish & Wildlife, proponent of the Wiley Slough Project for damage to adjacent farmland.

The draft Environmental Impact Statement is very unclear in its explanation of the interdisciplinary investigation necessary to ensure the integrated use of the natural and social sciences and the environmental design arts described as a requirement in decision making which may have an impact on the environment. RCW 43.21C(030)(a). For reasons that are not described to the satisfaction of District No. 5, the project is divided between salmon restoration and compensatory mitigation; approximately 250 acres to salmon habitat restoration and 150 acres for compensatory mitigation. See pages 20, 21, and 22.

“Although the Project itself will impact existing wetlands in the Project area, it is considered to be ‘self-mitigating’ due to the overall gain in wetland functions and values achieved on the Project’s remaining 250 acres.”

The draft Environmental Impact Statement skirts the issue of assigning a land use zone to the Project area. At page 36, the comprehensive plan-land use designations of the FLU map are described as part of the Snohomish County Comprehensive Plan 2005. The Project area is designated RCF Riverway Commercial Farmland. The County cites an administrative determination AD 1-95 for the proposition of allowing land to lie fallow and revert to an undeveloped condition is by definition not a “use.” The hearing examiner upheld the Planning Department's administrative determination that “restoration and mitigating activities are allowed in the County's A-10 zone.” Page 41 DEIS. The District is not satisfied with the analogy or the Resolution, in particular because the District's governing statute has an alternative legal procedure.
Smith Island Restoration Project will change the District's system of diking and drainage. Snohomish County has declared its intent to abandon the district and its land will lack benefit or service. The State Environmental Policy Act does not nullify any other specific statutory obligations. RCW 43.21C.050 Therefore, RCW 85.08.540 calls for a petition and a bond being filed by one or more landowners, as in the case of the original establishment, when abandonment is proposed. In response to the petition the County Commissioners may declare abandoned or may strike from the District's lands no longer benefitted or served thereby, or may cause any system of improvement to be altered, reduced, enlarged, added to, or by any other manner bettered or improved, either within or without the District, and to affect such subsequent improvements. The change in the system is subject to preservation of the assessments levied against the lands of the District. RCW 85.08.530 may apply.

This procedure is complicated by the fact that Snohomish County has a charter form of government. Rather than the Board of County Commissioners contemplated by the 1913 statute Snohomish County divides authority between the County Council exercising legislative authority and the County Executive carrying out the policies of the County. Both entities should act to satisfy RCW 85.08.540.

In general, these powers exercised by the County and by the supervisors of the Diking Improvement District No. 5 are not accounted for in the draft Environmental Impact Statement. The District's concern, which remains after reviewing the draft Environmental Impact Statement, is that insufficient attention has been paid to the consequences to the District and its system of dikes and drainage to evaluate the alternatives and to respond as changes associated with the Restoration Project.

From a biological standpoint, the objective of improving fish habitat is laudable. However, differences of opinion within the community of biologists include differences between those biologists that regard additional acres of habitat as the answer to biologists who place value on the production of edge habitat with characteristics beneficial to juvenile salmon in need of refuge, food, and fresh tidally influenced water. In this case, the imperatives of the draft Environmental Impact Statement appear to have more to do with the business of impact mitigation rather than the actual measurable benefits to salmon which come from the creation of edge habitat and water conditions, which favor survival of salmon.

The engineering presented by the draft Environmental Impact Statement requires additional review to be understood by District No. 5. References are made at page 73 and 89 to NAVD88. The engineering that was employed to build the original system for District No. 5 could not include NAVD88. The District would like an opportunity reconcile the original design datum with the restoration-engineering datum apparently used by CH2M Hill in 2005.
The differential in elevations noted on Smith Island as compared to nearby Otter Island on page 73 may be indicative of a risk to Smith Island roads and improvements. If water pools on the restoration site and the result is inundated land on Smith Island, the consequences of the no mitigation policy and letting nature take its course on approximately 400 acres of land defeat the planned creation of channels and edge habitat beneficial to Chinook salmon juveniles.

Although the draft Environmental impact Statement makes the attempt to cover the subject of revisions to the existing drainage system at pages 89 and 90, there is no resolution of the elevation differential between Otter Island and Smith Island and the District is not satisfied that the draft Environmental Impact Statement accurately describes the drainage characteristics of the existing system or the necessary revisions to counteract the interruption of existing drainage patterns. In response, the monitoring of the Project and budgeting of mitigation measures to actually carry out a revision to the drainage systems that is affected must be added to what the draft Environmental Impact Statement discloses.

To be specific and follow the SEPA process described in WAC 197-11-550 the District needs a minimum of 90 days for professional review of the DEIS.

Respectfully yours,
JONES & SMITH

GARY T. JONES
GTJ/ejd

N:JONES\Clients\DD5SnohoCo\Stamey Ltr 2011-07-0S.doc
Responses to July 6, 2011 Letter from Gary T. Jones of Jones & Smith

Response to Comment P2-1
We understand that sufficient time is needed to not only review the DEIS but also the supporting studies that show how we arrived at our conclusions. In response to the DEIS comments we received, the County undertook additional technical studies and agreed to Diking Improvement District 5’s (DID5) request for a consultant of its choice to provide an independent review of the studies’ findings. The studies cover existing and proposed drainage, saltwater impacts, potential overtopping of the dike during flood events, hydraulic impacts to Union Slough, and setback dike erosion protection recommendations.

Response to Comment P2-2
The County was unaware of the presence of a water well on IFF’s property at the time the DEIS was issued because the well log filing at Ecology occurred after the County’s well log research. The incorrect statement has been corrected in the FEIS, and updated to reflect the second well installed in October 2011. Additional field surveying was conducted after issuance of the DEIS to develop a more accurate inventory of the onsite drainage network.

Response to Comment P2-3
Please see response to P2-1.

Response to Comment P2-4
Comment noted. Since the DEIS was issued, the County has conducted many studies (see Response to Comment P2-1) to address concerns raised by Diking Improvement District 5 and interested parties. These findings have been incorporated into the project design. To address some concerns that have been voiced, the County has incorporated a pump into the new drainage system so that DID5 can manage unforeseen drainage impacts should they occur. The County is prepared to correct any minor sediment deposition that may occur as a result of decreased flows adjacent to the project site, and will apply for permits to maintain Union Slough navigability for Buse Timber’s log rafting operations.

Response to Comment P2-5
Since the issuance of the DEIS, two changes have happened to the Compensatory Mitigation Element for the Smith Island Project:

1. The County has decided that it no longer plans to propose an advanced or in-lieu fee mitigation program for future projects. Per an agreement already in place with BNSF, the County proposes to provide mitigation acreage for their Delta Yard project. The County is also engaged with WSDOT on an agreement to provide mitigation acreage for their SR 529 bridge project. The County has also offered to provide mitigation for IFF Holding’s project impacts.

2. The County and DID5 have discussed the future use of those lands the County holds for the benefit of DID5. At this time, those conversations have centered around DID5’s interest in benefiting from these lands through the use of compensatory mitigation for future DID5 projects.
This or an alternative arrangement will be confirmed following further discussion between DID5 and the County.

See updated text in the Proposed Action Alternative sections of the FEIS for further details on why project areas are discussed as mitigation or restoration and how the project is self mitigating.

Response to Comment P2-6
The project is consistent with County regulations. The zoning code (chapter 30.22 SCC) does not specifically list “restoration” of estuaries or marshlands nor “mitigation” as a “use” in the A-10 Use Matrix. Although the project area is designated Riverway Commercial Farmland (RCF), it is also within shoreline jurisdiction and designated a Resource Environment pursuant to the County’s Shoreline Management Program. New regulations enacted since the issuance of the DEIS allows shoreline habitat restoration and enhancements in the Resource Environment designation (see SCC 30.67.580). SCC 30.67.440(27) also states “…shoreline habitat restoration or enhancement projects do not have to be identified on the use matrices in chapter 30.22 SCC to be permitted in shoreline jurisdiction.”

Response to Comment P2-7
The County, as a landowner within DID5, must file a petition pursuant to RCW 85.08.540 to conduct proceedings for the purpose of evaluating the feasibility of the proposed alteration to the existing system of diking and drainage improvements as set forth in the proposed project. It is agreed that, in accordance with RCW 85.08.540, the final authority to approve or disapprove a system of improvements that could alter, reduce, enlarge, add to, or in any other manner improve the diking system is vested in the County’s legislative body. DID5 supervisors have stated a preference that the land of the dike to be breached should continue to be held for the benefit of the District, and this will be done if it is DID5’s preference.

Response to Comment P2-8
Plans to modify the system of diking improvements must be approved by the legislative body of the County in accordance with the process provided in Chapter 85.08 RCW. The County legislative body must determine that the improvements are feasible before the proposed system of improvements can proceed, and may in its discretion let a contract for construction of the improvements. The District Board of Supervisors is charged with responsibility for construction and maintenance of improvements approved by the County legislative body, except where the work is let by contract approved by the County legislative body. The County intends to reach formal agreement on dike design parameters with DID5 supervisors.

In response to comments received from DID5, the County has prepared technical studies to address issues of drainage patterns, saltwater impacts, potential overtopping of the dike during flood events, and hydraulic impacts to Union Slough.
Response to Comment P2-9
By opening up the entire site to tidal influence, a complex network of tidal channels will form creating thousands of linear feet of edge habitat. Additionally, the project will create topographic enhancements, which will provide edge habitat at various tidal elevations. These benefits of tidal restoration are commonly agreed upon by the community of biologists that are engaged in salmon habitat restoration. Restoring tidal habitat is well accepted as an essential aspect to recovering endangered salmon in the Snohomish River basin, as well as many other Puget Sound rivers that have lost significant areas of estuarine tidal habitat.

Response to Comment P2-10
Dike design elevations discussed in the EIS are relative to the NAVD88 datum.

Response to Comment P2-11
The project design addresses the elevation of the project site to ensure that project goals for channel formation are met.

Response to Comment P2-12
The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond.

Elevation differentials between Smith Island and Otter Island will not affect performance of the landward drainage system.

Response to Comment P2-13
Snohomish County agreed to conduct additional technical studies in response to DEIS comments for more analysis on key issues. The County has worked cooperatively with DID5 to address its concerns and agreed to an independent review of the studies that were prepared to address DID5’s comments.
Mr. Mark Stamey, EIS Project Manager  
Snohomish County Public Works  
Transportation & Environmental Services  
3000 Rockefeller M/S 607  
Everett, WA 98201  
Email: mark.stamey@snoco.org  

Re: Smith Island Restoration Project, RR 49206 DEIS  

Dear Mr. Stamey:  

These comments are being made on behalf of Hima Farms Inc. and Hima Nursery Inc. (“Hima Farms”), Kisan Enterprises LLC (Kisan Enterprises), and IFF Holdings LLC (IFF Holdings). These entities are all owners or operators adjacent to the proposed project location, and make the following comments. They own and operate an organic farm and nursery, with plans to expand and intensify those uses, in addition to other agricultural pursuits. The conclusion they draw is that more analysis and deliberation needs to be done and it needs to be done properly.  

The above entities respectfully request the decision makers either reject the project as proposed, or delay the decision with more time for appropriate study.  

ADEQUACY ISSUES:  

The DEIS is not adequate to inform the decision makers. The DEIS does not put forth or evaluate, or discuss adequate alternatives in the goal of regional salmon recovery. The DEIS chooses a single site location and a single project idea: “restore estuarine tidal marsh” and makes no consideration of meaningful alternatives. The discussion of constructing a setback dike in different locations is not adequate. Even in those discussions of a different location for a setback dike, the evaluations were scant, there was no balancing framework, and the evaluation was erroneous.¹  

¹ See section below on Agriculture Mitigation for comment on the DEIS's analysis of different set-back dike locations.
In the DEIS, no consideration was given to either:

1. Repairing the existing dike and modifying tide gates to allow for tidal influence when fish need the area, and no tidal influence when fish do not need the area.

2. Repairing the existing dike and incorporating a more staged and structured approach to creating prime edge or refuge habitat at the site, rather than flooding the site uncontrollably. No consideration was given to a more engineered system that provides the same functions and values to fish, yet protects adjacent agricultural lands.

No consideration was given to repairing the existing dike and tide gates to allow for fish passage and tidal influence in a manner that improves water quality and refuge habitat functions and values when salmon use the runs, but that also preserves agricultural resources when the fish are not using the area. Snohomish County is familiar with and has studied these types of projects in other areas, but failed to consider that alternative at this site in the DEIS. No consideration was given to the option of modifying the existing dike and tide gates, or coupling that with a fish hatchery type project— that is, a more engineered habitat.

Allowing “natural” flooding (rather than controlled changes) to change the river and channel dynamics across the project area results in discharges of great amounts of silt and sediment into waters of the state. There is no basis that these impacts are “self-mitigating” or that any process could be utilized to reduce these impacts. A clean water act permit would be required for these discharges.

By following the alternatives mentioned above, the impacts on agriculture and neighboring property is likely much less than the proposed project, but the DEIS does not even address the possibility of other alternatives for the public and decision makers to evaluate and consider. This is a fatal flaw to the DEIS as written, and is a fundamental purpose of the SEPA process. The SEPA/EIS process should weigh the alternative environmental impacts of different proposals and/ or different locations against each other, not simply try to justify a single proposal at a single location. The ad hoc approach exemplified in the current DEIS is to be avoided.

---

2See e.g., Otak, 1998. French Creek Watershed Engineering Study. Submitted to Snohomish County Public Works Surface Water Management, December 31,1998. From the purpose and scope of the Lower French Creek Hydraulic Analysis: “Tidal fluctuations allowed to flow through the culvert and tide gate must improve water quality in the lower reaches of French Creek to a level that does not deter fish migration. At the same time, the duration and extent of flooding on surrounding agricultural land must not impact the growing season and use of the land by the property owners.”

3See section below on Agriculture Mitigation for comment on the DEIS’s analysis of different set-back dike locations.

4WAC 197-11-425(3);197-11-402(10); Davidson Series & Associates v. Central Puget Sound Growth Management Hearings Board, 159 Wn. App. 148 (December 27, 2010)
$18,300,000.00 for 884 fish per year is a steep price tag, especially where only $1,500,000.00 is estimated to repair the existing dike. This comes in a fiscal climate when budgets for schools, the needy, and roads are being slashed. The decision makers utilizing this EIS need to be cognizant of the most improvement for the money, and simply offering alternative alignments to a dike as the only alternatives is inadequate. No consideration was given to more engineered habitats.

Of the alternatives discussed and rejected, IFF Holdings nor Hima Farms were ever asked about an easement.

Fundamentally, the DEIS fails to inform the decision makers, and accordingly gives them false choices. Therefore, the only decisions that can be made are to either “reject the project” or “delay making a decision on the proposal pending further analysis and deliberation.” Any other decision based upon this document or an EIS similar to it, would be ultra vires.

**SLS process is not in-line with GMA/SMA obligation & procedures:** Outside of failing to consider meaningful alternatives for a project to restore salmon to the region, the County points to an April 12, 2011 “accord,” seemingly to affirm that the “the public's best interests have been served” by the DEIS and the project. A signed accord to do something outside the proper channels and legal framework is troubling because it is illegal. The Sustainable Lands Strategy; Phase I Framework (SLS) is of no legal effect, and is ultra vires. While perhaps laudable to discuss, organize, and strategize on how to coordinate interests, the SLS is proceeding, apparently, outside the organization of the GMA and SMA. Therefore, it is not compliant with the Growth Management Act or Shoreline Management Act.

In short, a mere willingness to try to protect agricultural land is no guarantee that IFF Holdings’, Kisan Enterprises, and Hima Farms’ lands will remain to be viable agricultural land into the future. IFF Holdings, Kisan Enterprises, and Hima Farms require indemnification that their lands will not be destroyed. This “restoration” project may in fact destroy Hima Farms’ agricultural chances. This was not adequately addressed in the DEIS.

---

5 June 6, 2011 DEIS Cover letter- Steven E. Thomsen.
6 June 6, 2011 DEIS Cover letter- Steven E. Thomsen.
Snohomish County must amend its Comprehensive Plan to include appropriate areas for salmon habitat creation and restoration, and not proceed on an ad hoc basis, destroying agriculturally designated lands in an unbalanced manner. Indeed, the use matrix in Snohomish County states that if the use is not listed in the matrix or similar to another use, it is prohibited, or requires, perhaps, a formal code interpretation. Notwithstanding use matrix issues, proceeding with the action would violate the law to the extent it destroys designated agricultural land under the laws of the state and Snohomish County as they are currently written.

A Comprehensive Plan or Shoreline Management Plan amendment process could certainly look like the SLS, but the appropriate GMA or SMA framework is the legal framework in which the necessary changes to the law should be done. That is the whole point of planning under the GMA and SMA. For example, the City of Everett is likely one of the only major cities in the United States with prime agricultural land so proximate. On the other hand, some of the Snohomish River delta is undoubtedly appropriate for salmon restoration projects. These decisions of where to balance prime designated agricultural land and salmon or environmental restoration projects, should be made with the benefit of the GMA and SMA public processes, dialogue, and balancing. It is a falsehood that a salmon habitat restoration project is not a “use” of land or otherwise regulated in such a manner, especially where a project proponent is looking at spending $18,300,000.00 in public monies to create it, and other uses of the property are eliminated into the foreseeable future.

The area is designated “Rural Shoreline” not “Rural Environment” on the SMA shoreline designation map. The project does not comply with the Rural Shoreline Environment statement of intent to protect the land with only uses “compatible with agricultural activities.” The land is not designated natural or conservancy shoreline. Likewise, the project does not comply with the Agricultural Element of the Shoreline Management Master Program. That element prohibits any activity that threatens prime agricultural lands from incompatible uses, and prohibits filling that causes hydraulic head that threatens existing or potential adjacent agricultural uses.

**Diking District Procedures:** There is no indication that Snohomish County or other project proponents or landowners have complied with the procedures under RCW 85 for taking down dikes, changing drainage patterns, changing land assessment allocations, installing dikes, installing new drainage facilities, etc. In fact, it is a misdemeanor under RCW 85.08.690 to destroy dikes and drain facilities outside those procedures.

---

7DEIS p.50 states “Restoration and mitigation activities are not considered land “uses” pursuant to zoning regulations” but fails to consider whether such are SMA or Comprehensive Plan issues requiring compliances, or “uses” under SEPA RCW43.21C.030(2)(c); 43.21C.031. However, the concession that restoration and mitigation projects are “uses” under SEPA is implicit in Snohomish County even doing an EIS.

DEIS p.43

Changes to the drainage patterns and obligations of Diking District No. 5 have not been evaluated.

If increases in obligations of the District (and in turn the other landowners) are created by the changes in diking or drainage maintenance, either in terms of increased costs due to increased regulation or the need for more frequent cleaning due to increased sensitivity of the lands to drainage, then the project proponent will have to pay for these.

**SUBSTANTIVE ERRORS:**

**Salt Water Intrusion:** The DEIS makes conclusions that rely on assumptions that are false regarding saltwater intrusion to neighboring agricultural lands. Therefore, the conclusions are likewise erroneous. For example, the DEIS states:

“As previously discussed, the salinity of the water in Union Slough is much lower than in Puget Sound. Although the groundwater underlying the restored marsh will become gradually more saline, there is no reason to believe this salinity will migrate inland because of the low groundwater gradient, lack of pumping wells landward of the proposed dike, and impermeable character of the dike.” (emphasis added).

The above statement is factually erroneous for two reasons, and therefore inadequately addresses the environmental impacts.

1. First, the landowner and Hima Farms have a licensed pumping well on its property used for agricultural purposes. (Ecology Tag APF 231; See also, Record No. G1-069754CL). Hima Farms is on land landward of the proposed dike. The DEIS provision above is in error in that regard.

2. Second, chlorides and salinity in groundwater travel by Brownian motion - that is, from areas of higher concentration to lower concentration - in addition to advection and dispersion.

Chuck Lindsay, a licensed hydrogeologist with experience on Smith Island, indicates that there is a great increase in salinity with depth of wells on the island, and there is an existing shallow aquifer requiring only near surface utilization/screening. The aquifer is highly sensitive to salt water intrusion. This results in a need for a larger surface area to achieve and provide fresh water from the well.

There is no indication or study directly referenced in the DEIS that accounts for the existing groundwater hydrogeology on Smith Island, or one that addresses the impacts. Therefore, it is impossible to comment on the work performed by the project proponents without reference to the groundwater study.

---

[10] Chuck Lindsay, personal communication.
Pursuant to RCW 85.08.630-.660, a landowner can also appropriate water in the ditches for agricultural use. Hima Farms may soon petition the supervisors for this water. It appears Jim Rhodes also has water rights to the water in the ditches. (See Ecology Record No. S1-111608CL:S1-111268CL)

It is troubling that there has simply been no cited study of the groundwater and salt-water intrusion issues relative to agricultural uses, related to this project.

**Drainage Impacts:** The existing drainage pattern of ditches and drainage channels is not well understood by the drafters of The DEIS. Because the existing conditions and assumptions are incorrectly understood by the drafters, the conclusion that the new drainage patterns proposed by The DEIS will be “more effective” is erroneous.

The DEIS provides:

“Construction of the proposed dike will impact drainage to a significant portion of the area that will remain landward of the dike. The proposed dike will interrupt existing drainage patterns and mitigation will be required for this impact. Once the setback dike is constructed, drainage for this area will need to be routed to alternative drainage points.”

The “alternative drainage points” mentioned above have not been fully discussed or analyzed. Drainage is a fundamental issue on Smith Island.

An alarming issue, as discussed below, is that The DEIS has made erroneous conclusions about how the current water flows and drains from the properties.

The DEIS provides:

“A drainage channel will be excavated adjacent to the proposed setback dike starting at the north end of the west tidal channel and ending at a new tide gate to Union Slough.”

The DEIS provides:

“In the lands adjacent to the southern portion of the project area, approximately 27 acres drain westward under I-5 through a 24-inch culvert. This will not be affected by the proposed project.”

The DEIS provides that at the north end an existing 42” culvert under I-5 will be “cleaned out” and made operational, to allow water to flow from the east side of I-5 to the west. This would cause drainage that does not currently exist, to drain from the east side of I-5 across Buse Timber property to the west. There is no way Snohomish County can guarantee that any culverts not in their control will be “cleaned-out.” IFF Holdings, Hima Farms and Kisan Enterprises LLC, oppose any more water coming across their property, and is concerned about potential water quality and discharge permit requirements related to existing and any “new” water.

That leaves all the water on the East side of I-5, directly on Hima Farms, Kisan Enterprises, and IFF Holdings' property. This is unacceptable without a pump or lift station to drain the water from the land into the Slough.

---

11DEIS p.90
12DEIS p.90
Hima Farms and adjacent landowners are concerned and require indemnification from Snohomish County against groundwater tables rising and flooding their properties with salt water and flooded conditions resulting from any change in the drainage patterns, if the project is adopted. It is a matter of tidal records that 15 days out of the year the drainage system as designed by the DEIS will not be able to drain due to the tides and heights of the drainage structures and tide gates. This will result in a negative feedback cycle that could cause extremely long periods of flooding causing the land to be very difficult to impossible to farm. Many of the crops on the land have deep taproots that would be negatively impacted by any changes in the groundwater table or salinity concentrations. Therefore, a pump or lift station will be required to be constructed to keep the lands dry and the ground water fresh.

The DEIS provides:

“A current hydrologic analysis of the proposed dike design, footprint, and alignment did not find significant risk of reduced drainage, saltwater intrusion, flooding, or other groundwater impacts to adjacent properties due to the construction of the new set back dike or from restoration of estuarine tidal marsh to the project area.”

IFF Holdings, Kisan Enterprises, and Hima Farms have not seen this study and it is not directly referenced in paragraph as quoted. Therefore, it is unclear which study the conclusion is based upon.

IFF Holdings, Kisan Enterprises, and Hima Farms do not want additional water conveyed across their properties due to the potential of back flooding and inundation when water cannot leave the drainage system due to tides that are too high even at the lowest of tides. There will be no guarantee of “positive drainage” from the site, without a lift or pumping station. A pump or lift station will be required in any proposal.

Any drainage design must be 1 foot below existing pipe invert elevations of field drainage pipes, to ensure positive drainage off of Hima Farms, Kisan Enterprises, and IFF Holdings property. Any rise in the water level in the existing ditch along the east edge of IFF Holdings property will be catastrophic to agriculture on the property. Designs altering the drainage on Smith Island must account for this. A height of a floodgate does not exactly translate into height of water in the drainage area, because the drainage system is dynamic. In addition to absolute elevations of inverts, the dike design must incorporate appropriate storage capacity for water so the adjacent areas do not become saturated. It is erroneous to assume, without more, that keeping tide gate elevations the same will result in no changes to the saturated conditions. Lift stations or pump stations should be incorporated to compensate or mitigate for the loss of storage area and changes in drainage patterns due to the proponents project.

---

13See Snohomish County Conservation District analyses of drainage requirements and parameters of any relocation of dikes on Smith Island.
Public access: Hima Farms, Kisan Enterprises, and IFF Holdings can support no proposal that allows public access along the dikes. This is for two reasons: (1) contamination from pet and pet (dog) droppings onto Hima Farms organic farm, and (2) increase in access resulting in vandalism and theft.

Public safety: Hima Farms, Kisan Enterprises, and IFF Holdings can support no proposal that increases the danger of a gas pipeline explosion. Building a new dike over the gas line poses unreasonable risks.

Further, changing the river slough dynamics may cause unforeseen changes to the Snohomish River delta system, potentially causing havoc on historical dumpsites (Seattle's old dump) downstream that have not been addressed.

Misdemeanor: It is a misdemeanor to destroy agricultural dikes in a diking improvement district. RCW 85.08 et seq.

Dike Design & Height. It is impossible to comment on the dike heights with certainty. It is unclear which datum is being referenced, though there is some reference to NAVD 88\(^\text{14}\).

There is no indication that the dike location or design is actually being coordinated with agencies and people with expertise.

There is no indication that a “key” is enough to prevent salt-water intrusion.

Further, as landowners in Diking District No.5 that pay assessments for the maintenance of the dikes, Hima Farms, Kisan Enterprises, and IFF Holdings require that any dike design should comply with all Army Corps and Diking District No. 5 standards for flood protection, and protection against salt water intrusion. It is these comment drafters understanding that a dike topped with asphalt or a trail is not compliant with appropriate dike standards.

The DEIS does not mention the results of a March 16, 2011 Army Corps inspection report, that found the current dike to be minimally acceptable.

\(^{14}\) DEIS p.89; DEIS p.86.
REGULATORY IMPACTS:

Setback changes: Under the Shoreline Protection Act, there are exemptions for dike maintenance and operation existing as of September 8, 2975, and other agricultural uses. Apparently, Snohomish County is willing to turn its agricultural lands into wetlands. Likewise, the regulatory lines turning on navigability may change as well due to the project. New regulatory setback requirements will be imposed upon adjacent landowners by the unilateral acts of another landowner. This is not permissible. At a minimum, any creation or restoration of wetlands triggering any new regulations on adjacent landowners should have an appropriate buffer of distance on the proponents own property so that the regulations do not extend onto Hima Farms, Kisan Enterprises, or IFF Holdings property.

Likewise, the project may or likely will trigger new regulatory requirements for Diking District No. 5's responsibilities, that, in turn the landowners will have to pay for. Because the project proponent's actions could create this new regulatory overlay on the District and landowners, the proponent should pay for, indemnify, and bond for any regulatory compliance issues created by the project into the future.

MITIGATION:

Mitigation Bank & Self-Mitigation: It is not clear to Hima Farms, Kisan Enterprises, or IFF Holdings how Snohomish County as a government can itself own a wetland mitigation bank and legally compete against private wetland mitigation banks.

Moreover, it is unclear how filling 11.2 acres of freshwater wetlands functions and values translates into a need for salt-water wetlands. While for fish, salt-water wetlands may be more valuable theoretically, they are a different kind of wetland with different functions and values. Accordingly, there is no mitigation for destroying or converting 400 acres of freshwater wetland\(^{15}\) into salt-water wetland.\(^{16}\) This includes converting the whole area, and filling in drainage channels that are currently fresh water. While both types of wetland functions and values are important, they are important for different reasons. How can Snohomish County say one is more important than another for all reasons, or that salt water habitat compensates for fresh water habitat? Salmon cannot be the only benchmark to measure from in terms of the value of wetlands. The project proponent should not be allowed to destroy 400 acres of fresh water wetland functions and values.\(^{17}\)

\(^{15}\)Note: The land being converted is agricultural land, and regulated as such, even if it has functions and values and characteristics of a “wetland.” It is only Snohomish County's position in the DEIS that the land is “freshwater wetland” (p. 89), and not IFF Holdings, Hima Farms, or Kisan Enterprises conclusion. Snohomish County has recently leased the land for commercial agricultural purposes, and it remains viable.

\(^{16}\)DEIS p. 89.

\(^{17}\)See footnote 15, regarding “wetland” versus “agricultural land” above.
It is not clear how a project can be “self-mitigating,” especially where it destroys one type of function and value, and replaces it with another type. That a project is allowed to develop “naturally” by deliberately breaching dikes is not “natural”–it is an impact directly created by a project. Just because deposition and erosion occur by natural processes, does not mean there is no impact due to their deliberate increases. The conclusion that “natural processes are essential for this restoration project” does not justify their impacts. Whether it is a tractor dumping bucket loads of dirt and sediment into the waters of the state is no different in impacts than a project to let and allow the natural systems do the same thing by removing existing dikes.

**Agricultural Mitigation:** The mitigating factors for destroying agricultural land are not actual mitigation measures. The 35 acres of farmland “preserved” by the Action Alternative are already protected by the existing dikes and drainage system. Moreover, mere “commitment” to preserving agricultural land through “accords,” is not actually preserving agricultural land through codes and enforceable laws. The fact that Snohomish County is at a table discussing the important issues in balancing agriculture and salmon restoration in Snohomish is a good thing, but it is not “mitigation” or any assurance that agriculture will be preserved.

There is an alarming lack of studies to address impacts or mitigation proposals. There is no study evaluating the impacts of birds on the viability of agricultural or potential agricultural adjacent uses. This must be accomplished. There is no study regarding the impacts of the proposed project on livestock and potential livestock on adjacent agricultural lands. Will the land remain suitable for poultry, cattle, sheep, pigs, and other agricultural animals? All potential agricultural uses must be accommodated and analyzed pursuant to the Agricultural element of the Shoreline Management Master Program.

---

18DEIS p. 80
The DEIS states that without the benefit of an objective framework, “a meaningful comparison of the impacts on agricultural land between the Proposed Action and No Action alternatives is not possible.”¹⁹ For this reason alone, the DEIS “no action alternative” should be adopted because there is no framework to evaluate the impacts. The DEIS does not evaluate the impacts, and it should, to ensure and guarantee that the project results in a long term net gain for agriculture, which is a stated goal for Snohomish County.²⁰ Snohomish County in Appendix B provides a framework, but ignores it.

The reasons for the project were balanced against preserving agricultural lands without an objective framework, when the DEIS discussed alternatives.²¹ The DEIS states: “[T]he additional amount of agricultural land that might be preserved isn't outweighed by other important factors.”²² The factors in discussing and rejecting an alternative alignment proposal, were “[1] higher construction costs, [2] connection of the dike to City's proposed dike, [3] County and City needs for compensatory mitigation, and, most importantly, [4] the opportunity to create contiguous, high-value salmon-rearing habitat in a prime estuarine location.”²³

The discussion of constructing a setback dike in different locations is not an adequate discussion of alternatives. Even in those discussions of a different location for a setback dike, the evaluations were scant and the assumptions erroneous. It is unclear where these factors came from, and the factors are erroneous. Repairing the existing dike is $1.5 Million born by the landowners and the Army Corps, not Snohomish County alone.

There is no analysis of cost of a tide gate that allows for seasonal inundation and fish passage. The City does not have a constructed dike, and its potential construction cannot be an adequate basis to outweigh protecting agricultural lands

The County's and City's need for compensatory mitigation may be satisfied elsewhere, through private mitigation banks or other projects in areas designated or used for those purposes.

---

¹⁹ DEIS p.52
²⁰ See DEIS p.53, reciting that the goal is to have a long-term net gain for both agriculture and fish.
²¹ See DEIS p.7
²² DEIS p.7
²³ DEIS p.7
And finally, the most important factor cited by the County as outweighing agriculture, is the project itself, and not an objective factor. Necessarily, the DEIS preparer is making value judgments outside of an objective framework, and this disregard for proper process underscores the requirement and need of an objective framework.

The DEIS, though offered by the County, does not evaluate whether the project is compliant with the policies of Snohomish County. See GPP Policy 7.D.9; Policy 4.B.1; Policy 3.D.6.

The County did not even attempt to follow the workflow matrix provided by its own Agricultural Advisory Board in Appendix B. Appendix B must be followed where Snohomish County is the project proponent and reviewing agency.

CONCLUSION:

The DEIS is deficient in an alarming way. No action should be taken based upon this DEIS. More time is necessary for the project proponent to demonstrate or mitigate for environmental and agricultural impacts of the project, consider alternatives less damaging to agriculture, or consider alternative locations more suitable to the project.

The DEIS fails to inform the decision makers, and accordingly gives them false choices. Therefore, the only decisions that can be made are to either “reject the project” or “delay making a decision on the proposal pending further analysis and deliberation.” Any other decision based upon this document or an EIS similar to it, would be ultra vires. The entities respectfully request the agency actors to “reject the project” or “delay in making a decision.”

Sincerely,

[Signature]

Peter C. Ojala

PCO/pl
cc: Clients

---

24 June 6, 2011 DEIS Cover letter- Steven E. Thomsen.
Responses to July 6, 2011 Letter
from Peter C. Ojala of Adams & Duncan

Response to Comment P3-1
In response to DEIS comments received, Snohomish County has conducted additional technical studies to further analyze potential impacts of the project in regard to the existing and proposed drainage, saltwater, dike overtopping, and hydraulics in Union Slough. The results of the studies have been provided to your clients via Diking Improvement District 5 (DID5) and incorporated into the FEIS.

Response to Comment P3-2
The search for suitable locations for salmon habitat restoration projects within the estuary has taken place over the past 35 years, and involved evaluations by state agencies, local jurisdictions, tribal governments, and a range of environmental organizations. Over two dozen sites were studied and ranked in the 2001 *Salmon Overlay to the Snohomish Estuary Wetland Integration Plan* (SEWIP Salmon Overlay), and all but ten of the sites consisted of designated agricultural lands. The study ranked the Smith Island project area among the top three potential restoration sites in the estuary, along with the Biringer Farm area on North Spencer Island and the northern tip of Ebey Island. The *2005 Snohomish River Basin Salmon Conservation Plan* (2005 Plan), prepared by the Snohomish Forum in response to the 1999 federal listing of Chinook salmon and bull trout as threatened under the Endangered Species Act, also lists the Smith Island project as critical to achieving the 10-year milestone net-gain target of 1,237 acres of tidal marsh restoration in the Snohomish River estuary.

A discussion of setback dike alignment alternatives has previously taken place. Three alternatives were proposed in the April 2009 SEPA Environmental Checklist, and they had associated restoration-mitigation areas ranging from 262 acres to 479 acres. During the public comment period, the majority of comments received favored the maximum restoration alternative. However, this would have required purchasing adjacent properties from unwilling sellers. The alternative proposed in the EIS falls between the medium and minimum restoration alternatives presented in the SEPA Environmental Checklist, so the County has already significantly reduced the area for restoration. The dike alignment provides adequate separation from the IFF Holding property to accommodate necessary drainage systems while meeting the project’s restoration goals.

Response to Comment P3-3
Please see response to comment P3-2. The option you mention of modifying the existing dike and tide gates, or coupling that with a fish hatchery-type project, would not meet the goals of the project to restore 400 acres of critical salmon habitat to increase the viability of existing salmon runs.

Response to Comment P3-4
In 2013, the County finalized the *Union Slough Hydraulic Model Study* (Appendix J) to address potential impacts to Union Slough. Study results did not indicate significant sediment deposition within Union Slough through tidal inundation of the project site, although flow velocities upstream of the downstream dike breach will decrease. This could cause minor localized sediment deposition in eddies immediately upstream and downstream of the downstream breach. There may also be a small amount of sediment
deposition in the Union Slough reach between the two breaches. The ability of Union Slough to transport sediment, especially the fine-grained nature of the sediment load in this reach, will not be impaired. The County will monitor for possible sediment deposition through bathymetric surveys, and correct any deposition as a result of decreased flows adjacent to the project site by applying for permits to maintain Union Slough navigability for Buse Timber’s log rafting operation.

An earlier 2011 study conducted by GeoEngineers showed that the Union Slough channel position has been very stable over the historical record, including the period prior to construction of the existing dikes. The study concluded that the Smith Island project will not trigger significant erosion and that only minor increases in channel width and depth may occur over the long-term.

We are required to secure a number of permits, and the relevant ones will comply with the Clean Water Act.

Response to Comment P3-5
Please see response to comment P3-2.

Response to Comment P3-6
SEPA does not require the presentation of a cost-benefit analysis in an EIS. The example presented was qualified as conservative and the reader was cautioned that there is considerable variability and uncertainty surrounding smolt production and salmon survival estimates. The example also represents just one method of estimating the value of increased salmon numbers. For example, it is widely acknowledged that recreational fishing leads to significant spending within a local economy, resulting in an increase in jobs and economic productivity. In addition, the importance and value of the project cannot be assessed by only looking at it in terms of monetary costs and revenues. An increase in healthy salmon runs is critical to preserving wild salmon stocks which has been federally mandated under the Endangered Species Act. Healthy salmon runs are also important to affected Native American tribes, where salmon is a vital part of their tribal economies and their cultural identity.

Response to Comment P3-7
Comment noted. The statement has been removed from the EIS.

Response to Comment P3-8
In response to DEIS comments, Snohomish County has undertaken additional technical studies that include analysis of existing and proposed drainage patterns, saltwater intrusion and groundwater conditions, and potential downstream impacts to Union Slough, and these findings have been incorporated into the FEIS.

Response to Comment P3-9
The DEIS clearly states that the SLS Framework is non-regulatory and that the SLS is a broad coalition of public agencies, and agricultural, salmon recovery, and tribal interests that are working to reconcile the resource needs of the different groups involved. The April 2011 signing of the Phase I Framework accord reflected a commitment by the parties that the SLS process should eventually lead to GMA Comprehensive Plan amendments and Snohomish County Code provisions that will ensure net gains for
both agriculture and salmon recovery (that also addresses tribal cultural matters). The SLS process is intended to resolve issues that have arisen between these groups due to the Comprehensive Plan’s conflicting goals, objectives and policy language to protect both agriculture and salmon, and the land use and development codes that do not facilitate their implementation. Proposed policy amendments to the Land Use and Natural Environment chapters of the Comprehensive Plan were adopted by the County Council in October 2012 (Amended Ordinance 12-047) after a broad public process that complied with GMA and SMA regulations. Also see the third and fourth paragraphs of the response to Comment P3-11.

Response to Comment P3-10
Since the DEIS was issued, the County has conducted drainage, hydraulic, and saltwater impact technical studies that have provided important information that has been incorporated into detailed design and construction plans. The studies have informed development of a drainage system that will function equal to or better than the drainage system that exists today. The studies confirm that saltwater impacts will not occur, and that saltwater beneath IFF Holding’s property is an existing condition. Design and construction plans will provide sufficient safeguards and protections to ensure that agricultural uses landward of the proposed setback dike are not adversely impacted by the project.

Response to Comment P3-11
As stated earlier, the search for suitable locations for salmon habitat restoration projects in the estuary has taken place over the past 35 years. The County has not proceeded on an ad hoc basis since it started to deliberately acquire lands for habitat restoration on Smith Island in the late 1990’s and early 2000’s. The 2005 Snohomish River Basin Salmon Conservation Plan identified the Smith Island Restoration project as a critical project. In that same year, the Snohomish County Council passed Resolution 05-026 (see Appendix A) acknowledging its commitment to support salmon recovery plans in the Snohomish River Basin including the implementation of the Smith Island Restoration Project.

It is worth noting that the County’s Comprehensive Plan provides overlapping designations which allow the Smith Island project area to be used for either agriculture or habitat restoration. The project area is predominantly wetland - a critical area - and has not been in agricultural production for many years. In addition, this project proposes to enhance adjacent farmlands by constructing a better dike and protecting adjacent farmlands to continue with its operations.

Land use decisions have been and continue to be made with the benefit of a public process. The two most recent Growth Management Act (GMA) and Shoreline Management Act (SMA) public processes that affect this proposal include the adoption of two ordinances by the Snohomish County Council. Amended Ordinance 12-047 amended the Land Use and Natural Environment chapters of the Snohomish County GMA Comprehensive Plan General Policy Plan (GPP) as they relate to the preservation of agricultural lands and habitat restoration for threatened and endangered species in Snohomish County (see Land and Shoreline Use section). The County Planning Commission recommended approval of the GPP policies after holding a public hearing and deliberations.
In addition, since the issuance of the DEIS, the Snohomish County Council adopted Amended Ordinance 12-025 updating the County’s Shoreline Management Program (SMP) (see Land and Shoreline Use section) which recognizes and facilitates the implementation of the Smith Island Restoration Project, and allows habitat restoration in all shoreline environments. The SMP Update went through a lengthy public process.

Response to Comment P3-12
Under the County’s new Shoreline Master Program, or SMP, the Rural shoreline environment designation for the Smith Island project area was changed to a Resource shoreline environment. This designation applies to areas utilized or planned for agriculture or commercial forest practices, and its intent is to conserve existing natural resources and valuable historic and cultural areas to provide for sustained resource use. The accompanying management policies list the preferred and appropriate uses. The proposed restoration project would meet the requirement of a shoreline use that would sustain the shoreline area’s physical and biological resources.

A specific Agricultural Element no longer exists in the new SMP, however, agricultural use is covered under the Economic element. The County does not consider this project to be incompatible with agriculture, and habitat restoration is an allowed use in all shoreline environments.

Response to Comment P3-13
Any proposal, including this project, to change or modify the existing system of diking improvements will need to be approved in accordance with RCW 85.08.540. In addition to conducting SEPA review, the County acknowledges that as a landowner within DID5, it will need to file a petition in accordance with RCW 85.08.540 to have such proposal reviewed, and it is subject to approval by the County legislative body before any modification or change to the existing diking system may proceed.

Response to Comment P3-14
Impacts to drainage patterns are addressed in a report the County prepared titled Smith Island Drainage Analysis (Appendix I), which evaluated the drainage patterns and drainage needs that will occur as a result of the proposed project. The existing drainage storage located in the east tidal channel will be replaced with a new drainage storage pond connected to and located north of the west tidal channel. The existing toe ditch would be replaced with a new toe ditch that will be shorter in length, and the existing north tide gate would be replaced with a new similar tide gate just west of the new setback dike. The report indicates that drainage landward of the new setback dike will function equal to or better than the drainage system that exists today. See response to comment P3-20 for more details on the proposed drainage system.

DID5 has stated that it is responsible for the cleaning of all toe ditches and that individual land owners are responsible for cleaning other ditches located on their property. DID5 will have fewer toe ditches to clean after the project is completed. Likewise, maintenance and operation costs associated with the new setback dike are anticipated to be less than those currently associated with the existing portion of the 1930’s dike structure that will be breached. The fiscal impact to the operation and maintenance costs of
DID5 as a result of the proposed change has been discussed with DID5, and will be included as part of the feasibility review to be performed under RCW 85.08.540. This RCW relates to the legislative determination by the County whether to approve the proposed amendment to the existing system of diking improvements.

Response to Comment P3-15
The County was unaware of the presence of the water well you mention on IFF’s property at the time the DEIS was issued because the well log filing at Ecology occurred after the County's well log research. The incorrect statement has been corrected and updated to reflect the second well installed in October 2011.

In response to DEIS comments, the County has conducted a number of investigations to determine the potential for the proposed project to cause saltwater intrusion on adjacent properties, including the County’s 2012 Geologic and Hydrogeologic Field Investigation Report, Tetra Tech’s 2013 Saltwater Impact Study, and Shannon and Wilson’s 2012 Groundwater Flow and Seawater Impacts Assessment and 2013 Groundwater Report Update. These studies determined that the soils and groundwater in the alluvial sands aquifer and surface water, both on and around the project site, currently have salinity levels above drinking water and agricultural irrigation water standards. Under existing conditions, the Snohomish River provides a greater source of groundwater recharge to the underlying aquifer, with a potential minor input from groundwater sources from the south, than Union Slough. When the existing dike is breached along Union Slough and the project area receives daily tidal inundation, Union Slough will become the more predominant source of groundwater recharge. As Union Slough has a lower salinity level than the Snohomish River, the restored marsh areas will also have a low salinity level, and aquifer source recharge will be lower in salinity than existing conditions. The potential for saltwater impacts by seepage through sand lenses within the upper layer of silty clay loam soils on the project site is being analyzed and factored into the drainage system design. See the Water Resources section and associated technical reports in the Appendices for more information.

The County agrees that diffusion is one of the principal transport processes for groundwater constituents and is likely an active process in the shallow aquifer beneath Smith Island. However, the contribution from diffusion is relatively small compared to those of advection and dispersion.

Response to Comment P3-16
The County is not aware of the groundwater quality in any private wells on the island. However, based on the findings of the hydrogeologic study, the County agrees that the salinity in the shallow aquifer increases with depth. If the comment is referring implicitly to the well on IFF’s property, we understand from the driller’s log that this well is screened in the lower part of the aquifer, where we expect the groundwater salinity to be highest within the aquifer. Given the existing salinity levels near the well and that the aquifer is hydraulically connected to the nearby Snohomish River (about 1,300 feet to the west of the well), and with a salinity of 23 to 26 practical salinity units (psu), equal to a TDS between 18,000 and 20,000 mg/L), it is the County’s opinion that this well would not be expected to pump fresh water under existing conditions.
Response to Comment P3-17
The County’s geologic and hydrogeologic study performed in early 2012 provides an adequate characterization of subsurface conditions beneath the island, and includes a detailed assessment of the existing groundwater chemistry, piezometric levels, and flow conditions. The County’s study formed the basis for Tetra Tech’s 2013 detailed saltwater impacts analysis. Further studies include Shannon and Wilson’s 2012 *Groundwater Flow and Seawater Impacts Assessment* and 2013 *Groundwater Report Update*.

Response to Comment P3-18
The Ecology water rights records that were referenced pertain to property on the north end of Spencer Island.

Response to Comment P3-19
Please see response to comment P3-15 regarding the saltwater impact and groundwater technical studies that have been prepared for the project. The findings have been incorporated into the FEIS.

Response to Comment P3-20
Since the DEIS was issued in June 2011, the County has conducted significant analysis on existing and future drainage patterns and needs and, in working with Hima Farms on the ditch maintenance program, has reached agreement on the direction of existing drainage patterns. This information was supplemented by analysis provided by the Snohomish Conservation District. The project design has been developed to ensure that post-construction drainage patterns do not adversely impact property owners adjacent to the project site.

The County’s 2013 report titled *Smith Island Drainage Analysis* (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond.

The 2013 *Smith Island Drainage Analysis* was based on survey data confirming the elevation of the existing tide gate which will be replicated with the new tide gate. The analysis incorporated tide cycles to address the capability of discharging water through the tide gate. It determined that even during a 100-
year flood event, water in the channels would rise above the -0.6 elevation of drain tiles on IFF’s property for only a few days, and would never overflow the tidal channel itself. (The elevation will be confirmed during project design.) DID5 could use the proposed pump to prevent water rising above the -0.6 elevation. Final drainage capacities will be determined during project design.

The proposed drainage revisions avoid the need to rely on WSDOT to clean its culverts under I-5. The drainage analysis assumed a worst case analysis for storage system design for the County-owned property used by the horse boarding operation. The area in this drainage basin that currently drains to the east, will drain to the north and exit to Union Slough via the new tide gate. The details for conveyance of water from this property will be determined during the design phase of the project. The amount of water currently draining to the west through the 24-inch culvert under I-5 will not increase.

Please see responses to comments P3-15, P3-16, and P3-17 regarding concerns over groundwater and saltwater impacts. Regarding requests for indemnification, the County is working with adjacent property owners to determine appropriate performance assurances.

Response to Comment P3-21
A public access trail is not proposed on the County’s portion of the new setback dike, which will run parallel to the Hima Farms’ property. This should alleviate some concern about possible contamination to its organic produce or theft from trail users. Theft and other illegal activities do occur on Smith Island owing to its remote location, however, the proposed Smith Island project is not likely to affect, either positively or adversely, the level of criminal activity. A parking lot is proposed to be constructed on the north side of 12th Street NE to serve the City of Everett’s proposed trail south of 12th Street NE, which would be on City portion of the new dike.

Response to Comment P3-22
We understand property owner safety concerns regarding the crossing of the Puget Sound Energy (PSE) natural gas pipeline by the new setback dike. As stated in the DEIS, we are addressing a range of issues including soils settlement and potential erosion by entering into a Consent Agreement with PSE that would allow the County to work in its easement and construct the proposed dike. As part of this agreement, the setback dike will be designed and constructed across the pipeline utilizing engineered protective measures agreed to by PSE that will protect the pipeline’s integrity and ensure public safety during and post construction.

Response to Comment P3-23
The County’s 2013 Union Slough Hydraulic Model Study addresses potential impacts to Union Slough, and the study results indicate there will be a minor increase in flow velocity and shear stress on the existing Union Slough dikes downstream from the proposed restoration area. This increase is not expected to impact any historical dumpsites downstream.

Response to Comment P3-24
Please see response to comment P3-13.
Response to Comment P3-25
Dike design elevations discussed in the EIS are relative to the NAVD88 datum. A table has been added to the document that correlates this datum to other commonly used data.

Response to Comment P3-26
Snohomish County has had many discussions with regulatory agencies, consulting firms with expertise, and managers of similar projects on the dike design and its location regarding issues such as drainage, hydrology, erosion, saltwater intrusion, and groundwater conditions. This includes the County’s project partner, the City of Everett, which has been through the same dike breaching and restoration process with its own Smith Island/Union Slough project. The County has discussed and agreed to dike design parameters with the DID5 commissioners.

Response to Comment P3-27
Comment noted. The low permeability core will help minimize seepage, as will the Army Corps PL84-99 maintenance standards which address seepage problems. Seepage through and under the new dike will also be collected by a drain trench on the landward side of the dike and then redirected northward to a new drainage storage pond. See response to Comment P3-15 for information on several studies the County has conducted regarding saltwater and groundwater on and adjacent to the project site.

Response to Comment P3-28
The new setback dike design will meet all Corps and DID5 standards for protection from flooding and saltwater intrusion. Since the DEIS was issued in June 2011, the County has undertaken additional analyses to determine the potential for these events. Please see the County’s responses to comments P3-15 regarding the findings of these analyses and the County’s design recommendations.

The issue of allowing public use of a dike top access road for a walking trail is addressed in the Corps of Engineers’ Engineering Manual Design and Construction of Levees – Engineering Manual EM 1110-2-1913 (April 30, 2000) at 8-9(b): “…The decision as to whether the access road is to be opened to public use is to be made by the local levee agency which owns and maintains the levee.” While the County is a member of DID5, it is not proposing to allow public access on the County’s section of the new dike. However, the City of Everett, also a DID5 member, is proposing a trail on its section and will coordinate with DID5 on this matter.

With respect to using an appropriate surface material on the dike top, the Corps guidance does not preclude using a hard surface such as asphalt. The Corps’ guidance pertaining to eligibility in its PL84-99 program discusses the need to maintain any dike top road or trail to avoid ruts and ponding of water that could damage the dike. It states, “When the crest of the levee is used for recreation, inspections, surveillance during floods, and flood fighting activities, a surface treatment (e.g. gravel, crushed rock, pavement, etc.) should be provided to reduce the deficiencies listed above. This is not a requirement but it is recommended for active levees.”

Response to Comment P3-29
Comment noted. We understand DID5 is currently enrolled in the U.S. Army Corps of Engineers’ (Corps) Flood Rehabilitation Program (PL84-99 program), under which it is eligible to receive funding for dike
maintenance, emergency repairs, and dike engineering inspection assistance. A diking system is considered eligible if it meets the “Minimally Acceptable” standards of the PL84-99 program. This requires periodic or routine inspections of a diking district’s operational and maintenance procedures by the Corps. Diking systems that receive an “Acceptable” or “Minimally Acceptable” overall system rating on the last periodic or routine eligibility inspection are “Active” as part of the PL84-99 program. DID5 reviews the report and, if necessary, makes the improvements to the system in order to move it towards an “Acceptable” rating. The new dike and associated toe ditch of shorter length will require less maintenance than the existing diking system.

Response to Comment P3-30
DID5 is currently leading an effort to implement an agreement with regulatory agencies to address maintenance of drainage systems. Permitting of the project will address regulatory requirements for construction and post construction monitoring to be performed by the County. New drainage systems and dikes will have regulatory requirements consistent with the proposed agreement and other existing dike regulations that apply. The fiscal impact to the operation and maintenance costs of DID5 as a result of the proposed change has been evaluated and discussed with DID5, and will be included as part of the feasibility review to be performed under RCW 85.08.540. This RCW relates to the legislative determination by the County whether to approve the proposed amendment to the existing system of diking improvements.

Response to Comment P3-31
Although similar to a mitigation bank, an in-lieu fee mitigation program, as discussed in the DEIS, is a program that can only be sponsored by governmental or non-profit land management entities (per 33 CFR parts 325 and 332).

Response to Comment P3-32
In 2008, the federal government revised the Federal Rule on Compensatory Mitigation for Losses of Aquatic Resources. A major change to the rule was using a watershed approach to select appropriate mitigation. A watershed approach means using an analytical process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. It involves consideration of watershed needs and how locations and types of compensatory mitigation projects address those needs.

Accorng to numerous watershed plans that have been created for the Snohomish River Basin, restoration of estuarine habitat is a high priority. Under consideration of these plans, the conversion of freshwater wetlands to saltwater wetlands is supported as a compensatory mitigation approach. Further, the functions and values of the existing freshwater wetlands are less than the functions and values that will be provided by the saltwater wetlands. Therefore, the project can be deemed “self-mitigating.”

Response to Comment P3-33
See response to comment P3-32.
Response to Comment P3-34
As presented in Response to Comment P3-11, land use decisions have been and continue to be made with the benefit of a public process. The two most recent Growth Management Act (GMA) and Shoreline Management Act (SMA) public processes that affect this proposal include the adoption of two ordinances by the Snohomish County Council. Amended Ordinance 12-047 amended the Land Use and Natural Environment chapters of the Snohomish County GMA Comprehensive Plan General Policy Plan (GPP) as they relate to the preservation of agricultural lands and habitat restoration for threatened and endangered species in Snohomish County (see Land and Shoreline Use section). The County Planning Commission recommended approval of the GPP policies after holding a public hearing and deliberations.

As the U.S. Department of Agriculture’s Census of Agriculture data has found, the number of farms and the total farm acreage in Snohomish County has increased in the same period that several thousand acres of designated agricultural land have been acquired for habitat restoration, compensatory mitigation and other public purposes, as well as for residential development. A large percentage of this agricultural growth has occurred on rural lands outside the floodplain that are not specifically zoned Agriculture, but on which agriculture is a permitted use. The County’s 2007 Agricultural Lands Inventory found one third of farmland in active production was on these GMA rural lands.

Response to Comment P3-35
An extensive survey of existing birds in the project area was conducted for the EIS. It was accompanied by a discussion of changes to avian diversity that could be anticipated with the implementation of the restoration project. Existing land conditions are not ideal for livestock. The area leased by the horse boarding operation is wet on the east side of the property due to a high water table and perennially wet ground conditions as documented in the 2007 Agricultural Lands Inventory Project report. The 2009 Sustainable Agriculture Study classified a large part of the project area as Marsh or Wetland.

To determine the potential for any post-construction impacts on adjacent agricultural lands with respect to drainage or saltwater intrusion, several technical studies were conducted in response to comments received on the DEIS. The studies have provided critical information that has contributed to the design of a drainage system that will function equal to or better than the drainage system that exists today.

No studies were undertaken on the project’s impacts to livestock or potential livestock as there are no livestock on or adjacent to the project area. This project is subject to the newly adopted Snohomish County Shoreline Master Program Update and not the old Shoreline Management Master Program.

Response to Comment P3-36
The goal of the SLS initiative is to arrive at a permanent and satisfactory solution to the absence of an objective framework that can assess the impacts to designated agricultural land from restoration projects. Appendix B has never been adopted as a policy or incorporated into the Comprehensive Plan or development code, and therefore, cannot be considered as an objective or legal framework against which to measure impacts to agriculture.

Please see response to Comment P3-2 regarding our evaluation of different setback dike alignment locations.
Response to Comment P3-37
The Smith Island project proposes year-round tidal inundation because seasonal inundation does not meet the project’s objectives.

Response to Comment P3-38
Comment noted.

Response to Comment P3-39
Please see response to Comment P3-36.

Response to Comment P3-40
The DEIS, in the Land and Shoreline Use section, did evaluate the level of compliance of the project with the three GPP policies that you reference, and this discussion is retained in the FEIS. The County is not proposing to establish a wetland and habitat mitigation bank.

Response to Comment P3-41
The agricultural community through the Agricultural Advisory Board issued a position paper recommending an evaluation of project proposals to result in a “no net loss” of designated agricultural land when parcels are converted to non-agricultural uses. This paper was included in the DEIS as Appendix B. The position paper contains recommendations but there is currently no code requirement for the project to comply with its provisions.

Response to Comment P3-42
Please see response to comment P3-1. The FEIS contains sufficient information for decision makers and shows that the project can be built by working cooperatively to resolve issues and mitigating for environmental impacts.
June 22, 2011
Snohomish County Public Works
Transportation and Environmental Services
3000 Rockefeller Ave, M/S 607
Everett, WA 98201
Attention: Mark Stamey

Comments on Smith Island Restoration Project DEIS

First, to clarify, we are not necessarily opposed to the restoration project. We do believe, without hypocrisy, in Property Rights for all. A landowner should be able to do what they want with their property as long as they do not do damage to others. Typically, those others are adjacent property owners.

<table>
<thead>
<tr>
<th>Impacts not properly addressed in protection of adjacent lands (Hima Farms):</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Drainage</td>
</tr>
<tr>
<td>- Salt Water Intrusion</td>
</tr>
<tr>
<td>- Opening Public Access to Private Property</td>
</tr>
<tr>
<td>- Compensation for Loss of Farmland per GMA or SLS</td>
</tr>
<tr>
<td>- Alleged wetland impacts by Hima Farms and Snohomish County</td>
</tr>
</tbody>
</table>

There is a very non-committed and unsubstantiated claim on Page 6 IMPACTS TO ADJACENT PROPERTY OWNERS saying “A currant hydrologic analysis of the proposed dike design, footprint, and alignment did not find significant risk of reduced drainage, saltwater intrusion, flooding or other groundwater impacts to adjacent properties...” No technical support is presented in the document that supports this claim.

The existing Dike is 1200 to 4000 feet from Hima Farms. There is nearly 500 acres of land that buffers Hima Farms and lands west of the Freeway from issues with flooding.

In the existing location, moderate breaches or overtopping of the dike is “absorbed” into the 400 acres and “thousand foot” buffers. This provides “buffering” protection to Hima Farms and properties west that will not be provided with the proposed re-location. Any breaches or overtopping will be directly onto Hima Farms land.
Drainage:
The DEIS does not correctly characterize the drainage impacts that would be created by moving the dike. They do make some general comments on Page 19 that “…drainage on the landward side of the new dike will be improved through construction of new ditches and installation of a new tide gate into Union Slough…” however there needs to be realistic specifics on minimum invert elevations, storage capacity, and/or pump designs and capacity.

Hima Farms is underlain with a drainage system designed in the 80s by NRCS. The integrity of this design intent has to be maintained. The Snohomish County Conservation District (SCCD) has recently analyzed the drainage requirements and at a minimum, the SCCD parameters must be met with any relocation of the dikes.

Invert elevations: existing field drainage discharges into the large drainage channel along the eastern property line of Hima farms and landward of the proposed dike relocation at -0.6 MSL. Free drainage away from the discharge pipes at this elevation must be maintained.

Storage capacity: drainage from the adjacent land and Hima Farms eventually is discharged into the Snohomish River or Union Slough. The more significant drainage from Hima Farms is to the north into Union Slough. Discharge into these waterways is through tide gates. The tide gates are closed when tide levels are above the inverts of the discharge pipes. The gates can be closed for periods up to 15 days per the SCCD analysis.

Field drainage below the root zone needs to be maintained during this period so there needs to be capacity to store stormwater during this 15 day period. SCCD has calculated that there needs to be 40 acre-feet to account for anticipated storm conditions in this drainage basin.

The existing tide gate invert is at -2.0 MSL or a difference of 1.4 feet between the field drainage invert and the Tide Gate invert. With this depth of storage there would have to be 28.5 acres of storage capacity to assure drainage from Hima Farms under all conditions.

We believe the proposed relocation of the Dike may have to be reconsidered to allow for enough storage to protect the integrity of the existing Hima Farms field drainage system. The Dike may have to be moved east to allow for 28.5 acres of storage.

Pump designs and capacity: As an alternative to area for storage pump systems are often used in Dike Districts. Pumps can be designed to move all the stormwater; these pumps would be expensive to purchase and to operate. It is more efficient to design smaller pumps with supporting storage; pumps cost less to buy and operate. They may never turn on except during large storm events.

The county needs to correctly assess the drainage requirements of adjacent properties and provide detailed drainage designs that will adequately protect Hima Farms and the adjacent properties.

Page 49 HOW WOULD THE PROJECT AFFECT CURRENT AND ADJACENT LAND USES makes the statement “…Smith Island Restoration Project would have no significant adverse impacts on existing agricultural uses landward…”, but this statement is not adequately backed up by details to support the contention. Until full commitments to proper installation of a properly designed system are made, this statement does not provide confidence of “fact”.

- The DEIS fails to adequately address exactly how they will maintain drainage on adjacent properties.
Salt Water Intrusion:
Removing the 1200 to 4000 foot “buffer” between the dike and Hima Farms does increase risk of exposure to Salt Water Intrusion in two ways:
1. Brackish water will now be adjacent to Hima Farms exposing the farm to the possibility of salt water seeping through or under the dike.
2. Salt water or brackish water breaching or overtopping the dike and spilling directly onto Hima Farms now without the benefit of a near 500-acre absorption field.

The dike could be properly constructed with an impermeable cut-off trench to prevent seepage. Although we believe the likelihood of seepage is low, the risk is increased with the relocation of the dike and the county needs to indemnify Hima Farms against this risk.

The bigger risk is a breach in the dike or possibly overtopping. There is a huge buffer with the existing dike but any breaches or over-toppings with the relocated dike will be directly on to Hima Farms. The county needs to indemnify Hima Farms against this risk.

Moving the dike further east away from the property line could regain a “buffer” for minor or moderate breaches of the dike. The county could consider moving the dike away from the property line of Hima Farms.

- The EIS does not adequately indemnify or prove adequate protection to Hima Farms from Salt Water Intrusion.

Opening Public Access to Private Property:
Page 12 talks about benefits to “...enhanced public access and recreation” and even the construction of a parking lot north of 12th on county land.

Hima Farms has already had more than $30,000 worth of tools and equipment stolen from the farm by thieves finding access through county land.

Hima Farms and other adjacent property owners (Buse Timber as one) are opposed to public access on this land as it usually means problems with vandalism, littering, and as proven theft on their private property.

- The counties DEIS fails to address how they will protect adjacent private property from theft and vandalism by encouraging public access to their property.
Compensation for Loss of Farmland per GMA or SLS:

Page 7 IMPACTS TO AGRICULTURAL LAND BASE simply makes the statement “…loss of designated agricultural land in the project area…is acknowledged as an unavoidable adverse impact of the proposed project.”

GMA directs agencies to protect against the loss of Natural Resource Lands including Agriculture. Prime Agricultural Land is to be protected.

Sustainable Lands Strategy (SLS) has been developed to balance loss of Ag Land to the gain of Fish Habitat. The DEIS makes reference to the SLS on pages 7 and 8 but they do not address “the spirit” of SLS in specific relationship to their project.

Why has the county not demonstrated how it will compensate, per the SLS agenda and promises, this conversion of Ag Land? Where is SLS in this proposal, what are the mitigation and compensation efforts for this loss of farmland.

The county needs to specify exactly how they are going to compensate for this loss of Ag Land per the agreements within SLS. A lot of citizens can appreciate the benefits of the Salmon Restoration Project but this needs to be balanced with attention to the citizens Food Security. Loss of local agriculture is not without damage to our Nation’s Food Security.

- The EIS must address specific compensation for the loss of farmland.

Alleged wetland impacts by Hima Farms and Snohomish County:

Dike District 5 had directed landowners to maintain their drainage facilities on their respective lands. Hima Farms and Snohomish County cleaned components of their drainage facilities that had/wetland characteristics. The DOE and Army Corp believes there was a violation.

We believe County and Federal Law exempt the work done from Critical Area rules. This belief is not shared by the DOE; Hima Farms and Snohomish County are working with Erik Stockdale to resolve this issue. It is an issue that needs to be addressed for all farmland.

We will work through the “problem” with DOE and Army Corp and hopefully we can find Hima Farms and Snohomish County acted according to the allowed exemptions. If the DOE confirms there was a violation and mitigation of the violation is required, the county (with Hima Farms and DOE) needs to address how that mitigation will happen.

One solution discussed with DOE is to add “wetlands” to the restoration project. With the Dike relocation as proposed, there is not enough area to provide for wetland mitigation and stormwater storage. The county should consider moving the proposed Dike alignment slightly to the east to allow for mitigation and drain water storage.

- The EIS does not address possible wetland mitigation in regards to purported DOE violations

Thank you for the opportunity to comment on the DEIS and the project. Hima Farms is willing to be a “good neighbor” as long as the above issues can be addressed.

Merle Ash
Land Technologies, Inc.
18820 3rd Ave NE
Arlington WA 98223
360-652-9727
Merle@landtechway.com
Responses to June 22, 2011 Letter from Merle Ash of Land Technologies, Inc.

Response to Comment P4-1
These listed potential impacts are addressed in the responses below.

Response to Comment P4-2
The hydrologic analysis referred to in the DEIS came from the *Hydrodynamic Modeling Study of the Snohomish River Estuary*, which was prepared by Battelle in 2007 for the Tulalip Tribes. In response to DEIS comments, Snohomish County undertook additional technical studies that covered existing and proposed drainage patterns, saltwater impacts, potential overtopping of the dike during flood events, and hydraulic impacts to Union Slough. These findings have been incorporated into the FEIS and are discussed in the following responses to DEIS comments.

Response to Comment P4-3
The County has prepared a 2013 report titled *Union Slough Hydraulic Model Study* (Appendix J) which examines the potential impact of the project on 100-year flood levels. New modeling was conducted to provide the necessary comparison with existing predicted 100-year flood levels. The study concluded that the project would not raise flood levels. It is not anticipated that the new setback dike will be topped by rising waters more frequently than the existing dike. While the new dike will be closer to IFF’s property, the dike’s consistent height of 15 feet NAVD88 and the fact that it will be constructed to a significantly higher standard than the existing dike will provide overall better flood protection. The existing dike has a variable top elevation in the project area of approximately 11 to 18 feet NAVD88.

Response to Comment P4-4
The County has prepared a 2013 report titled *Smith Island Drainage Analysis* (Appendix I) to evaluate the drainage patterns and drainage needs that will occur as a result of the project. The report utilizes the analysis provided by the Snohomish Conservation District regarding the land westward of the new setback dike. The report included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. These design elements will safeguard the integrity of Hima Farms’ drainage system which was designed in the 1980’s by the Natural Resources Conservation Service.
Response to Comment P4-5
Please see response to Comment P4-4. The 2013 Smith Island Drainage Analysis by Tetra Tech, and the later 2013 Drainage Report by Otak provide the basis for detailed design. Construction plans will be prepared that will provide sufficient safeguards and protections to ensure that the existing drainage patterns of agricultural uses landward of the new setback dike are not adversely impacted post-construction.

Response to Comment P4-6
The County has conducted a number of investigations to determine the potential for the proposed project to cause saltwater intrusion on adjacent properties, including the County’s 2012 Geologic and Hydrogeologic Field Investigation Report, Tetra Tech’s 2013 Saltwater Impact Study, and Shannon and Wilson’s 2012 Groundwater Flow and Seawater Impacts Assessment and 2013 Groundwater Report Update. These studies determined that the soils and groundwater in the alluvial sands aquifer and surface water, both on and around the project site, currently have salinity levels above drinking water and agricultural irrigation water standards. Under existing conditions, the Snohomish River provides a greater source of groundwater recharge to the underlying aquifer, with a potential minor input from groundwater sources from the south, than Union Slough. When the existing dike is breached along Union Slough and the project area receives daily tidal inundation, Union Slough will become the more predominate source of groundwater recharge. As Union Slough has a lower salinity level than the Snohomish River, the restored marsh areas will also have a low salinity level, and aquifer source recharge will be lower in salinity than existing conditions. See the Water Resources section and associated technical reports in the Appendices for more indepth information.

Response to Comment P4-7
Please see response to comment P4-3 regarding the potential for overtopping of the dike. With respect to seepage, the design for the setback dike includes a low permeability core to minimize seepage. In addition, the dike will be subject to the Army Corps’ PL84-99 maintenance standards which address seepage problems. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. Given that the new dike will be properly designed and constructed, inadvertent breaching of the dike is an unlikely possibility.

Response to Comment P4-8
As stated in the response to comment P4-4, the location of the new setback dike has been shifted slightly eastward from the location shown in the DEIS. The alignment in the FEIS provides adequate separation from IFF’s property to accommodate the necessary drainage systems while meeting the project’s restoration goals.

Response to Comment P4-9
The DEIS does not propose a public access trail on the County’s section of the new setback dike, which will run parallel to IFF’s property. Theft and other illegal activities do occur on Smith Island owing to its remote location, however, the proposed Smith Island project is not likely to affect, either positively or adversely, the level of criminal activity. A parking lot has been proposed to be constructed north of 12th Street NE and that location is south of IFF’s property. The parking lot would serve users of the City of Everett’s trail link south of 12th Street NE which would be on its portion of the dike.
GMA directs agencies to protect both agriculture and the environment, and to retain open space and habitat areas. The EIS explains in detail the goal and mission of the SLS process and its progress in the Summary section of the EIS. The purpose of the SLS is to define general guidelines and principles upon which agricultural, salmon recovery, and tribal proponents agree that future actions to preserve farmlands and restore fish habitat should be based. The intent is to achieve a “net gains” model for both agriculture and fish, where the term “net gains” refers to the principle that the benefits of a broad-scale agreement should be greater than its cost for every party involved. However, an important understanding reached in the early phase of the SLS process was that not every individual action proposed to help farms or fish will provide benefits for both. Individual actions to strengthen agriculture may have undesirable consequences for fish habitat, and some fish habitat restoration projects present no real opportunity to enhance farming and may have negative impacts. For this reason, SLS is being applied not to individual actions but to reach-scale “packages” of multiple measures affecting broader areas. Within each package, both farms and fish may experience some undesired impacts, but a package should offer a net gain over the broader region.

Policy amendments relating to the preservation of agricultural lands and implementation of habitat restoration projects were made to the Land Use and Natural Environment chapters of the Snohomish County GMA Comprehensive Plan when they were adopted by the County Council in October 2012 (Amended Ordinance 12-047). However, the County’s land use and development codes to implement these policies have not yet been formulated.

DID5 has stated that it is responsible for cleaning all toe ditches and that individual land owners are responsible for cleaning other ditches located on their property. The ongoing and future ditch maintenance activities on Smith Island are outside the scope of this project. DID5 members, including the County, are coordinating with federal, state and local regulatory agencies on a Drainage Maintenance Plan to ensure drainage maintenance activities are consistent with each agency’s respective regulations.
Thank you madam hearing examiner my name is Merle Ash from Land Technologies and representing Hima Farms, one of the adjacent landowners. Since the DEIS has been written, they have had a lot of meetings with DOE and SWM about what needs to be addressed. The DEIS, as written doesn’t adequately address.

Several of problems that DEIS does not address are drainage needs and specifics of the drainage. More discussion on how to ensure against salt water intrusion through dike, seepage under dike or more importantly what happens when the dikes are breached or overtopped. Right now there is a 1,200 to 4,000 foot buffer between dike and farm. 500 acres of buffer to absorb any breaching or overtopping. With proposed project overtopping or breaching, directly into Hima Farms.

Concerns over proposals for public access adjacent to their farm. 30 to 40 thousand dollars have been stolen from their property and access was gained through the County property. Trails etc adjacent to farm or private property, need barriers put up to protect property. Graffiti, garbage, and worse case theft. Would like to be protected from that.

The DEIS basically talks about GMA and preservation of farm land, but states that there is nothing in County code that says you can’t use farm land for mitigation. Lots in GMA that says you can’t. Gone through extensive process to build SLS. See something more put into this that speaks to compensating for loss of farm land. What will be the compensations?

Drainage, rebuilding a channel and tide gate that most of water passes through. Existing drainage system on Hima Farm, NRC installed in the 80’s, invert at minus 0.6 MSL and tide gate at minus 2. Drainage at Hima Farms needs to be maintained at that minus 0.6 because of farm type and farmers market (year round farm). Drainage needs to be protected. The tide gate at minus 2 but might not open up for 15 days due to storms. Storage for stormwater drainage that happens in that drainage basin. SC Conservation District calculated that would be 40 acre feet of storage is needed for large storm events if tide gate stays close for 15 days. There is only 1.4 feet difference allow between elevations, that means there is 28.5 acres of storage needed and or a pump system or possibly a pump and storage combination would be most effective.

Make sure the Final EIS more specifically addresses how this will assure drainage for Hima Farms.
Responses to June 22, 2011 Public Testimony from Merle Ash of Land Technologies, Inc.

Response to Comment P5-1
Since the DEIS was issued in June 2011, the County has conducted several technical studies on existing and expected future drainage patterns, the potential for saltwater intrusion and seepage under the new setback dike, the potential for dike overtopping, and impacts to Union Slough.

The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. The dike will also have a low permeability core to minimize seepage.

The County has conducted a number of investigations to determine the potential for the proposed project to cause saltwater intrusion on adjacent properties, including the County’s 2012 Geologic and Hydrogeologic Field Investigation Report, Tetra Tech’s 2013 Saltwater Impact Study, and Shannon and Wilson’s 2012 Groundwater Flow and Seawater Impacts Assessment and 2013 Groundwater Report Update. These studies determined that the soils and groundwater in the alluvial sands aquifer and surface water, both on and around the project site, currently have salinity levels above drinking water and agricultural irrigation water standards. Under existing conditions, the Snohomish River provides a greater source of groundwater recharge to the underlying aquifer, with a potential minor input from groundwater sources from the south, than Union Slough. When the existing dike is breached along Union Slough and the project area receives daily tidal inundation, Union Slough will become the more predominate source of groundwater recharge. As Union Slough has a lower salinity level than the Snohomish River, the restored marsh areas is expected to also have a low salinity level, and aquifer source recharge to be lower in salinity than existing conditions. See the Water Resources section and associated technical reports in the Appendices for more indepth information.

The County’s Union Slough Hydraulic Model Study (Appendix J) examines the potential impact of the project on 100-year flood levels. New modeling was conducted to provide the necessary comparison with existing predicted 100-year flood levels. As the study concluded that the project would not raise flood
levels, it is not anticipated that the new setback dike will be topped by rising waters more frequently than the existing dike. In addition, the dike will be subject to Army Corps PL84-99 maintenance standards which address seepage problems. While the new dike will be closer to IFF’s property, the dike’s consistent height of 15 feet NAVD88 and the fact that it will be constructed to a significantly higher standard than the existing dike will provide overall better flood protection. The existing dike has a variable top elevation in the project area of approximately 11 to 18 feet NAVD88.

The findings of these studies have been incorporated into the FEIS.

Response to Comment P5-2
A public access trail is not proposed on the County’s portion of the new setback dike, which will run parallel to IFF’s property. Theft and other illegal activities do occur on Smith Island owing to its remote location, however, the proposed Smith Island project is not likely to affect, either positively or adversely, the level of criminal activity.

Response to Comment P5-3
The EIS explains in detail the goal and mission of the SLS process and its progress in the Summary section of the EIS. The purpose of the SLS is to define general guidelines and principles upon which agricultural, salmon recovery, and tribal proponents agree that future actions to preserve farmlands and restore fish habitat should be based. The intent is to achieve a “net gains” model for both agriculture and fish, where the term “net gains” refers to the principle that the benefits of a broad-scale agreement should be greater than its cost for every party involved. However, an important understanding reached in the early phase of the SLS process was that not every individual action proposed to help farms or fish will provide benefits for both. Individual actions to strengthen agriculture may have undesirable consequences for fish habitat, and some fish habitat restoration projects present no real opportunity to enhance farming and may have negative impacts. For this reason, SLS is being applied not to individual actions but to reach-scale “packages” of multiple measures affecting broader areas. Within each package, both farms and fish may experience some undesired impacts, but a package should offer a net gain over the broader region.

Policy amendments relating to the preservation of agricultural lands and implementation of habitat restoration projects were made to the Land Use and Natural Environment chapters of the Snohomish County GMA Comprehensive Plan when they were adopted by the County Council in October 2012 (Amended Ordinance 12-047). However, the County’s land use and development codes to implement these policies have not yet been formulated.

GMA plans and regulations are guided by 14 goals. Maintaining and enhancing natural resource-based industries such as farming is one, however, retaining open space and habitat areas, protecting the environment, and managing shorelines wisely are also important goals of the GMA. New shoreline regulations enacted since the issuance of the DEIS clearly allow shoreline habitat restoration and enhancements (see SCC 30.67.580). In addition, SCC 30.67.440(27) also states “…shoreline habitat restoration or enhancement projects do not have to be identified on the use matrices in chapter 30.22 SCC to be permitted in shoreline jurisdiction.”

The EIS analysis does not identify any specific adverse impact to agriculture that would result from the project. The 350-acre reduction in the inventory of designated agricultural land falls within the nearly
14,000 acres of designated agricultural land that has been identified as being not well-suited for farming (i.e. marsh or wetlands). Therefore, the County does not propose to provide any mitigation when the existing designated agricultural land is restored to salmon habitat.

Response to Comment P5-4
The County’s 2013 Smith Island Drainage Analysis was supplemented by analysis provided by the Snohomish Conservation District. The drainage analysis is based on survey data confirming the elevation of the existing tide gate which will be replicated with the new tide gate. The analysis incorporated tide cycles to address the capability of discharging water through the tide gate. It determined that even during a 100-year flood event, water in the drainage channels would rise above the -0.6 elevation of drain tiles on IFF’s property for only a few days, and would never overflow the drainage channel itself. A storage pond and pump are proposed as part of the project design. Use of the pump by DID5 can prevent water rising above the -0.6 elevation. The project design is being developed to ensure that post-construction drainage patterns do not adversely impact property owners adjacent to the project site.
Thank you for opportunity to provide oral comments.

P6-1 Concludes more studies need to be done and deliberation accomplished to make sure this project is in correct location. We have issues with location of dikes.

P6-2 No deliberation is given to the drainage need on the adjacent farmlands and no consideration given to the aquifer and saltwater intrusions and effect on our farm. Simple calculation on acreage to inches of rainfall per year will yield millions of gallons of fresh water being put into aquifer. Currently the land acts as a buffer of the possibility of salt water intrusion. Turning land that currently serves as a fresh water input to a salt-water input will create a loss of that buffer and increase height in the salt water on immediately adjacent farmlands.

P6-3 Currently land protected by dikes and those dikes have served the District very well. The DEIS indicate that dike is not currently part of Corps program or in jeopardy of being in the program, and that is not true.

P6-4 The DEIS indicated there are no wells on the property. They do have a well on their property. That well was put in by getting the permits from WDOE on their property and have permission to install more wells.

P6-5 Drainage, height and location of dike, public access and destruction of farm land and don’t see any details in DEIS on those impacts on adjacent farm lands. Recommend FEIS provide specific solutions for all of the problems.

P6-6 Draft EIS does not recognize the authority of DD5; it is very disturbing. It seems like it is an intentional effort to undermine the authority of the Diking District.

P6-7 It is the permittee’s responsibility to make sure adjacent farmland is not impacted. Hima is not seasonal farmland, all year round and have invested heavily to make that farmland work for all year round.
Responses to June 22, 2011 Public Testimony
from Naeem Iqbal of Hima Farms

Response to Comment P6-1
In response to comments received on the DEIS, the County undertook additional studies that covered existing and proposed drainage, saltwater impacts, and hydraulic impacts to Union Slough. The findings have been incorporated into the FEIS. The project design is being developed to ensure that post-construction drainage patterns do not adversely impact property owners adjacent to the project site.

Response to Comment P6-2
The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. The dike will also have a low permeability core to minimize seepage.

The County has conducted a number of investigations to determine the potential for the proposed project to cause saltwater intrusion on adjacent properties, including the County’s 2012 Geologic and Hydrogeologic Field Investigation Report, Tetra Tech’s 2013 Saltwater Impact Study, and Shannon and Wilson’s 2012 Groundwater Flow and Seawater Impacts Assessment and 2013 Groundwater Report Update. These studies determined that the soils and groundwater in the alluvial sands aquifer and surface water, both on and around the project site, currently have salinity levels above drinking water and agricultural irrigation water standards. Under existing conditions, the Snohomish River provides a greater source of groundwater recharge to the underlying aquifer, with a potential minor input from groundwater sources from the south, than Union Slough. When the existing dike is breached along Union Slough and the project area receives daily tidal inundation, Union Slough will become the more predominate source of groundwater recharge. As Union Slough has a lower salinity level than the Snohomish River, the restored marsh areas is expected to also have a low salinity level, and aquifer source recharge to be lower in salinity than existing conditions. See the Water Resources section and associated technical reports in the Appendices for more indepth information.
The County’s *Union Slough Hydraulic Model Study* (Appendix J) examines the potential impact of the project on 100-year flood levels. New modeling was conducted to provide the necessary comparison with existing predicted 100-year flood levels. As the study concluded that the project would not raise flood levels, it is not anticipated that the new setback dike will be topped by rising waters more frequently than the existing dike. In addition, the dike will be subject to Army Corps PL84-99 maintenance standards which address seepage problems. While the new dike will be closer to IFF’s property, the dike’s consistent height of 15 feet NAVD88 and the fact that it will be constructed to a significantly higher standard than the existing dike will provide overall better flood protection. The existing dike has a variable top elevation in the project area of approximately 11 to 18 feet NAVD88.

**Response to Comment P6-3**
Comment noted. We understand that DID5 is currently enrolled in the U.S. Army Corps of Engineers’ (Corps) Flood Rehabilitation Program (PL84-99 program), under which it is eligible to receive funding for dike maintenance, emergency repairs, and dike engineering inspection assistance. A diking system is considered eligible if it meets the “Minimally Acceptable” standards of the PL84-99 program. This requires periodic or routine inspections of a diking district’s operational and maintenance procedures by the Corps. Diking systems that receive an “Acceptable” or “Minimally Acceptable” overall system rating on the last periodic or routine eligibility inspection are “Active” as part of the PL84-99 program. DID5 reviews the report and, if necessary, makes the improvements to the system in order to move it towards an “Acceptable” rating.

**Response to Comment P6-4**
The County was unaware of the presence of the water well you mention on IFF’s property at the time the DEIS was issued because the well log filing at Ecology occurred after the County's well log research. The incorrect statement has been corrected in the FEIS and updated to reflect the second well installed in October 2011.

**Response to Comment P6-5**
The findings of technical studies the County conducted since the issuance of the DEIS have been incorporated into the FEIS, along with additional information regarding agricultural lands within the County. Public access is not proposed on the County’s portion of the new setback dike; the City’s dike will have a dike top trail.

**Response to Comment P6-6**
Diking Improvement District 5 (DID5) was formed under Chapter 85.08 RCW in response to a petition from the Everett Improvement Company dated July 31, 1930. On August 18, 1930, the Board of County Commissioners formed Diking Improvement District 9. A short time later on January 13, 1931, the Board ordered that the District be designated and known as Diking Improvement District 5. A diking improvement district formed under Chapter 85.08 RCW is not a separate municipal corporation or governmental entity and remains under the auspices and control of the County which formed it. While the District Board of Supervisors is charged with the responsibility for maintenance and construction of a system of improvements, the final authority and responsibility for approving the proposed plans is vested in the County Council, which is the legislative body of the County (see RCW 85.08.220 and .540). Input from
the Board of Supervisors will be important in determining the feasibility of the proposed improvements. The County intends to reach formal agreement on dike design parameters with DID5 and discussion on project agreements is underway.

Response to Comment P6-7
Please see response to Comment P6-2.
Mark Stamey, EIS Project Manager
Smith Island Restoration Project
Snohomish County Public Works
Transportation and Environmental Services
3000 Rockefeller Ave., M/S 607
Everett, WA 98201
RE: Smith Island Restoration Project DEIS

Mr. Stamey,

While not opposed to the Smith Island Restoration Project in principle, Buse Timber and sales has several concerns that we feel need to be addressed prior to project approval or through an agreed upon adaptive management process.

Here is an outline of those concerns:

- Buse Timber maintains a tideland lease with the WA State Department of Natural Resources for water storage and take out of logs in Union Slough adjacent to our northeast property corner. This enables us to buy logs in areas that trucking is unreasonable to do and provides us a competitive advantage and access to logs that would otherwise be unavailable. At times, as much as 50% of our raw material (logs) are rafted through Union Slough. These rafts are towed in from Ebey Slough and then come down Union Slough to our storage area. This activity is absolutely vital to maintaining employment for approximately 110 of our employees.

We have a great deal of concern as to the impact that releasing dikes on both sides of Union Slough will have on the channel depth over a period of time and what the increase of water volume and velocity will have on our ability to safely and efficiently be able to continue to operate on the water downstream of the project.

What assurances can the county provide that this vital part of our business will not be altered or destroyed?

- With the increase of water volume and velocity traveling through the lower part of Union Slough as a result of the project we are concerned about long-term erosion of the existing dikes.

Can the remaining original dike be improved to be more resistant to scouring and erosion caused by increased volume and flow of water?
• The height of the dike needs to be high enough to prevent overtopping. I believe the dike height needs to be 14.25 feet after settling. We are concerned that any overtopping will cause irreparable damage to our business and products. We need the new and remaining dike heights consistent along the entire dike. This needs to be the case even several years after construction to allow for settling.

• Drainage from the east side of I-5 is a significant concern to us. We strongly believe that drainage from the east side of I-5 needs to drain to the east rather than under I-5.

Buse Timber has no control over the water on this side of the Freeway but if drained under I-5 westward we then become responsible under out SWPP with the DOE.

Of further concern in this regard, the WSDOT has standards for maintaining culverts that put any drainage plan that fits into the Army Corps of Engineers diking approval at risk. WSDOT only requires cleaning if a culvert exceeds 75% blockage. No plan should rely on the WSDOT maintenance.

We think the drainage design and maintenance of ditches needs to facilitate water originating on the east side of I-5 to drain east and stay off of Buse Timber property. This needs to be achieved.

• As part of this project we are also greatly concerned about ongoing drainage and ditch maintenance. It seems that there are inconsistencies between agencies on what ditches and bodies of water are considered waters of the state. Of further question is what is regarded as ditch maintenance.

Prior to the Smith Island Project approval we would like to see resolution of these issues between DDS, Snohomish County and the DOE. This would include ditches being individually defined and permitted for ongoing maintenance.

Thank you for the opportunity to comment. While this is not a complete list, it does highlight our company's primary concerns. We hope that through some preliminary work by the county and agreed upon adaptive management processes the project can move forward successfully. However, our view of success assumes that the businesses within DDS feel no adverse impact from the project now or many years into the future.

Sincerely,
Buse Timber and Sales, Inc.

Jamie Hillery
Timber Manager
Responses to June 20, 2011 Letter
from Jamie Hillery of Buse Timber & Sales, Inc.

Response to Comment P7-1
In 2013, the County finalized the Union Slough Hydraulic Model Study (Appendix J) which addresses potential impacts to Union Slough to include conditions post-construction of the Blue Heron Slough project on the former Biringer Farm property. The results indicate a minor increase in flow velocity and shear stress on the existing Union Slough dikes downstream from the proposed restoration area. This increase may also cause an enlargement of the inner channel within Union Slough, however, it is not considered a problem unless it damages the dikes such as through undercutting or oversteepening of the dike front. The potential for erosion will be monitored during annual inspections by the Corps or monitoring by the County. If new areas of erosion appear on the downstream dikes following project construction, additional bank protection materials will be added to the dikes by the County, in cooperation with DID5, to increase their resistance to erosion.

The hydraulic model results did not indicate significant sediment deposition within Union Slough, although flow velocities upstream of the downstream dike breach will decrease. This could cause minor localized sediment deposition in eddies immediately upstream and downstream of the downstream breach. There may also be a small amount of sediment deposition in the Union Slough reach between the two breaches. The ability of Union Slough to transport sediment, especially the fine-grained nature of the sediment load in this reach, will not be impaired. The County will monitor sediment deposition through bathymetric surveys, and correct any deposition as a result of decreased flows adjacent to the project site by applying for permits to maintain Union Slough navigability for Buse Timber’s log rafting operation.

The remaining original dike will be stabilized and improved to be more resistant to scouring and erosion that may be caused by increased water flows and volumes. The ends of the dike sections at each breach, and the remaining section of the existing dike, will be protected with woody materials and plantings, or other measures determined necessary during design.

Response to Comment P7-2
The County’s Union Slough Hydraulic Model Study evaluated the potential impact of the project on 100-year flood levels. New modeling was conducted to provide the necessary comparison with existing predicted 100-year flood levels. As the study concluded that the project would not raise flood levels, it is not anticipated that the new setback dike will be topped by rising waters more frequently than the existing dike. The County has reviewed the dike top elevation with the City of Everett and DID5. The new setback dike will connect to the City’s dike that was constructed in 2007, which is approximately 15 feet NAVD88. The new setback dike proposed by the County will also be 15 feet NAVD88, which is consistent with the goal of the District to match the 100-year flood elevation. Final construction techniques to maintain that height after settlement will be further evaluated during the design phase of the project.
Response to Comment P7-3
The proposed drainage revisions account for all water from the project area and the EIS text has been revised accordingly with regard to WSDOT’s culverts. None of the drainage studies conducted since the DEIS was issued have accounted for water passing through WSDOT’s 42-inch culvert under I-5. The project’s drainage design includes two tide gates and a large drainage storage pond with a pump to assist drainage through the tide gate during periods of heavy rainfall and high flows in Union Slough. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. Drainage from I-5 that may flow to the project area will be accommodated in the project design.

As the levels of water draining under I-5 will remain the same or less post-construction, Buse Timber’s NPDES permit from WDOE and SWPPP will not be jeopardized.

Response to Comment P7-4
DID5 has stated that it is responsible for cleaning all toe ditches and that individual land owners are responsible for cleaning other ditches located on their property. The ongoing and future ditch maintenance activities on Smith Island are outside the scope of this project. District members, including the County, are coordinating with federal, state and local regulatory agencies on a Drainage Maintenance Plan to ensure drainage maintenance activities are consistent with each agency’s respective regulations.
June 20, 2011

RE: SMITH ISLAND RESTORATION PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT - JUNE 2011

Dear Mr. Stamey:

Though we understand the reason for the Smith Island Restoration Project, in reading through the referenced draft impact statement there are several concerns that we feel need to be thoroughly addressed prior to any project approval being provided. Our concerns are as follows:

1. The DEIS states that with construction of the new setback dike drainage modifications will be made to ensure positive drainage on the properties adjacent to the new dike and therefore no negative impacts will result. Our concern is that the drainage modifications proposed include having areas on the east side of 1-5 that presently drain to the east now draining to the west without addressing the size of the existing culverts and drainage ditches that are supposed to carry that excess water.

   In one instance a 42-inch culvert under 1-5 is predicted to carry a large share of the water from an area behind the new dike but this culvert belongs to Washington State Department of Transportation whose maintenance criteria is to not provide any cleaning until the capacity of the culvert is reduced by a minimum of 75%. If the proposed drainage plan is to be implemented then there needs to be a requirement that WSDOT maintains these culverts at a higher standard.

   The County should be required to provide adaptive management practices in this regards to ensure that after the project is complete all adverse effects to the adjacent property owners will be addressed and taken care of.

2. Dagmars Marina does not want ditch erosion on its property due to the increase flow of drainage water that could affect the marina operation nor the responsibility of this excess discharge as it concerns our existing National Pollutant Discharge Elimination System (NPDES) Boatyard General Permit with the Department of Ecology. Without this permit we could effectively be out of business. We urge that any approval of this restoration project require that all drainage presently being drained to the east side of 1-5 remain that way.

P8-1
3. Several sections of the DEIS refers to "minimizing" adverse effects of the proposal (i.e. "seepage will be minimized", "natural drainage ways are minimally affected"). The diking district, of which Dagmars Marina is a part of, is presently enrolled in the U.S. Army Corps of Engineers' Flood Rehabilitation Program (PL84-99) and nothing should be approved for this restoration project that would jeopardize that enrollment. The new dike needs to be constructed to the latest Corps standards and at the very minimum the top of the new dike should be built to an elevation of 14.25 feet after settlement which would conform to the existing dike on the City of Everett's property. Special concern needs to be taken in the design so that no "overtopping" of the dike occurs in the future.

Again, the County should be required to provide adaptive management practices to ensure that after the project is complete all future adverse effects will be addressed and immediately be taken care of. This should include a maintenance and performance bond that would require annual inspections of the new dike to address any variation in elevation of the top of the dike and potential seepage problems.

The proposed restoration project should not be done at the expense of creating hardship to the immediate property owners in such a way that it will affect their ongoing business operations.

Sincerely,

DAGMARS MARINA, LLC

Victor M. Loehrre
Managing Member
Responses to June 20, 2011 Letter
from Victor M. Loehrer of Dagmars Marina, L.L.C.

Response to Comment P8-1
The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. The dike will also have a low permeability core to minimize seepage.

The drainage design accounts for all water from the project area and does not rely on WSDOT’s 42-inch culvert. The project will also not result in an increase in the amount of water draining through the 24-inch culvert under I-5. This culvert conveys the southwest tidal channel and provides drainage for approximately one-third of the IFF property south of the west tidal channel.

As the levels of water draining under I-5 will remain the same if not less post-construction, Dagmars Marina’s NPDES permit from WDOE will not be jeopardized.

Response to Comment P8-2
The new setback dike will be designed to meet or exceed the Army Corps’ PL84-99 program standards for material uniformity and compactness, slope stability, other structural elements, and elevation, and will not jeopardize DID5’s enrollment in the program. The County has prepared a report titled Union Slough Hydraulic Model Study (Appendix J) which evaluates the potential impact of the project on 100-year flood levels. New modeling was conducted to provide the necessary comparison with existing predicted 100-year flood levels. As the study concluded that the project would not raise flood levels, it is not anticipated that the new setback dike will be topped by rising waters more frequently than the existing dike. In addition, the County has reviewed the dike top elevation with the City of Everett and DID5. The new setback dike will connect to the City’s dike that was constructed in 2007 which is approximately 15 feet NAVD88. The new setback dike proposed by the County will also be 15 feet NAVD88, which is
consistent with the goal of the District to match the 100-year flood elevation. Final construction techniques to maintain that height after settlement will be further evaluated during the design phase of the project.

With respect to seepage, the design for the setback dike includes a low permeability core to minimize seepage. In addition, the dike will be subject to the Army Corps’ PL84-99 maintenance standards which address seepage problems. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the new storage pond.

**Response to Comment P8-3**
The County is exploring approaches to providing assurances to mitigate for possible unanticipated adverse effects from the project that are detrimental to Dagmars Marina.
June 23, 2011

RE: SMITH ISLAND RESTORATION PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT - JUNE 2011

Dear Mr. Stamey,

In regards to the referenced draft environmental impact statement and in particular the paragraph entitled "IMPACTS TO TRANSPORTATION" my concern is how it will affect the Dagmars Marina day-to-day operation. As most drivers are paid on a per trip basis (which in most cases result in accelerated speeds) the 60 truck trips anticipated each day, with peak volumes occurring during the time of the year and time of day that is the busiest for the marina, could result in numerous problems if not handled correctly.

A suggestion would be to incorporate trailers with lighted construction warning signs placed adjacent to the existing "boat loading signs" on Ross Avenue warning truckers going in either direction of the ongoing business activity in the immediate vicinity. It may be necessary to have a flagger present during Fridays as boaters get ready for the weekend. Temporary speed bumps would also be an option.

Additionally, as a result of the heavy truck and trailer trips to be made over two years, money should be allocated for road repair of Ross Avenue - it is doubtful, with the underlying soils conditions, that Ross Avenue is capable of handling this additional truck traffic without some repairs needing to be done at the completion of the restoration project.

Your attention to the above should be taken into consideration as you work on the impacts resulting from this project. Thank you.

Sincerely,

DAGMAR$ MARINA, LLC

Victor M. Loehrre
Managing Member
Responses to June 23, 2011 Letter
from Victor M. Loehrer of Dagmars Marina, L.L.C.

Response to Comment P9-1
We will be preparing a communication plan to inform and coordinate with Dagmars Marina and other area businesses and property owners regarding the project construction schedule and to identify anticipated traffic delays. We will be implementing traffic best management practices and will work closely with the construction contractor and trucking operators to comply with existing traffic speeds so that disruptions to area businesses will be minimized. Our approach will evaluate the existing sight stopping distances around businesses and the level of signage available and appropriate to ensure the safety of all road users. Discussions have already taken place between the County and Dagmars Marina regarding how to alleviate construction traffic congestion on Ross Avenue, both on a daily basis and during the Marina’s peak hours on Fridays during the busy summer months.

Response to Comment P9-2
All traffic mitigation measures will be agreed upon by the County and the City (which has jurisdiction over Ross Avenue and other local roads). A commonly used approach that could be used is establishing a benchmark of the existing road conditions and conducting an assessment of the road post-construction to determine the need for road repairs.
My name is Vic Loehrer and I am an owner of Dagmars Marina and a Diking District No. 5 Commissioner. The Applicant has had the better part of two years to work on this EIS but we are only given 30 days to review – so I thought it would be best to read my notes to make sure I do not leave too much out of my comments.

Having read the Applicant’s EIS I find it is full of general information, references to 147 other publications, speculation and promises – but contains no concrete solutions to any of the problems raised. The EIS mentions that the Applicant is coordinating and consulting with the Diking District but I would describe it more as kicking the can around the block – a lot of energy is expended but at the end of the day, there is nothing to show for it.

Thought the principal reasoning behind the restoration project is acceptable, as Commissioners for the Diking District, we have fiduciary responsibility as a government entity established through various RCW’s to ensure that there are no adverse impacts on the District itself – our required approval of the Applicant’s project will come with stipulations in regards to continued financial viability of the District, legal ramifications with respect to the existing dike easements, dike design, dike location, drainage issues, salt water intrusion to adjacent farm land, and water velocity increases in Union Slough, which needs to take into account the anticipated breech of the dikes on the Beringer site to the north. Ongoing maintenance of the dikes, culverts, and drainage ditches need to be determined, with inconsistencies between various government entities take into account and reconciled.

Diking District No. 5 has recently been inspected by the Corps of Engineers and will continue to be enrolled in their Flood Rehabilitation Program with a few minor repairs to be accomplished this year. If the restoration project proceeds, the Applicant must be required to provide adaptive management practices to ensure that the District does not lose the status and any adverse impacts are taken care of in a timely manner – minimum erosion, as mentioned in the EIS, is not acceptable. A requirement for a performance bond must be made part of any project approval, which would cover a specified time period or a set number of flood events, to ensure that funds are available for damage control and District compensation if the restoration project does not perform as proposed. An increase in fish habitat is commendable but it should not be at the expense of putting local businesses in jeopardy of being able to conduct their day-to-day operations including the potential to destroy prime farmland.
Responses to June 22, 2011 Public Testimony
from Victor Loehrer of Dagmars Marina, L.L.C.

Response to Comment P10-1
In response to DEIS comments received regarding the general nature of the information provided in the DEIS, Snohomish County has conducted additional technical studies to further analyze potential impacts of the project in regard to the existing and proposed drainage, hydraulics in Union Slough, and the potential for saltwater intrusion and dike overtopping. The results of the studies have been provided to DID5 and incorporated into the FEIS.

Response to Comment P10-2
DID5 was formed under Chapter 85.08 RCW in response to a petition from the Everett Improvement Company dated July 31, 1930. On August 18, 1930, the Board of County Commissioners formed Diking Improvement District 9. A short time later on January 13, 1931, the Board ordered that the District be designated and known as Diking Improvement District 5. A diking improvement district formed under Chapter 85.08 RCW is not a separate municipal corporation or governmental entity and remains under the auspices and control of the County which formed it. While the Board of Commissioners is charged with the responsibility for maintenance and construction of a system of improvements, the final authority and responsibility for approving the proposed plans is vested in the County Council, which is the legislative body of the County (see RCW 85.08.220 and .540).

The County’s 2013 Union Slough Hydraulic Model Study (Appendix J) addresses potentially higher water velocity impacts to Union Slough, including those from both the Smith Island project’s proposed breaching of the existing dike and by the Blue Heron Slough project’s future breaching of dikes on the former Biringer Farm property across the slough. Input from the Board of Commissioners regarding the findings of this study, as well as the drainage and saltwater intrusion analyses and other matters of concern such as the proposed dike location and future maintenance, will be important in determining the feasibility of the proposed improvements.

Response to Comment P10-3
While the existing dike meets the U.S. Army Corps of Engineers’ Minimally Acceptable standard of its PL84-99 program, the new dike would be constructed to a higher standard and would not, therefore, jeopardize DID5’s enrollment in the program.

The County has conducted a number of drainage studies, and the analyses concluded that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. The new dike will also also have a low permeability core to minimize seepage, and will be higher than the existing dike to provide better protection during flood events.
# Snohomish County Agricultural Advisory Board

June 30, 2011

Snohomish County Council  
Snohomish County Executive  
3000 Rockefeller Avenue  
Everett, WA 98201

**SUBJECT:** Smith Island Restoration Project DEIS, Comments of Record

Dear County Council Members and Executive Reardon:

The Snohomish County Agricultural Advisory Board offers the following comments regarding the Draft Environmental Impact Statement (DEIS) for the Smith Island Restoration Project and asks that, prior to the July 6 deadline, the Council and the Executive forward these written comments on to the lead agency, Snohomish County Public Works, Mark Stamey, EIS Project Manager.

| A1-1 | A portion of the finding for the project should be directed toward projects that will improve agricultural productivity in the county, such as manure digesters, composting operations, livestock slaughter operations, purchase of development rights, and the like. A suggestion would be 20% of total funding. |
| A1-2 | Adequate provision must be made for the protection of adjacent farm land, including tide gates and ditches and the owners of such land should be consulted as to adequacy of any such provisions. |
| A1-3 | Given the anticipated expenditure of public funds in the approximate amount of $18,000,000 for construction of a new dike and the relatively small amount of remaining land to be protected by the dike, consideration should be given to renewing efforts to acquire the IFF/Hima Nursery farmland immediately to the west of the proposed dike alignment. The expectation would be that, if the property is acquired by the County and included in the property to be restored to salmon habitat, the length of the dike might be substantially reduced, or the need for the dike might be eliminated entirely. This would require additional study to insure that the Interstate 5 roadway and city of Everett property are adequately protected. A critical component of the acquisition of the property would be an offset whereby other farmland of greater size and quality is removed from other restoration projects in the Snohomish River estuary so as to allow for the establishment of newly productive farming operations in the estuary, including the IFF/Hima nursery operations, should they wish to relocate. |
| A1-4 | The benefits of this project for fish habitat restoration and its impacts on the agricultural lands must be considered in conjunction with and measured against all other restoration projects in the Snohomish River estuary including but not limited to, the Blue Heron and Ebey Island projects. It may be the productive farmland deemed the most worthy of being protected from elimination is in one project, while farmland not capable of supporting agricultural production is in another. Similarly, the potential of inundated areas to support fish habitat may be greater in one project than another. These factors cannot be considered in isolation and further study of farm and fish issues will be required. |

**BOARD MEMBERS**

- **Dairy**  
  Nike Bueler
- **Nursery**  
  Mike Harnden
- **Livestock**  
  Gerald Labish
- **Commodity Crops**  
  Brian Bookey
- **Agricultural Direct Marketing**  
  Mark Craven
- **Diking, Drainage, and Flood Control District in Snohomish River Basin**  
  Dave Remlinger
- **Diking, Drainage, and Flood Control District in Stillaguamish River Basin**  
  Elizabeth Christianson
- **Equine**  
  Jackie Macomber
- **SC Farm Bureau**  
  John Postema
- **Stillaguamish River Basin**  
  Jesse Allen
- **Snohomish River Basin**  
  Marv Thomas
Thank you for considering the Snohomish County Agricultural Advisory Board’s comments on the Draft Environmental Impact Statement for this important project.

Sincerely,

Marv Thomas, Chair
Snohomish County Agricultural Advisory Board

cc: Clay White, Director, Planning & Development Services
    Steven Thomsen, Director, Department of Public Works
    Debbie Terwilleger, DPW Surface Water Utility director
    Mark Stamey, Sr. Planner, DPW Transportation & Environmental Services Division
Responses to June 30, 2011 Letter from Marv Thomas of the Snohomish County Agricultural Advisory Board

Response to Comment A1-1
A majority of the project funding comes from restoration grants. The grant agencies funding the project have specific requirements on how their funds will be disbursed and for what purposes, i.e. land acquisition, habitat restoration, etc. The grants do not allocate funds to improve agricultural productivity, however, this project will not result in an adverse impact on the agricultural facilities and other properties adjacent to the project area. These properties will, in fact, benefit from a new, higher dike and a drainage system that will provide flood protection equal to or better than what currently exists. In addition, the project will save DID5 significant future repair costs related to the existing dike.

Response to Comment A1-2
The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. The dike will also have a low permeability core to minimize seepage.

The County has been in discussion with DID5 to ensure drainage of the land remaining landward of the new setback dike will not be adversely affected compared to existing conditions, and that impacts to adjacent property owners are avoided.

Response to Comment A1-3
The County was initially interested in purchasing the IFF property when it was previously owned by Richard Harnden. Mr. Harnden chose to sell the property to IFF. IFF has not raised the subject of selling its property to the County. During the early stages of project development, the County approached WSDOT on the possibility of incorporating the I-5 embankment into the dike design. This option was not considered feasible due to WSDOT’s potential future use of its right of way for an expansion of I-5, and the need to protect critical infrastructure. After considerable analysis, the County considered the setback dike location between the east and west tidal channels to be its preferred alternative.
Response to Comment A1-4

The search for suitable locations for salmon habitat restoration projects has taken place over the past 35 years, and involved evaluations by state agencies, local jurisdictions, tribal governments, and a range of environmental organizations. Over two dozen sites were studied and ranked in the 2001 Salmon Overlay to the Snohomish Estuary Wetland Integration Plan (SEWIP Salmon Overlay), and all but ten of the sites consisted of designated agricultural lands. The study ranked the Smith Island project area among the top three potential restoration sites in the estuary along with the Biringer Farm area on North Spencer Island and the northern tip of Ebey Island. The location of a specific site for the project is limited due to the project’s primary goal. The Snohomish River estuary, with its mix of saltwater and freshwater, has been identified as critical to habitat restoration because it is where salmon adjust physiologically to transitioning as juveniles from a riverine (freshwater) habitat to open water (saltwater), and later as an adult returning to spawn in upstream river habitats. This movement between different environments is an integral part of their life cycle and it can only take place within an estuary.

Response to Comment A1-5

The SLS process has been undertaken to address some of the policy questions raised by the Agricultural Advisory Board in its document dated September 9, 2008 and revised May 12, 2009. The purpose of the SLS is to define general guidelines and principles upon which agricultural, salmon recovery, and tribal proponents agree that future actions to preserve farmlands and restore fish habitat should be based. The intent is to achieve a “net gains” model for both agriculture and fish, where the term “net gains” refers to the principle that the benefits of a broad-scale agreement should be greater than its cost for every party involved. However, an important understanding reached in the early phase of the SLS process was that not every individual action proposed to help farms or fish will provide benefits for both. Individual actions to strengthen agriculture may have undesirable consequences for fish habitat, and some fish habitat restoration projects present no real opportunity to enhance farming and may have negative impacts. For this reason, SLS is being applied not to individual actions but to reach-scale “packages” of multiple measures affecting broader areas. Within each package, both farms and fish may experience some undesired impacts, but a package should offer a net gain over the broader region.

Policy amendments relating to the preservation of agricultural lands and implementation of habitat restoration projects were made to the Land Use and Natural Environment chapters of the Snohomish County GMA Comprehensive Plan when they were adopted by the County Council in October 2012 (Amended Ordinance 12-047). However, you are correct in stating that the County’s land use and development codes to implement these policies have not yet been formulated.

In addition to the SLS process, some of the issues raised by the Agricultural Advisory Board have been evaluated in the development of the FEIS and the technical studies that the County prepared in response to the public comments received after the DEIS was issued in June 2011. These include examining the suitability of the project site to sustain agriculture, existing and future drainage on site and adjacent properties, potential for saltwater impacts, potential for overtopping of the dike during flood events, and hydraulic impacts to Union Slough.
Response to Comment A1-6

The project is consistent with County regulations and a change in the matrix is not required. The zoning code (chapter 30.22 SCC) does not specifically list “restoration” of estuaries or marshlands nor “mitigation” as a “use” in the A-10 Use Matrix. Although the project area is designated Riverway Commercial Farmland (RCF) in the County’s comprehensive plan, it is also within shoreline jurisdiction and designated Resource Environment pursuant to the County’s Shoreline Management Program. New shoreline regulations enacted since the issuance of the DEIS allows shoreline habitat restoration and enhancements in the Resource Environment designation (see SCC 30.67.580). SCC 30.67.440(27) also states “…shoreline habitat restoration or enhancement projects do not have to be identified on the use matrices in chapter 30.22 SCC to be permitted in shoreline jurisdiction.”
The Smith Island project report is very short on what impact the project will have on Snohomish County Agriculture and suggests that the SLS strategy will take care of that. Unfortunately the SLS strategy has no legal foundation at this time and therefore we are strongly suggesting that the SLS codification is implemented before the realization of the Smith island project and if not, the following considerations are a necessary part of the project.

By document dated September 9, 2008 and revised May 12, 2009, the Agricultural Advisory Board recommended a policy for evaluation of proposals to convert designated farm land to nonfarm purposes. That document is attached to the Smith Island DEIS as Appendix B. In the light of the fact that the SLS process referenced in the DEIS has not yet been codified and its procedures are not yet capable of being implemented, an evaluation as suggested by that policy should be performed as to this project.

1. In accordance with the SLS principles and as a measure of benefit to the Snohomish County Agriculture, a percentage of the total expenditures for the Land and Fish Habitat Restoration should be calculated and funded separately, which funds should be directed toward projects that will improve agricultural productivity in the county, such as initiation of manure digesters; regulatory easement of composting operations; organization and construction of USDA approved livestock slaughter operations; purchase of development rights of new agricultural land; drainage improvements and flood protection efforts in support for diking districts and the like. A suggestion would be to use 20% of total funding needed for the restoration project, including the land purchases as a way of measurement.
2. Adequate provisions must be made for the protection of adjacent farmland due to the impact of the Smith Island Fish habitat restoration project, including drainage and the accustomed operation of the specific agricultural operations on such lands. The owners of such land should be consulted as to adequacy of any such provisions. A ten year bond should be required to ensure the adequacy of the protection provisions.

3. In the context of the SLS principles the benefits for Fish has been considered in the Salmon Restoration Plan, which took three years of many meetings to consider the complexity of how to improve Fish Habitat. This project is one of these recommendation and the benefits of this project for fish habitat restoration and its impacts on agricultural lands must be considered in conjunction with and measured against all other restoration projects in the Snohomish River estuary, including, but not limited to, the Blue Heron and Ebey Island projects. It may be that productive farmland deemed the most worthy of being protected from elimination is in one project, while farmland not capable of supporting agricultural production is in another. Similarly, the potential of inundated areas to support fish habitat may be greater in one project than another. These factors cannot be considered in isolation and further study of farm and fish issues will be required. In the light of the fact that Fish has the benefit of an existing Salmon Restoration Plan, and due to the loss of farmland because of it, an Agricultural Restoration Plan for all of Snohomish County may be needed when farm land is being taken away without knowing how much land we need and how the removal of such lands will impact the Agricultural Production in Snohomish County in the next twenty years.

4. The stated position that habitat restoration activities are not a “use” of land and thereby not subject to the limitation and control of uses identified in the zoning code use matrix is untenable. In the absence of a change in the allowed uses in the A-10 zone, a de-designation process must occur, or a change in the matrix is required.
Since the SLS policies are the result of an desire to work together for the benefit of Fish and Farms and to prevent litigation which easily stops the necessary progress, the above recommendations are going a long way to accomplish these goals if implemented in a timely fashion

Thank you for considering these comments on the Draft Environmental Impact Statement for this important project.

Sincerely yours,

John Postema
(360) 668-2178
19127 99th Ave SE Snohomish
WA 98296
Responses to an Undated Letter from John Postema

Response to Comment A2-1
The SLS process has been undertaken to address some of the policy questions raised by the Agricultural Advisory Board in its document dated September 9, 2008 and revised May 12, 2009. The purpose of the SLS is to define general guidelines and principles upon which agricultural, salmon recovery, and tribal proponents agree that future actions to preserve farmlands and restore fish habitat should be based. The intent is to achieve a “net gains” model for both agriculture and fish, where the term “net gains” refers to the principle that the benefits of a broad-scale agreement should be greater than its cost for every party involved. However, an important understanding reached in the early phase of the SLS process was that not every individual action proposed to help farms or fish will provide benefits for both. Individual actions to strengthen agriculture may have undesirable consequences for fish habitat, and some fish habitat restoration projects present no real opportunity to enhance farming and may have negative impacts. For this reason, SLS is being applied not to individual actions but to reach-scale “packages” of multiple measures affecting broader areas. Within each package, both farms and fish may experience some undesired impacts, but a package should offer a net gain over the broader region.

Policy amendments relating to the preservation of agricultural lands and implementation of habitat restoration projects were made to the Land Use and Natural Environment chapters of the Snohomish County GMA Comprehensive Plan when they were adopted by the County Council in October 2012 (Amended Ordinance 12-047). However, you are correct in stating that the County’s land use and development codes to implement these policies have not yet been formulated.

Response to Comment A2-2
The grant agencies providing funding for the project have specific requirements on how their funds will be disbursed and for what purposes, i.e. land acquisition, habitat restoration, etc. The grants do not allocate funds to improve agricultural productivity, however, this project will not result in an adverse impact on the agricultural facilities and other properties adjacent to the project area. These properties will, in fact, benefit from a new, higher dike and a drainage system that will provide protection equal to or better than what currently exists. In addition, the project will save DID5 significant future repair costs related to the existing dike.

Response to Comment A2-3
Since the DEIS was issued in June 2011, the County has conducted significant analysis on existing and expected future drainage patterns. The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.
Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond. The dike will also have a low permeability core to minimize seepage.

The County also conducted the Union Slough Hydraulic Model Study (Appendix J) to examine the potential impact of the project on 100-year flood levels that could lead to overtopping of the new setback dike. New modeling was conducted to provide the necessary comparison with existing predicted 100-year flood levels. While the study concluded that the project would not raise flood levels, the new dike will have a height of 15 feet, which is taller than the existing dike.

Response to Comment A2-4
The search for suitable locations for salmon habitat restoration projects has taken place over the past 35 years, and involved evaluations by state agencies, local jurisdictions, tribal governments, and a range of environmental organizations. Over two dozen sites were studied and ranked in the 2001 Salmon Overlay to the Snohomish Estuary Wetland Integration Plan (SEWIP Salmon Overlay), and all but ten of the sites consisted of designated agricultural lands. The study ranked the Smith Island project area among the top three potential restoration sites in the estuary along with the Biringer Farm area on North Spencer Island and the northern tip of Ebey Island. The location of a specific site for the project is limited due to the project’s primary goal. The Snohomish River estuary area, with its mix of saltwater and freshwater, has been identified as critical to habitat restoration because it is where salmon adjust physiologically to transitioning as juveniles from a riverine (freshwater) habitat to open water (saltwater), and later as an adult returning to spawn in upstream river habitats. This movement between different environments is an integral part of their life cycle, and it can only take place within an estuary.

Analysis conducted as part of the EIS preparation, found that agricultural production in Snohomish County is unlikely to be adversely impacted by the proposed project. The U.S. Department of Agriculture’s Census of Agriculture data has found that both the number of farms and the total farm acreage in Snohomish County have made solid gains in the same period that several thousand acres of designated agricultural land have been acquired for habitat restoration, compensatory mitigation and other public purposes, and for residential development. A large percentage of this agricultural growth has occurred on Rural Lands outside the floodplain that are not specifically zoned Agriculture, but on which agriculture is a permitted use. The County’s 2009 agricultural lands inventory found one third of farmland in active production was on Rural Lands, and not on designated agricultural lands. This latter category consists primarily of 5-acre Rural Residential parcels, which are important potential land resources for the County’s agricultural industry. Approximately one-third of the county’s farms are nine acres or less in size.
Response to Comment A2-5
The project is consistent with County regulations and a change in the matrix is not required. The zoning code (chapter 30.22 SCC) does not specifically list “restoration” of estuaries or marshlands nor “mitigation” as a “use” in the A-10 Use Matrix. Although the project area is designated Riverway Commercial Farmland (RCF) in the County’s comprehensive plan, it is also within shoreline jurisdiction and designated Resource Environment pursuant to the County’s Shoreline Management Program. New shoreline regulations enacted since the issuance of the DEIS allows shoreline habitat restoration and enhancements in the Resource Environment designation (see SCC 30.67.580). SCC 30.67.440(27) also states “…shoreline habitat restoration or enhancement projects do not have to be identified on the use matrices in chapter 30.22 SCC to be permitted in shoreline jurisdiction.”

Response to Comment A2-6
Comment noted.
Dear Mr. Stamey,

Thank you for this opportunity to comment on the Smith Island DEIS.

The purpose of the environmental impact statement is to assure that the county decision makers and the Public are fully apprised of all environmental consequences before making a final decision whether to pursue the project. Therefore this EIS must adequately focus on the facts and environmental impacts concerning this project.

It appears that the Smith Island DEIS has some compliance problems with SEPA rules. This DEIS has three components. It is part environmental impact statement, part project promotional brochure, and part legal brief. These second two components are extraneous and irrelevant to the proper content of an EIS as prescribed by SEPA rules.

It is not our purpose to exaggerate this technical noncompliance out of proportion. Although this is an impropriety, we understand that the drafters of the DEIS are desirous to promote the project and we can overlook the resulting bias so long as the environmental impacts themselves are correctly and fully stated. In this regard there is some risk that the extraneous surpluse of the promotional brochure and the legal brief might distract the DEIS drafters from their true mission.

And here, indeed, there are some problems. There are a few specific instances in which the drafters’ enthusiasm for the project has clouded their perception or discussion of the environmental impacts.
"Restoration"

Because Public Works as applicant has inserted the word "restoration" into the title of the proposal it is no surprise that Public Works as lead agency would take the view that the farmland to be destroyed is farmland "restored" by the project, as stated at p. 7. However, in the context of this proposed project, precisely what is meant by the term "restored"? It ought to mean "returned to its status quo ante erection of the dikes." But there is no factual basis given in the DEIS for drawing the conclusion that the farm land to be flooded by the project was erstwhile saltwater marsh. Yet the term "restoration" is intoned over and over throughout the DEIS as though it were an established fact, which it is not. What few facts are available indicate definitely otherwise.

♦ "One of his (Dr. Smith's) land deals was at the mouth of the Snohomish River, later called Smith Island. This area consisted of unprotected tide flats and was therefore subject to seasonal flooding.
{http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=2965}
♦ Salt marsh means daily tidal inundation. Seasonal flooding is not daily tidal inundation. The "season" was no doubt the winter rainy season of January/February when flooding occurred on the occasion of winter storm conjoined with high tide.

♦ "These prairies are made by alluvial deposits during the overflowing of the river, and are consequently more of a sandy loam than salt-water marshes …"
{http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=8307}
♦ Ergo, Smith Island never was a salt-water marsh.

♦ Smith Island "was logged in the 1880s."
{http://www.co.snohomish.wa.us/documents/Departments/Public_Works/SurfaceWaterManagement/Smith%20Island/smithislandhistory.pdf}
♦ Salt-water marshes are not logged. Smith Island never was a salt-water marsh.

This is a very critical point of fact that weighs upon the essential logic of the project, yet the drafters of the DEIS appear to be so absorbed in their special pleading for the project that they overlook the need to ferret out the facts. Where the applicant and the lead agency are identical, the tendency of the lead agency to credit the press releases and propaganda of the applicant is the very malady against which WAC 197-11-926(2) recommends erection of an internal screen as a prophylactic.

A subtle deception emanates from that word "restoration". That word tacitly induces the inattentive to conclude that the dikes created the island, or that the island before the dikes was mere saltwater marsh which the project will restore. But the facts show otherwise. The facts clearly indicate that the island, the farmland, and probably farming itself preceded the dikes. The dikes no doubt protected the farmland margins from episodic flooding when winter storms conjoined with high tides. But it is a gross exaggeration to say as the DEIS recites at p. 61 that "dikes were constructed to create farmland" Land cannot be "restored" to swamp unless that land were previously swamp, and there is no basis in fact for concluding that the land to be flooded by the project was previously swamp. Therefore whatever would actually be "restored" by the project is very much in doubt, wholly speculative and without any foundation in fact.

Moreover it is entirely possible that the land area to be flooded by the project is more extensive than the land area that was episodically flooded pre-dike by the conjunction of winter storm and high tide, because post-dike siltation continues to accrue outside the dike and farming operations have caused the land to subside inside the dike. This should be carefully researched and the facts of the matter found and related prior to a finding of adequacy for the Smith Island DEIS.
Project Financial Inefficiency

At p. 140 the DEIS does discuss the stunning inefficiency of the project. At a cost of $18.3 million the project will yield a return of 884 Chinook per year. This is $20,701 per fish for the first year, amortized out to 10 years at $2070 per fish. This is breathtakingly poor return. At a time when programs are being cut back or slashed and government employees laid off, the wisdom of this kind of spending on fish is suspect, and certainly should be directly and fully discussed in the FEIS. Even considering the market value of a fish as discussed a pg142, the project proponents would be financially far ahead to get their fish at Safeway. Amortizing the project over 10 years gives an annual cost of $1.83 million which, offset by the $118,815 per year noted at pg142 of the DEIS, (an unrealistic figure that more likely is less than half that claimed) leaves the project with an annual net loss of at least $1,645,185.”

The discussion of Marine survival is very enlightening. However, if 77% of the smolt lingering at the estuary make it out to sea and only 2% of those return, how is it that habitat is the problem? Any intelligent bang per buck analysis would explore the cause of that 98% loss rate, ocean conditions, over-fishing, predation or whatever. To focus on habitat is to use the doomed smolt as pawns in a more obscured scheme.

The willingness to even entertain this degree of wasteful expenditure is bewildering. Does this simply reflect a Pikes Uber Alles fixation, or is there something else at work?

Perhaps the note at p. 21 of the DEIS regarding the county's foray into the wetland banking business illuminates the subject. There we see that the county anticipates reserving 150 acres of the new swamp for marketing wetland banking credits. Valued at (say) $100,000 per acre these 150 acres might generate revenue in the vicinity of $15 million. So perhaps the project is more darkly rational that what might appear at first glance. The plans to generate revenue from the project, including the property tax implications, should be disclosed in full detail. In addition, additional costs, such as maintenance and operating costs are not included. Certainly without these financial disclosures the intent of this project is obfuscated rendering the DEIS incomplete and inadequate.

Destruction of Farmland

At p. 7 of the DEIS the statement is made
"... at least 200 acres of designated agricultural land would be subject to restoration."

"Restoration" here is a euphemism for the wholesale destruction of farmland. This would be a good place to temporarily set aside pleading for the project and just tell it like it is. The FEIS should state factually:

1. How much farmland will be tidally inundated? You can do better than "at least 200 acres"
2. How much of this is designated agricultural? All of it?
3. How many times per day will it be flooded?
4. With saltwater or freshwater?
5. To what depth?
6. Over what period of time? How long per inundation, and for months? For years? Forever?
7. What is the past agricultural history of this land? Who farmed it? When? What did they grow? Was it a commercial or subsistence operation?

8. What is the consequence of this flooding? Does it destroy the land for agricultural purposes?

9. What mitigation is proposed by the project for this impact? I realize that the legal brief component of the DEIS says no mitigation is legally required, but nevertheless farmland destruction is an environmental impact which is to be disclosed, quantified, and discussed in the EIS, along with a statement and discussion of whatever mitigation is planned or possible. The decision-makers might well decide to mitigate beyond the mere legal requirement, and for that reason they should be advised of the factual situation. The DEIS should state as a matter of fact what mitigation is in fact proposed by the project for this destruction of farmland.

10. What mitigation is possible for this destruction of farmland?

11. What effect will this loss of farmland have on the farmland base and the resulting price of farmland? Obviously there will be some consequent upward pressure on price. The same DEIS which computes a figure of $205.05 per fish at p. 142 surely can, and should, quantify the upward pressure on farmland price as a result of destruction of farmland.

12. How is this project coordinated, if at all, with the many other local projects of conversion of farmland to swamp for the alleged benefit of fish? This should be fully quantified and discussed in the FEIS.

**Violation of GMA**
Both state law and county law require the preservation and protection of designated agricultural land. Destruction of designated agricultural land by saltwater flooding is a violation of the Growth Management Act and a violation of Snohomish County policy as expressed in the Comprehensive Plan. The FEIS should address this at length.

**Violation of SnoCo Zoning Code**
Uses not allowed in the Snohomish County zoning use matrices are disallowed and unlawful. The use matrix applicable to Smith Island shows there is no allowed use approximating "wetland restoration", or the like. The project thus violates the zoning code. This should be discussed in detail in the FEIS.

**Public Access**
The project intends to allow public access. The DEIS does not adequately discuss the impacts of public access related to the safety and security to Hima Farms, the River Delta Ranch, and the pipeline. This should be fully addressed in the FEIS.
Project Funding
Although the DEIS does not break out project funding in full detail, it does however at p. 25 list some grant sources that total to $5.895 million of the $18.3 million project cost (DEIS p. 23.) Where is the balance to be found? This should be fully described and quantified in the FEIS.

The DEIS states at p. 9 that Conservation Futures monies have participated in the acquisition of lands for the project. The SCFB has documentary evidence that over $1 million in CCF funds and nearly $1 million in REET II funds have already been consumed by the project. We are of the view that this project is an unlawful expenditure of both of these types of funds. This question should be explored in detail in the FEIS.

Dike District 5
The project cannot occur without the voluntary consent of Dike District 5. However, it is not at all clear from Title 85 RCW that DD5 actually has the authority to consent to breaching or removal of its dikes to allow flooding of land within the responsibility of DD5. The FEIS should discuss this critical question.

Follow-on Transactions
SEPA states that the EIS is to recognize, discuss and evaluate impacts to the natural and the built environment. River Delta Ranch includes both the natural and the built environments. So does WSDOT’s I-5 corridor and Everett’s Poplar stands and the settling ponds immediately south of the River Delta Ranch. The Smith Island Project naturally sets the stage for the various follow-on real estate transactions contemplated among the County, the City and the State; all of which will directly or indirectly affect neighbors of the project land. Therefore, the impacts of these follow-on real estate transactions must be fully recognized, discussed and evaluated in the EIS. They have been, however, wholly ignored in the DEIS, a great inadequacy of the DEIS that must be repaired in the FEIS, lest it be equally inadequate.

Pipeline Safety
The DEIS fails to adequately discuss the critical issue of safety of the gas pipeline. This is obviously of great importance and is glossed over by the DEIS. This question is especially critical in light of the plan to allow public access which carries homeland security issues. This should be fully discussed in the FEIS.

Siltation
The project will of course result in siltation contamination to the river and nearby wetlands (DEIS, p 21) the DEIS does not quantify this effect nor propose any mitigation for it. The “self-mitigation” mentioned at p. 21 is not mitigation at all, but mere balancing which is a poor substitute for actual mitigation. This needs to be discussed frankly in the FEIS, quantified, and the resulting necessity for a clean water permit explained.

Fish Kill
The DEIS does not consider and discuss the potential for fish kill due to stranding fish in low areas when the tide recedes. The annual estimated Chinook return of 884 fish per year (DEIS p. 140) could be totally wiped out by a fish kill considering the figure of only 2.4 fish per day on average.
"Climate Change"
At p. 8 of the DEIS the drafters’ reveal they are still trapped in the web of the global warming hoax. Predictions by "climate models" should not be stated as though they are fact. The "higher air temperatures" that are "predicted to increase water temperatures" by these models are mere forecasts of a discredited hoax and are empirically counterfactual. The FEIS should contain a full explanation of the recent discoveries in the past two years that the global warming hysteria is the product of a hoax.

No doubt the DPW staff are true believers in the anthropogenic warming doctrine. In that case they must also believe the oceans will soon be rising and the height of the dikes envisioned by the project are wholly inadequate. This needs to be fully discussed and evaluated.

Hima Farms
There are presently two active farming operations on the island: Hima Farms, and the River Delta Ranch.

The FEIS must state precisely what is required to protect Hima farms from adverse impacts by the project. The threats include drainage disruption and saltwater intrusion. The DEIS contains only broad conclusions, and is factually inadequate to give assurance against these risks.

River Delta Ranch
The DEIS inadequately describes project impacts to River Delta Ranch because it nowhere describes factually what the effects of the project will be on the ranch. Reducing the land area of the ranch by one-quarter, eliminating the barn where its hay is stored and where its horses escape the weather will certainly have an effect on the horse farm's marketability and hence its viability. Likewise for the contamination of the spring that feeds the stream at the SW corner of the ranch. These shortcomings should be corrected in the FEIS.

Saltwater Intrusion into Aquifer
The risk of saltwater intrusion into the aquifer underlying Smith Island needs to be more adequately discussed and quantified.

Historical
In that the Smith Island Dike was constructed over one hundred years ago, it appears that the DEIS has not considered the Historical significance of this area, further frustrating the issue of adequacy for the FEIS.

No Alternatives
The DEIS shows no alternatives other than "go" and "no go." However, WAC 197-11-440(5) specifically requires inclusion, evaluation and consideration of reasonable alternatives. In the Smith Island case there are in fact many alternatives to which the DEIS is blind and does not even consider. Some possible examples would be:

1. Converting the horse farm to a county demonstration project and horse rescue facility for the county's animal control division.

2. Installing a “Super Tidegate” that would allow other uses of the land when the fish are not present. This alternative would most likely produce a more economical proposal with a lesser impact on the environment.
Another option that has not been considered would be to create a fish hatchery operation. This most certainly would return a larger number of fish at a much reduced impact on the environment.

In addition, other options for the flooding of smaller portions and more efficiently managed areas, has been overlooked.

We hope that you find these comments constructive. We request that this letter be entered into and made part of the record for the Smith Island Project.

Sincerely,

Ed Husmann
President
Responses to an Undated Letter from
Ed Husmann of Snohomish County Farm Bureau

Response to Comment A3-1
In response to comments we received regarding the level of environmental analysis in the DEIS, the County undertook additional technical studies to evaluate the potential for environmental impacts arising from the proposed project. The studies analyzed existing and proposed drainage patterns, the potential for saltwater intrusion and dike overtopping, groundwater conditions, and downstream impacts to Union Slough. The findings of these studies have been incorporated into the FEIS.

Response to Comment A3-2
The www.historylink.org website you reference describes the mouth or estuary area of the Snohomish River alternately as unprotected tide flats, freshwater tidelands, and salt marshes – of which Dr. Smith reclaimed 75 acres by constructing a system of dikes. The interchanging of terms is most probably attributed to the different types of estuaries and varying habitat types found, depending on geographic location, “in and around estuaries, including shallow open waters, freshwater and salt marshes, sandy beaches, mud and sand flats, rocky shores, oyster reefs, river deltas, tidal pools, sea grass beds, and wooded swamps.” Please see the US Environmental Protection Agency’s website at http://water.epa.gov/type/oceb/fact5.cfm

The DEIS did not claim that the dikes created Smith Island, and there was no intention to exaggerate the purpose of constructing dikes. The natural environment – be it mudflats or salt marsh – would have preceded farming, which is a human activity.

Response to Comment A3-3
Records from the original General Land Office (GLO) survey indicate that prior to man-made activities, Smith Island was comprised of estuarine emergent and scrub-shrub marsh communities with scattered trees on slightly higher ground, particularly near Union Slough (Haas and Collins, 2001). The 1869-74 GLO map depicts the Smith Island project area as being in the transition zone between emergent and forested tidal zones (Figure 8 in the FEIS), and in the 1938 aerial image, a number of remnant tidal channels can be seen meandering across the site (Figure 20). This area where the project is proposed would have experienced twice daily tidal flooding and high-flow storm flooding.

Response to Comment A3-4
SEPA does not require the presentation of a cost-benefit analysis in an EIS. The example presented in Appendix C, which has been rewritten to provide more clarity, was qualified as conservative and the reader was cautioned that there is considerable variability and uncertainty surrounding smolt production and salmon survival estimates. As can be seen from the reference to Skagit River outmigration levels, there is considerable potential for Snohomish Basin salmon to recover and increase their own smolt density levels during outmigration. The importance of improving habitat in the estuary is primarily because smolts spend several months in the slightly saline waters to adjust physiologically to saltwater before they venture out into the open ocean, and habitat also provides protection against large predator fish. When calculating the number of returning adult salmon, we used a very conservative estimate that was almost half the maximum percentage of that in the Skagit River. This indicates that the number of
returning salmon could be considerably higher. As Appendix C notes, put in the context of Chinook salmon population status in the Snohomish Basin, the adult returns per year cited as 884, represents a 31% increase over the average adult spawning population from 1996-2000, as presented in the 2005 Snohomish River Basin Salmon Conservation Plan.

The example also represents just one method of estimating the value of increased salmon numbers. For example, it is widely acknowledged that recreational fishing leads to significant spending within a local economy, resulting in an increase in jobs and economic productivity. In addition, the importance and value of the project cannot be assessed by only looking at it in terms of monetary costs and revenues. Salmon and fish are also important food sources, an increase in healthy salmon runs is critical to preserving wild salmon stocks (which has been federally mandated), and is important to affected Native American tribes, where salmon is a vital part of their tribal economies and their cultural identity.

Response to Comment A3-5
The County did not propose a wetland mitigation bank in the DEIS. It did discuss and consider types of compensatory mitigation opportunities that could possibly be pursued in the future. At this time, the County is no longer proposing using the Smith Island Restoration Project for future compensatory mitigation (advanced mitigation for future projects). In the Description of Alternatives section, the text has been updated to describe the current compensatory mitigation elements of the project. There are several elements where the ‘credits’ generated by the project are being applied to offset impacts from other projects in the estuary.

Response to Comment A3-6
The project proposes to inundate up to 400 acres of land, of which 50 acres is owned by the City of Everett. All of the land is designated agricultural land. Inundation will take place twice a day with a mix of brackish water. The depth of the water onsite will vary pending the tide cycle and river flow. Approximately 50% of the time, the land will be inundated with less than one foot of water; the water will reach an approximate maximum depth of 5 feet for around 1% of the time.

Response to Comment A3-7
The County’s 2007 agricultural land inventory categorized the project site as Marsh/Wetland, which is consistent with its current classification as a regulated critical area. Commercial and subsistence agricultural activities that have taken place include forage crop cultivation (i.e. hay/grain production), cattle grazing, tree farming, horse grazing and boarding.

Response to Comment A3-8
Daily tidal inundation of the existing land will preclude any future use for agricultural purposes. However, the existing land is not currently suitable for many agricultural activities. Contributing to this are factors such as poor soils, land subsidence, deterioration of drainage systems, and the presence of widespread invasive plant species.
Response to Comment A3-9
The EIS analysis does not identify any specific adverse impact to agriculture that would result from the project. The reduction in the County’s inventory of designated agricultural land falls within the nearly 14,000 acres of designated agricultural land that has been identified as being not well-suited for farming (i.e. it is marsh or wetlands). Therefore, the County does not propose to provide any mitigation when the existing agricultural land is restored to salmon habitat.

Response to Comment A3-10
Analysis conducted as part of the EIS preparation found that the conversion of 350 acres of designated agricultural land to salmon habitat would not adversely impact agricultural production in Snohomish County. The U.S. Department of Agriculture’s Census of Agriculture data has found that both the number of farms and the total farm acreage in Snohomish County have made solid gains in the same period that several thousand acres of designated agricultural land have been acquired for habitat restoration, compensatory mitigation and other public purposes, as well as for residential development. A large percentage of this agricultural growth has occurred on Rural Lands outside the floodplain that are not specifically zoned Agriculture, but on which agriculture is a permitted use. The County’s 2007 Agricultural Lands Inventory found one third of farmland in active production was on Rural Lands, not on designated agricultural lands. This latter category consists primarily of 5-acre Rural Residential parcels, which are important potential land resources for the County’s agricultural industry. Approximately one-third of the county’s farms are nine acres or less in size.

The question of whether the loss of 350 County-owned acres in the estuary would lead to upward pressure on the price of farmland is speculative. The land here is not broadly conducive to farming due to the high water table and perennially wet ground conditions, as documented in the 2007 Agricultural Lands Inventory Project report. In addition, subsidence of the land has occurred due to past farming practices of draining and tilling that have dried and oxygenated soils leading to organic decay and soil compaction. Drainage systems have deteriorated and invasive non-native plant species cover a significant part of the area.

Response to Comment A3-11
Considerable coordination has taken place to implement the various restoration projects within the estuary area. The Smith Island Restoration Project is a partnership between Snohomish County and the City of Everett and is one of the top priority salmon habitat restoration projects listed in the 2005 Snohomish River Basin Salmon Conservation Plan. The 2005 Plan was prepared and coordinated by the Snohomish Forum, whose members included Snohomish County, King County, fourteen cities including the City of Everett, the Tulalip Tribes, special purpose districts, and interest groups ranging from conservation to farming, and from business to private citizens. The 2005 Plan projects have different sponsors who are responsible for the planning, design and implementation of a project. The City of Everett’s Smith Island Union Slough Restoration Project was completed in 2007 and is located directly south of the Smith Island Restoration Project. The Port of Everett’s Blue Heron Slough project is located across Union Slough from this project and is in the permitting stage. See Figure 5.

The County has completed three hydraulic model studies to evaluate the nature and extent of likely impacts to Union Slough when the project is completed in conjunction with other estuary projects. The
The first model was developed by Battelle in 2007, the second by GeoEngineers/WEST in 2011, and the third by Tetra Tech in 2013. The Battelle study evaluated the potential combined impacts of six projects in the estuary, and the other two studies evaluated impacts only from the Smith Island and Blue Heron Slough projects. All three models predicted only minor increases in flow velocity and shear stress over existing conditions, with limited potential for sediment deposition and erosion during typical flow conditions.

Response to Comment A3-12
The Washington Growth Management Act (GMA) plans and regulations are governed by 14 goals. These include not only maintaining and enhancing natural resource-based industries such as farming, but also protecting the environment, retaining open space and habitat areas, and managing shorelines wisely. The GMA requires all cities and counties to not only designate farm lands, but also to designate and protect wetlands and critical areas. While the GMA does not require an environment chapter as part of a comprehensive plan, it defines a strategy for salmon recovery and requires protection of fish and wildlife habitat. In WAC 365-190, it provides minimum guidelines for conservation of these areas and defines conservation as “land management for maintaining species in suitable habitats within their natural geographic distribution…” and habitat as “Areas with which endangered, threatened, and sensitive species have a primary association.”

Response to Comment A3-13
The project is consistent with County regulations and a change in the matrix is not required. The zoning code (chapter 30.22 SCC) does not specifically list “restoration” of estuaries or marshlands nor “mitigation” as a “use” in the A-10 Use Matrix. Although the project area is designated Riverway Commercial Farmland (RCF) in the County’s comprehensive plan, it is also within shoreline jurisdiction and designated Resource Environment pursuant to the County’s Shoreline Management Program. New shoreline regulations enacted since the issuance of the DEIS allows shoreline habitat restoration and enhancements in the Resource Environment designation (see SCC 30.67.580). SCC 30.67.440(27) also states “…shoreline habitat restoration or enhancement projects do not have to be identified on the use matrices in chapter 30.22 SCC to be permitted in shoreline jurisdiction.”

Response to Comment A3-14
The Smith Island Restoration Project does not propose a public access trail on the County’s portion of the new setback dike which will run parallel to IFF’s property and River Delta Ranch, and cross the Puget Sound Energy (PSE) natural gas pipeline. That should alleviate the concern regarding safety and security issues. A small parking lot is proposed north of 12th Street NE to provide access to the trail link that the City of Everett is proposing to construct on its portion of the new dike. However, the trail will be south of 12th Street NE and away from IFF, River Delta Ranch, and the PSE pipeline.

Response to Comment A3-15
The funding table and other funding-related information in the EIS are intended to help the reader understand how the project evolved. It is beyond the scope of an EIS and not a requirement to cover in detail all of the elements of funding that have gone into this project.

Response to Comment A3-16
Diking Improvement District 5 (DID5) was formed under Chapter 85.08 RCW in response to a petition
from the Everett Improvement Company dated July 31, 1930. On August 18, 1930, the Board of County
Commissioners formed Diking Improvement District 9. A short time later on January 13, 1931, the
Board ordered that the District be designated and known as Diking Improvement District 5. A diking
improvement district formed under Chapter 85.08 RCW is not a separate municipal corporation or
governmental entity and remains under the auspices and control of the County which formed it. While the
District Board of Supervisors is charged with the responsibility for maintenance and construction of a
system of improvements, the final authority and responsibility for approving the proposed plans is vested
in the County Council, which is the legislative body of the County (see RCW 85.08.220 and .540). Input
from the Board of Supervisors will be important in determining the feasibility of the proposed
improvements. The County intends to reach formal agreement on dike design parameters with DID5 and
discussion on project agreements is underway.

Response to Comment A3-17
No “follow on real estate transactions” are contemplated at this time. The City of Everett’s poplar farm is
south of 12th Street NE and will not be sold but incorporated into the City’s restoration area, and no
impacts will occur to I-5. River Delta Ranch’s lease arrangement is likely to change as a result of this
project with a reduction in its leased area from approximately 45 acres to 27 acres.

Response to Comment A3-18
We understand property owner safety concerns regarding the crossing of the PSE natural gas pipeline by
the new setback dike. As stated in the DEIS, we are addressing a range of issues including soils
settlement and erosion by entering into an agreement with PSE that would allow the County to construct
the proposed dike in the easement. As part of this agreement, the setback dike will be designed and
constructed across the pipeline utilizing engineered protective measures agreed to by PSE that will protect
the pipeline’s integrity and ensure public safety during and post construction.

Regarding homeland security issues with respect to the pipeline, these are the responsibility of Puget
Sound Energy as the pipeline lies within an easement where it crosses County land. No public access is
proposed on the County’s portion of the new dike, however, the City is proposing public access through a
dike top trail south of 12th Street NE. No impacts regarding homeland security will result from the
proposed restoration project.

Response to Comment A3-19
The 2013 Union Slough Hydraulic Model Study (Appendix J) indicated that there will be no adverse
impacts to channel depth in Union Slough, or contamination to the slough from excess silt and sediment.
The hydraulic model results did not indicate significant sediment deposition within Union Slough,
although flow velocities upstream of the downstream dike breach will decrease. This could cause minor
localized sediment deposition in eddies immediately upstream and downstream of the downstream
breach. There may also be a small amount of sediment deposition in the Union Slough reach between the
two breaches. The ability of Union Slough to transport sediment, especially the fine-grained nature of the
sediment load in this reach, will not be impaired. The County will monitor for possible sediment
deposition through bathymetric surveys, and correct any deposition as a result of decreased flows adjacent
to the project site by applying for permits to maintain Union Slough navigability for Buse Timber’s log
rafting operation. Sediment deposition from tidal inundation within the County and City restoration areas
would be part of the biological process of restoring the areas to tidal marsh.

According to numerous watershed plans that have been created for the Snohomish River Basin, restoration of estuarine habitat is a high priority. Under consideration of these plans, the conversion of freshwater wetlands to saltwater wetlands is justified. Further, the functions and values of the existing freshwater wetlands are less than the functions and values that will be provided by the saltwater wetlands. Therefore, the project can be deemed “self-mitigating.”

Response to Comment A3-20
The analysis used to calculate the fish return estimate is based on smolt production data from real field studies. This calculation specifically accounts for juvenile out-migration mortality which would include predation, stranding and other sources. Low areas and naturally occurring segregated ponded areas at low tide, such as beaver ponds (see G.W. Hood’s 2012 Beaver in Tidal Marshes: Dam Effects on Low-Tide Channel Pools and Fish Use of Estuarine Habitat) and natural channel morphology, are part of the riverine process and are conditions to which juvenile salmon are naturally adapted. There are no studies of which we are aware that show any specific, let alone additive, mortality from stranding or predation in natural waterways consisting of tidal flats and ponded areas relative to the overall estimated mortality modified main channels. We posit the greater risk of predation and mortality is not in shallow ponded locations at ebb tide, or due to stranding on mudflats, but is in deeper main channel locations where larger predators reside – notably older and larger cutthroat, steelhead, and bull trout. The historical loss of smaller tidal channels and relatively shallower shrub scrub and emergent marsh plain has undoubtedly created greater predation pressure by forcing smaller out migrating salmon to reside in larger deeper channels, which at the same time have been managed for navigation and other industry by removing the woody debris/snags that would otherwise offer shelter from predators in the main distributary channels at low tide. There are many studies supporting that functional estuary habitat provides juvenile salmon with protection from predation and beneficial rearing habitats.

Response to Comment A3-21
The County assumes that the “discredited hoax” mentioned in your comment refers to the documents stolen from the computers of the University of East Anglia in the U.K. in November 2009, in an effort to discredit climate science before the Copenhagen Conference on Climate Change was held in December of that year. The accusations that scientists manipulated scientific conclusions to produce findings that would support regulation of carbon dioxide were subsequently investigated by eight U.K. and U.S. boards of inquiry, including the Environmental Protection Agency. None of these committees found any evidence of fraud or scientific misconduct by scientists whose work was hacked but they did release statements supporting the scientific consensus that the Earth’s mean surface temperature had been rising for decades, and that global climate change caused by human activities is based on multiple lines of scientific evidence.

There is more certainty and existing evidence surrounding scientific projections of increases in future air temperatures than of sea level rise, which is primarily attributed to highly variable factors such as an increase in ocean temperatures and the melting of the Arctic and Greenland ice sheets. While a decrease in overall snowpack in the Cascades and instream flows do not pose a threat to the new setback dike, the height of the dike will be 15 feet NAVD88 to comply with DID5’s practice of building to the 100-year
flood elevation. This height will also offer increased protection during extreme weather flooding events and a modest rise in sea level over the mid-term.

Response to Comment A3-22
Since the DEIS was issued, the County has conducted technical studies to more fully evaluate conditions related to drainage and saltwater impacts in order to avoid adverse impacts to adjacent property owners. The County’s 2013 report titled Smith Island Drainage Analysis (Appendix I) expanded on a study previously completed by the Snohomish Conservation District. This study evaluated the drainage patterns and drainage needs that will occur as a result of the project. This included using both a proportional drainage analysis and rainfall-runoff modeling to determine the amount of storage area that would be lost as a result of the project and how much storage should be provided for the landward area. The study concluded that storage area was lost as a result of the project and revisions to the drainage system were necessary.

Another drainage study was conducted in 2013 by Otak (Appendix L) to analyze 4 potential interior drainage systems. The drainage analysis included surface water inflow from I-5 and sub-surface seepage rates determined during an investigation by Shannon and Wilson. The analysis found that a gravity based drainage system that included two tide gates and a large drainage storage pond could accommodate drainage needs except during prolonged periods of heavy rainfall and high flows in Union Slough. To ensure the adjacent properties will not be negatively impacted, a pump facility will be included in the proposal. The pump would be located adjacent to the new tide gate as shown on Figure 22. A toe ditch or drain trench will also run the length of the dike to capture any seepage coming through or under the dike, and redirect it to the storage pond.

The County has conducted a number of investigations to determine the potential for the proposed project to cause saltwater intrusion on adjacent properties, including the County’s 2012 Geologic and Hydrogeologic Field Investigation Report, Tetra Tech’s 2013 Saltwater Impact Study, and Shannon and Wilson’s 2012 Groundwater Flow and Seawater Impacts Assessment and 2013 Groundwater Report Update. These studies determined that the soils and groundwater in the alluvial sands aquifer and surface water, both on and around the project site, currently have salinity levels above drinking water and agricultural irrigation water standards. Under existing conditions, the Snohomish River provides a greater source of groundwater recharge to the underlying aquifer, with a potential minor input from groundwater sources from the south, than Union Slough. When the existing dike is breached along Union Slough and the project area receives daily tidal inundation, Union Slough will become the more predominate source of groundwater recharge. As Union Slough has a lower salinity level than the Snohomish River, the restored marsh areas is expected to also have a low salinity level, and aquifer source recharge to be lower in salinity than existing conditions. See the Water Resources section and associated technical reports in the Appendices for more indepth information.

Response to Comment A3-23
On page 49 of the DEIS, we disclosed that the project will result in the reduction of approximately 18 acres of the 45 acres of grazing land currently available to River Delta Ranch. However, we do not consider this a significant adverse impact to the horse boarding operation as it affects the wettest area of land it currently leases. Since the project design is more developed than when the DEIS was issued, it is now anticipated that the barn you mention will need to be removed. Under the terms of the license
agreement with River Delta Ranch, the County is under no obligation to maintain, replace or repair any of its facilities. River Delta Ranch’s marketability will not be affected because the license agreement precludes the boarding of any additional horses to those currently boarded there. The license arrangement is temporary.

We do not anticipate any contamination of the southwest tidal channel either during or post-construction. This stream is located a sufficient distance from the proposed alignment of the new setback dike.

Response to Comment A3-24
Please see comment A3-22.

Response to Comment A3-25
The County’s archaeological consultant, Landau Associates, prepared a cultural resources investigation report in January 2010 which evaluated the historic significance of the dike adjacent to Union Slough and the drainage ditch system. The Historical and Cultural Preservation section of the FEIS summarize Landau’s examination of the known records related to the dike and a site visit to evaluate it. The records include the formation of a diking district in 1931 to construct a diking system on Smith Island. Additional records include a 1938 aerial photograph showing a dike adjacent to Union Slough, a 1941 Marysville 15’ USGS quadrangle map showing the earliest mapping of features resembling dikes, and a comparison of two Kroll maps dated 1952 and 1960 that show a dike had been constructed by 1960.

No evidence was found in Landau Associates’ library research to determine whether the dike in the 1960 map was an improvement of an existing dike or a new dike atop an existing natural levee. None of the maps reviewed by Landau Associates indicated the presence of the drainage ditches within the current project area.

A structure’s level of historic significance is determined by evaluating it for eligibility on the National Register of Historic Places (NRHP) using a set of criteria specified in 36 CFR 60.4. These criteria are:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association, and:

a. That are associated with events that have made a significant contribution to the broad pattern of our history
b. That are associated with the lives of persons significant in our past
c. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
d. That have yielded, or may be likely to yield, information important in prehistory or history.

The dike and drainage ditch do not comply with Criteria A because the extent of agricultural usage of Smith Island appears to have been limited and did not play a significant role in local or state history. Criteria B is not met because Dr. Henry A. Smith’s early dike construction was located outside of the
project area, and Landau Associates discovered no evidence that the project area features were associated with him. Criteria C and D were not met as no evidence was found in the library research to determine whether the construction of the dike employed innovative techniques. In conclusion, the dike and ditches are not historically significant and, therefore, are not eligible for listing on the NRHP.

**Response to Comment A3-26**
The public did have the opportunity to comment on other dike alignment alternatives when they were presented in a SEPA Environmental Checklist. The Description of Alternatives section of the FEIS summarizes these other alternatives and the reasons why they were considered but rejected. There are a number of reasons why the four suggested variations of alternatives are not feasible:

1. **Converting the horse farm to a demonstration project:** As landowner, the County currently has a license agreement with River Delta Ranch, the horse boarding facility, to provide an area for its business operations. The facility owner has not indicated any interest in entering into a partnership with the County to convert the business into a County demonstration project.

2. **Installing a “Super Tidegate” that would allow other uses of land when fish are not present:** This suggestion would not feasibly result in restoration of fish habitat and preservation of fallow agricultural land. It would not meet the needs of the restoration project and the 2005 Plan to restore the site and reconnect it to other restored areas upstream and downstream, creating one contiguous area for salmon.

3. **Create a fish hatchery operation:** Reliance on salmon hatcheries as a substitute for the conservation of wild populations is risky as a long-term conservation strategy. Hatchery salmon do not have the same resilience or genetic diversity as wild salmon, which makes them more susceptible to disease, less able to respond favorably to changing environmental conditions -- such as warmer or cooler sea temperatures -- and they have significantly less reproductive capacity.

4. **Other options for the flooding of smaller portions:** The County has considered the option of restoring a smaller area. Three setback dike alignments were proposed in the SEPA Environmental Checklist that allowed for restoration/mitigation areas ranging from 262 acres to 479 acres. During the public comment period, the majority of comments received favored the maximum restoration alternative. However, the landowner adjacent to the west side of the project area was not interested in selling his land. The alternative proposed in the DEIS falls between the medium and minimum restoration alternatives presented in the Checklist, so the County has already significantly reduced the area for restoration.

The Smith Island project site occupies a key location in the estuary for salmon habitat restoration as implementation of the project would help connect smaller projects upstream and downstream into a larger, contiguous area that is more beneficial for salmon. The Smith Island Restoration Project is discussed in the 2005 Plan as a key project in meeting the 10-year benchmark of 1,237 acres for salmon habitat restoration.
Public Testimony Before the County Hearing Examiner on June 22, 2011 from Ed Moats of the Snohomish County Farm Bureau

Thank you, madam hearing examiner, for the opportunity to speak. My name is Ed Moats and I am a public affairs consultant for Snohomish County Farm Bureau and am speaking on behalf of SnoCo Farm Bureau today. We will be submitting written comments by end of comment period. My oral comments will be very brief.

Devoted weekend intense study of DEIS ... found it to be illuminating and lucid.

Mark and Craig congratulated for that very ... readable and quite clear

In the course of today and comments to come that there are some things that could be expanded upon and some information that could be added.

Recognize that the DEIS included information that goes far beyond the bare bones for SEPA requirements. Think it is a good thing. Illuminating.

| A4-1 | Specifically I note that you have included in the document some information regarding funding information for the project. The information is pretty much restricted in table to funding sources from grants. Encourage you in the FEIS to expand that to include all funding sources from grants or otherwise. For example in early part of the DEIS many pages before you get to table of grants state part of the project lands was acquired through Conservation Futures money. But no dollar figures on that ... think the exact dollars that CCF was used for should be included and this should be included in an expanded table of funding sources. |
| A4-2 | Another item that would be useful to public and those paying attention to project whether the County intends down the road at some point to use the project land for wetland compensatory mitigation credits. Not expressly so stated in the DEIS but the reader can see it but not expressly stated sort of hinted at, if that is the case ought to spell out what those details what those would be. |
Responses to June 22, 2011 Public Testimony
from Ed Moats of Snohomish County Farm Bureau

Response to Comment A4-1
The funding table and other funding related information in the EIS are intended to help the reader understand how the project evolved in its development. It is beyond the scope of an EIS and not a requirement to cover in detail all of the elements of funding that have gone into this project.

Response to Comment A4-2
The DEIS did leave open what type, if any, compensatory mitigation opportunities would be pursued in the future. The County is no longer proposing using the Smith Island Restoration Project for advanced mitigation for future projects (future compensatory mitigation). In the Description of Alternatives section, the text has been updated to describe the current compensatory mitigation elements of the project. There are several elements where the ‘credits’ generated by the project are being applied to offset impacts from other projects in the estuary.
July 7, 2011

Steve Fogg
P.O. Box 1792
Everett, WA 09206

RE: Comments to Smith Island DEIS

Mark
I have recently read over the draft EIS for Smith Island and have a few comments:

1. On page 25, I am referred to as a source and I OBJECT!!! The reasons are; a) this was done without my permission, & b) this was a personal comment in a private conversation, I am requesting that this be removed from the final document.

2. As a suggestion for the sentence in question I offer the following: "The cost of improvements to the 50–90 year old dike will be impacted by material costs, permits, seasonal construction limitations, conformance to RCW chapter 85, Corp of Engineer Standards, and other factors such as available funding."

3. I noticed in the proposed draft EIS for Smith Island the legal status of Diking District #5 of Snohomish County is not mentioned, this is very troublesome, nor are there any references to the District's authority under the RCW's.

4. As a private citizen I urge the County Council to adopt the NO ACTION OPTION, this will allow funds for public education, public safety, and public transportation, thus directly benefiting many more members of the taxpaying community.

Thank you,
Steve Fogg, private citizen
Responses to July 7, 2011 Letter from Steve Fogg

Response to Comment PC1-1
The comment has been removed from the EIS.

Response to Comment PC1-2
Comment noted.

Response to Comment PC1-3
Diking Improvement District 5 (DID5) was formed under Chapter 85.08 RCW in response to a petition from the Everett Improvement Company dated July 31, 1930. On August 18, 1930, the Board of County Commissioners formed Diking Improvement District 9. A short time later on January 13, 1931, the Board ordered that the District be designated and known as Diking Improvement District 5. A diking improvement district formed under Chapter 85.08 RCW is not a separate municipal corporation or governmental entity and remains under the auspices and control of the County which formed it. While the District Board of Supervisors is charged with the responsibility for maintenance and construction of a system of improvements, the final authority and responsibility for approving the proposed plans is vested in the County Council, which is the legislative body of the County (see RCW 85.08.220 and .540). Input from the Board of Supervisors will be important in determining the feasibility of the proposed improvements.

Response to Comment PC1-4
Thank you for your comment.
I manage horse boarding ranch adjacent to where they are talking about putting up the dike. Asked for map to be displayed. There are a few concerns about proposed issue. Breached Spencer Island to do salmon restoration, ever since that happened, the horse boarding ranch fields never dried out like they use to in the 40 years my boss ran the place. Concern once they bring the dike over, seeing how the horse ranch and tree farm are only 3 feet above sea level, that seepage will happen and won’t be able to grow trees and run horses. Existing does allow a nice buffer in between there.

Ownership of land by Snohomish County? – 400 acres. Seems like a lot more, he added up about 16,000 acres between all of the land the county owns, city, and Indian Bureau, and everything else like that. That is a lot of acreage, don’t see why it has to come down and take out as much. Not that many fish that come through there. County would still benefit from taking half as much and give a good buffer for tree farm and Dagmar.

A lot of neat wildlife out there that will lose their home.

Worried about underground water, seeping up through the dike, just from the other breach on Spencer Island, has standing water in pastures that never goes away. One thing that needs to be looked at. Good job on report.
Responses to June 22, 2011 Public Testimony
from Mark Convey of River Delta Ranch

Response to Comment PC2-1
The County has conducted a number of technical analyses since the DEIS was issued in June 2011. The 2013 report titled Smith Island Drainage Analysis (Appendix I) evaluated the drainage patterns and drainage needs that will occur as a result of the project. The drainage analysis also assumed a worst case analysis for storage system design for the County-owned area where River Delta Ranch’s horse boarding operation is located. The area in this drainage basin that presently drains to the east will drain to the north to a new drainage storage pond and relocated tide gate to Union Slough, west of the new setback dike. The project proposes a pump to assist drainage through the tide gate during periods of heavy rainfall and high flows in Union Slough. Final drainage capacities will be determined during project design. The details for conveyance of water from this property will be determined during the design phase of the project.

The amount of water draining to the west through the 24-inch culvert under I-5 will not increase. This culvert conveys the southwest tidal channel and provides drainage for approximately one-third of the IFF property south of the west tidal channel. Seepage will be minimized with a low permeability core element in the new dike, and compliance with the Army Corps’ PL84-99 program maintenance standards. The new dike will include a toe ditch or drain to collect any seepage that comes through or under the dike, and redirect it to the new storage pond.

Response to Comment PC2-2
The County and City’s ownership of the land for the Smith Island Restoration Project is approximately 400 acres. The proposed location of the new setback dike does not maximize the full area available, but it is important to include at least one of the larger tidal channels, the east tidal channel, in the project area. As you noted, the problem is that not many fish are currently able to access the area and none of these are salmon. Being able to restore some 400 acres for salmon habitat and allow daily tidal inundation is critical to restoring wild salmon stocks that are severely depleted.

Response to Comment PC2-3
Some wildlife such as voles, raccoons, deer, and coyotes will be displaced when the existing dike is breached and the area is subject to tidal inundation, but the larger mammals are expected to be able to relocate to adjacent areas. The loss of upland habitat – shrubs, trees, and grassy areas - is also expected to affect common bird species such as sparrows and chickadees, owl species, and raptor and upland bird foraging. However, trees left in the project area that will be tidally inundated will create snags that provide temporary roosting or nesting areas for a variety of land birds. They will also have access to the trees left on the remainder of the existing dike by Union Slough, and new native trees and shrubs that will be planted on the new dike and upland areas. Certainly, waterfowl, water birds, seabirds, and shorebirds will benefit considerably from the new environment, which will also provide wintering, resting, and feeding habitat for migrating birds using the Pacific Flyway.

Response to Comment PC2-4
See response to Comment PC2-1.
July 6, 2011

Snohomish County Public Works
Transportation and Environmental Services
Attention: Mark Stamey, EIS Project Manager
3000 Rockefeller Ave. M/S 607
Everett, Washington 98201

Dear Mr. Stamey:

Subject: Washington Department of Fish and Wildlife (WDFW) comments on Draft Environmental Impact Statement (DEIS), Smith Island Restoration Project

Thank you for the opportunity to comment on the DEIS. The proposal is as good as possible given the existing land ownership conditions, and the project should proceed as proposed to help accomplish the 10-year goals of the Snohomish River Basin Salmon Conservation Plan (Salmon Plan). WDFW submits the following comments for your consideration as you develop the project further.

1. WDFW has concerns that the DEIS does not consider the effect of construction of the proposed new dike on the Lead Entity’s ability to accomplish the 50-year goals of the Salmon Plan. We think language should be inserted into dike construction agreements stating that the County and others consider the dike to be a temporary structure that may need to be removed in the future to accomplish recovery of Chinook salmon. Lack of consideration of the last 40-years of the Salmon Plan is shown, for example, on page 97 where the DEIS says “In all, the Forum set a goal of approximately 1,200 acres of tidal marsh restoration …” In fact 1,237 acres is the 10-year goal; the 50-year goal is 5789-acres, Which the DEIS does not mention. The lack of consideration of the long term issue prevents readers from fully evaluating the impacts of the proposal; this should be corrected in the EIS.
2. Presently about 505 acres of the project site on Smith Island have high potential for restoration to salmon habitat. The Salmon Plan on page 11-19 says “The highest-priority actions for ecological recovery in the estuary sub-basin are: …maintain restoration opportunities by protecting properties with high potential to be restored to tidal function.” If 105 acres (21%) of the project site is permanently protected for agricultural use as the DEIS proposes, and substantial other acreage throughout the delta is protected in perpetuity for transportation and other infrastructure, it is difficult to see how the Lead Entity’s long term Chinook restoration goal can be met. We think the land parcels that are proposed for protection by the new dike are “properties with high potential to be restored to tidal function.” Thus, we think the proposal should specify that the dike is being constructed because restoration of 400-acres is required soon, but the land behind that dike still must be considered to be part of the estuary which people of the future might need to restore to tidal functions.

3. An alternate solution would be for the EIS to directly address the issue of how much acreage will be needed for restoration to tidal functions during a successful 50-year Salmon Plan, and where that amount of acreage, with more potential for restoration than this site, can be found in the estuary. The Salmon Plan calculates that 5789 acres need to be restored in the delta to achieve less than 1% risk of extinction in 100 years. (If the Lead Entity can accept a risk of up to 5%, “only” 4879 acres would have to be restored.) The focus of the DEIS on the 1237-acre goal of the first 10-years is obscuring the fact that a lot more acreage must be restored subsequent to the first 10-years. For this alternative, the EIS should show where 5789 acres can feasibly be restored without restoring all the land in this project area to tidal function.

4. The calculations in Appendix C can be pursued to calculate that 107 Chinook smolts per acre and 2.25 adults per acre is the DEIS’s best estimate of what can be produced by restoring 400 acres to tidal conditions. If that is accurate, and if 105 acres is the size of the area landward of the proposed dike, then that acreage (the River Delta Ranch, Hima farm and Buse site east of I-50) if restored, could produce 11,235 smolts and 236 adults per year. This is a conservative estimate because additional flooded acreage increases the area of tidal channels exponentially. The EIS should confirm this estimate or re-calculate the magnitude of potential Chinook productivity of the land behind the proposed dike. Without this estimate clearly stated the EIS will fail to inform decision makers of all impacts of the various alternatives.
5. The DEIS only partially addresses the issue that the River Delta Ranch, Hima Farms, and Buse property proposed for protection by the new dike are presently wetland, and may be changed to less functional wetland or even upland by the new dike, thus causing a decrease of wetland function in the delta. On page 90 the DEIS says “Drainage of the project area landward of the new dike will be more effective than existing conditions due to the collective improvements…” On page 91 it says “Once built, the proposed dike would provide a benefit of increased flood protection to properties…” On page 86 the DEIS say the existing dike top in some areas falls below the standard elevation, allowing more flooding of the wetland than the proposed dike will allow. The impact these statements suggest is lessened to some degree on page 90 by the statement “Wetlands outside of the [drainage] channels [inside the new dike] should not be affected as they are created in part from a high groundwater table and low infiltration rates result from the silt clay soils.” However, we think that lowering the water level in the drainage channels will cause the wetlands inside the proposed dike, and the agreements for construction of the dike include requirements that tide gate operations must be conducted such that the existing hydrology and salinity of the protected sites continue into the future to preserve existing wetland functions. In the future if that acreage does indeed become dryer or less salty, the changes should cause a suitable economic penalty, substantially larger than the economic benefits that could be gained from drying and/or reducing the salinity of the wetlands.

6. The DEIS does not attempt to quantify the amount of subsidence that the River Delta Ranch, Hima Farms, and Buse property will experience in the future if they are drained by a new dike. The total amount of expected subsidence should be addressed, not just the change in rates from the present diked condition to the future diked condition. Such quantification will allow better evaluation of the quality of land the project is proposing to protect, to help decision makers evaluate the magnitude of benefit the County is getting from the impact of building the new dike.

7. On page 139 of the DEIS a typographic error should be corrected. “0.52 smolts/hectare (0.21 smolts per acre)” should be changed to “0.52 smolts per square meter = 5200 smolts/hectare (2106 smolts/acre) of tidal channel”. Although we are not convinced that after the upper reaches of the river are restored Snohomish tidal sloughs will continue to produce only half as many fish per square meter as Skagit tidal sloughs, at present it is reasonable for the EIS to use Dr. Rowse’s density data as a conservative value for smolt density to be expected on Smith Island.

8. We appreciate your effort in Appendix C on page 139 to calculate the number of Chinook that will be produced by the proposal, knowing that many fisheries scientists say such an effort is too difficult to allow accomplishment of a credible answer. We agree that decision-makers and the public want and need such information, and we think your selection of data and formulae on which to make an estimate of numbers of Chinook is reasonable.
9. The project area of Smith Island may become productive of coho smolts in the future, even though it was not in the past. This is because coho do not use the Emergent/ Forested Transitional Zone of estuaries, which is what Smith Island was when it could flood freely from the Snohomish River. However, due to the construction of I-5 and other infrastructure the project area will in the future flood solely from Union Slough. That may change it to Forested Riverine/Tidal Zone habitat (like Spencer and Otter Islands), which is highly productive of coho as well as Chinook. The EIS should consider this possibility, and estimate coho production that will develop from the proposal.

10. The DEIS’s method of estimating a dollar value of the fish that can be produced by this project substantially underestimates their true value to the community. The DEIS simply multiplies the expected weight of returning Chinook adults by the retail market value of that much Chinook flesh. In fact the value of Chinook and coho is much higher than the price their flesh would sell for in a fish market. We think the EIS should calculate value of Chinook and coho based on all the economic activity that could develop from fish produced on the site, including region-wide benefits from sport fishing on a reasonable percentage of the production, once restoration allows resumption of sport fishing on these populations of Chinook. We expect the value to the economy of a fish caught by a sportsperson is several times its value if caught by a commercial fisher and sold in a store. Also, the value to the region of adult Chinook that are consumed by Orca should be estimated, and the number of smolts that could be produced on this site and eventually meet this fate should be estimated. With these considerations included, we expect the value of the Chinook and coho that will be produced by the project will be much higher than the DEIS estimates, and this should be corrected in the EIS.

11. The lost value of Chinook and coho that could have been produced on the properties landward of the proposed dike should also be calculated and stated forthrightly.

12. Page 35 of the DEIS says “Buse Timber owns a 15-acre property that lies east of I-5, adjacent to and northwest of the project area; it is primarily fallow pasture-land.” On page 11-20 the Salmon Plan concludes (regarding what ecological actions would contribute to salmon recovery) “Other actions could include buying existing log rafting rights or providing incentives to reduce log raft storage that ground on mudflats.” The EIS should evaluate the likelihood that protecting the Buse property with the proposed dike will delay accomplishment of the goal of reducing log rafting in salmon habitat.

13. The DEIS causes confusion about the size of the parcels discussed. Page 35 of the DEIS says “To the west of the project areas lies the former Harnden Nursery property, purchased by IFF in 2009. IFF operates a business at this location known as Hima Nursery Inc.” The DEIS does not give the acreage of this land parcel. Page 49 implies the Harnden Nursery was 72-acres. However, page 9 of the Smith Island Wetland Characterization Report (May, 2008) says “The Harnden property is approximately 50 acres in size…” There is conflict in the DEIS about the size of River Delta Ranch too; page 35 describes River Delta Ranch as on 45 acres of
County-owned property, but page 38 says “…approximately 35 acres landward of the proposed new dike would conserve …River Delta Ranch.” The EIS should clarify these discrepancies and directly state the total acreage of public and private parcels that are proposed for protection by the new dike, and the value of the agriculture that the County expects will be accomplished there.

Clarifying the amount and productive value of agricultural land that will be protected is important because we think that, at the time the DEIS was initiated, the reason for the proposed dike was a social desire to protect at least some agricultural land on every site where fish habitat projects are proposed. However, in the interim we think that due to the Sustainable Land Strategy (SLS) regional culture has changed to the point that economic growth of the agriculture sector is now seen by most people as the most important agriculture issue, and protecting small areas of isolated and wet farmland, just to make a statement that the County thinks agriculture is important, is not as vital as formerly thought. Page 38 of the DEIS says “The construction of the new dike will continue to help conserve and enhance Hima Nursery’s existing agricultural operations, and the reservation of approximately 35 acres landward of the proposed new dike would conserve existing agricultural practices primarily for River Delta Ranch [a horse boarding company utilizing this public property].” The EIS should compare the estimated value of agriculture operations on these sites and the Buse site to the costs of building the dike plus the value of Chinook and Coho that could rear there. This is needed to allow decision makers to evaluate whether the dike is worth the lost opportunity of prevented Chinook and coho production. It is important to do this to demonstrate to readers that the EIS is complete, with conclusions that are straight forward and well thought through. Our expectation is that local society has changed away from the initial presumption that the costs are justified for protecting agriculture on every site no matter the local conditions and no matter the impacts on the County’s responsibilities under the Endangered Species Act.

Thank you for the opportunity to provide this information. If you have any questions, please contact me at (425) 379-2303.

Sincerely,

Douglas G. Hennick

Watershed Steward for the Snohomish and Stillaguamish Rivers, and Island County
Responses to July 6, 2011 Letter from Douglas G. Hennick of WDFW

Response to Comment S1-1

The Snohomish River Basin Salmon Conservation Plan (2005 Plan) proposes actions across the Snohomish River Estuary, other sub-basins, habitat protection, and harvest and hatchery management, all of which must be implemented to lead to delisting and recovery of Chinook salmon. Restoration goals were developed using multiple types of modeling and public discourse. As adopted by partners and as stated in the 2005 Plan, habitat restoration is founded on cooperatively working with landowners to protect and restore habitats that will lead to meeting the 10-year benchmarks, putting the lead entity on a trajectory to meet delisting and recovery goals. Snohomish County was unsuccessful in its attempt to purchase the former Harnden property, and the current owner, IFF Holding, has not raised the subject of selling its property to the County.

During early stages of project development, the County approached WSDOT on the possibility of incorporating the I-5 embankment into the dike design. This option was not considered feasible due to WSDOT’s potential future use of its right of way for an expansion of I-5, and the need to protect critical infrastructure. Therefore, these properties are off the table for any habitat restoration purpose.

As demonstrated in Table 1, the active restoration projects in the estuary may lead to meeting the ten-year benchmark as outlined in the plan (1,237 acres). This acreage is approximate because the Snohomish Forum has not determined how to account for restoration acreage in projects where a mitigation component exists.

Throughout the planning process and in its adoption of the Puget Sound Salmon Recovery Plan, of which the 2005 Plan is a chapter, the National Marine Fisheries Service (NMFS) recognized that recovery would take greater than a ten-year period, perhaps fifty years or more. Through its authority delegated under the Endangered Species Act, the National Marine Fisheries Service adopted biological recovery criteria (Viable Salmonid Population parameters, as well as regional targets) and reductions in the listing factors (posted in the Federal Register at the time of listing) as factors that would lead to delisting. NMFS has adopted the ten-year plan as the first step in a long delisting strategy. Many watersheds started working with 50-year targets to aid in determining what kind of steps would be necessary for recovery, as well as how much to tackle in the first ten years.

There is additional text in the FEIS Built Environment section under Land Use that addresses total land in estuary and discusses salmon recovery goals versus agricultural preservation. There is also new language in the Project Background section that goes further into detail on the history of salmon recovery planning.
Response to Comment S1-2
Page 7 of the DEIS states, “The proposed alignment will preserve approximately 35 acres of County-owned designated agricultural land and protect an additional 70 acres of farmland that is in active production.” The DEIS does not state that any acreage in the Snohomish River Estuary under Snohomish County’s jurisdiction will be permanently protected. Furthermore, the recovery approach by the Snohomish Forum is to involve many people and spread actions across the basin (so no single landowner or jurisdiction bears the responsibility for delisting). In Section 11.3 of the 2005 Plan, the Snohomish Forum calls for all restoration projects to be completed with willing landowners. As Snohomish County does not own the IFF property and the landowner is not willing to be part of the restoration project, this property is off the table for restoration.

Response to Comment S1-3
Please see the response to comment S-1.

Response to Comment S1-4
As stated in the responses to Comments S-1 and S-2, the IFF property is off the table for restoration. IFF’s properties now consist of the 55 acres it purchased from Harnden and the 15 acres it later purchased from Buse Timber.

Response to Comment S1-5
As part of the technical studies that were conducted since the DEIS was issued, a hydrogeologic investigation was performed on the site. Although it was not specific to wetlands, it characterizes the existing salinity and wetness of the site. For a summary of the investigation’s findings, see the updated information in the Water Resources section of the EIS.

The 2013 Smith Island Drainage Analysis report (Appendix I) evaluated the project for potential impacts to wetlands, however, they were found to be unlikely to occur. The new drainage facilities proposed for the areas landward of the new setback dike will, at a minimum, provide equivalent drainage capability to the level that currently exists. Additional monitoring was conducted for a later 2013 Drainage Report that further established the existing conditions.

A new tide gate will be placed at the same elevation as the existing tide gate utilized for discharge of water to Union Slough so that drainage behind the dike is at the same minimum elevation as at present. This drainage is expected to function more effectively because there will be a smaller drainage area contributing to flows through the new tide gate, and a new storage pond to be constructed south of the tide gate will provide a direct connection to it. This should minimize the need for pumping to achieve the -0.6 elevation needed for the field drains on IFF Holding’s property to function. This would avoid the existing method of moving water through the cross-ditch between the west and east tidal channels to access the tide gate.

WDFW’s concerns over the functions and values of the land that remains landward of the dike are noted and, as the project moves into the permitting phase, the County will work with WDFW to ensure a no net loss of habitat functions and values. We will continue to monitor the groundwater hydrology following project construction.
Response to Comment S1-6
The County did not estimate the amount of expected future subsidence for the lands behind the dike. It does not believe that construction of the setback dike will cause the landward area to dry out, leading to greater subsidence. Precipitation is the primary source of flooding and wetting for onsite wetlands, and only rarely does overtopping of the existing dikes occur.

Response to Comment S1-7
Thank you for pointing out the error on page 139; it has been corrected.

Response to Comment S1-8
Thank you for your comment.

Response to Comment S1-9
Coho production from this project has not been calculated because coho salmon are only a candidate species and there is currently no mandate for coho productivity or “recovery.” However, the statement about changes in the composition and structure of the Ecological Management Units, as developed under the 1997 Snohomish Estuary Wetland Integration Plan, will likely change due to climate change impacts. As salmon recovery efforts in the Snohomish River Basin are adaptively managed, the effects of climate change on estuary targets will be evaluated. At this point, exact changes in the composition and structure of estuarine habitats are difficult to predict. At the same time, sea level rise would predictably shift further upstream, potentially highlighting other more upstream areas that may be restored to maintain the balance of estuarine habitat types, predicted as necessary in the salmon recovery effort.

Response to Comment S1-10
The County acknowledges there are many ways in which the value of improving salmon stocks can be calculated; the retail market value of a Chinook’s weight that was used in the DEIS is just one example. We have declined to do a more comprehensive estimate because a cost-benefit analysis is not required under SEPA, and the purpose of the project is to recover declining salmon numbers.

Response to Comment S1-11
As stated in responses to Comments W-1, W-2, and W-4, the IFF property is off the table for restoration consideration for this project.

Response to Comment S1-12
Comment noted. The 15 acres is now part of the IFF’s property. Actions such as buying existing log rafting rights or providing incentives to reduce log raft storage are beyond the scope of the Smith Island Restoration Project. As a landowner within DID5, Buse Timber’s operations must not be negatively impacted by the project if DID5’s support is to be obtained. Other parties have pursued discussions with log rafting parties in the Snohomish River estuary over time and will continue to do so.
Response to Comment S1-13
Page 49 in the DEIS was referring to the amount of land (72 acres) that Harnden leased from the County to grow tree nursery stock, not its own 55-acre property adjacent to I-5. River Delta Ranch does lease approximately 45 acres from the County; the 35 acres was referring to the acreage left after the project is constructed, as approximately 10 acres will be required for the project. This has been clarified in the Final EIS.

Response to Comment S1-14
Since the DEIS was issued in June 2011, IFF has acquired the Buse Timber property adjacent to Union Slough and east of I-5. Since IFF is not interested in selling its property to the County, there is no longer any reason to estimate the productive value of that agricultural land, or of Chinook or coho that could be reared there if the land was available for restoration. At this time, the County has not made a decision to terminate the lease of the River Delta Ranch, however, as mentioned in the response to comment S1-13, above, approximately 10 acres of the currently leased 45 acres will be required for the project.
July 6, 2011

Snohomish County
3000 Rockefeller Ave.
Everett, WA 98201

Re: Comments on Draft Environmental Impact Statement, Smith Island Restoration Project

To Whom It May Concern,

I am submitting this letter in support of the Smith Island Restoration Project DEIS, both as an interested citizen and a professional ecological economist. As a disclaimer, I am the Executive Director of Earth Economics, a non-profit 501c(3) organization, that has been involved in aspects of the Smith Island project as a contractor to Snohomish County Public Works. Specifically, we conducted an economic analysis of the ecosystem service benefits that would be provided as a result of restoring Smith Island under the Proposed Action and No Action alternatives. Our analysis was intended to be included as part of the DEIS. I would like to make several observations about the Smith Island Restoration Project that I feel are important to convey to citizens and policy makers:

1. The Smith Island Restoration Project will provide significant economic benefits over time for Snohomish County and its residents. Using benefit transfer, an accepted economic appraisal methodology, Earth Economics estimated that Smith Island will provide approximately $5 million to $6.9 million in annual ecosystem service benefits under the Proposed Action, compared with $0.3 to $0.9 million in annual ecosystem service benefits under the No Action alternative.

2. An ecosystem, such as a wetland, produces a flow of valuable services across time, including wastewater treatment, flood risk reduction, fish and wildlife habitat, and aesthetic value. In this sense it can be thought of as a capital asset. This analogy can be extended by calculating the net present value of the future flows of ecosystem services, just as the asset value of a traditional capital asset (or large project) can be approximately calculated as the net present value of its future benefits. This calculation is an exercise however, because ecosystems are not bought and sold like traditional capital assets. The asset value of Smith Island under the Proposed Action alternative is estimated to lie between $62.1 - $90.9 million, compared with $2.1 - $17.9 million under the No Action alternative (both calculated at a 4.125% discount rate over the next 100 years).

3. When all of the known costs and benefits are included, the proposed Smith Island Restoration Project will provide significant economic, cultural and ecological benefits. The
Earth Economics analysis found that the potential economic value justifies project expenditures. The Proposed Action Alternative would provide a return of approximately $3.76 – $5.50 for every $1 invested; while the No Action Alternative provides a low return of approximately $0.40 – $4 for every $1 invested. Some of the ecosystem services that will be enhanced as a result of restoration include water quality, disturbance regulation, climate regulation, recreation and aesthetic value, and habitat. A significant salmon harvest will also be generated, adding cultural, ecological, and economic value to the region.

4. Scale is an important concept to consider for the Smith Island project. This concept has been alluded to in the DEIS, but is worth reiterating. The best solutions are always those that occur at the physical scale of the problem. In the early 1900s our nation was short of national infrastructure such as interstate highways and electrification. Institutions and policies were set up at the correct and appropriate (national) scale to address these shortages. Among many other activities, the federal government built the interstate system and passed the Rural Electrification Act, promoting economic development in the United States. Projects on the scale of the Smith Island Restoration Project are the most expedient way to address the shortage of green infrastructure and reduce long term recovery and litigation costs for salmon, improving our economy. Also, Chinook Salmon in the Snohomish Basin, for instance, require at least three geographic scales during their lifetimes. They spawn and hatch in the streams of the Snohomish Basin; they rear in the Snohomish Estuary, where salt water meets the river; and they grow and mature at the scale of the Northern Pacific Ocean. Each of these scales is complementary, meaning they cannot substitute for one another. If the Snohomish Estuary is the limiting factor to salmon productivity, then salmon populations will only recover if the estuary is recovered, regardless of how much the Pacific Ocean is recovered. Moreover, the estuary cannot be moved to another area in the sense that urban development can be shifted to new areas, because it exists within a narrow spatial band, where salt water meets fresh water. Farmland also exists within a relatively narrow band, and this should be considered.

In conclusion, the Proposed Action will create multiple public benefits and a positive economic impact in Snohomish County and beyond. To ensure a healthy local economy, nature’s economic value should be considered during this decision-making process.

Respectfully Submitted,

David Batker
Executive Director
Earth Economics
I read with considerable interest Snohomish County’s plan for the Smith Island Restoration Project. File 7 and Appendix D, using Audubon data, details the significance of bird habitat and the number of bird species that will be impacted with this project. Pilchuck Audubon has been intimately involved with the Tulalip Tribe’s Qwuloot salmon restoration project doing monthly bird surveys. Pilchuck Audubon was also invited by the Washington State Department of Fish & Wildlife to participate in its yearlong study of the Ebey Island salmon restoration project. Based on that experience, as president of the Pilchuck Audubon Society, I would like to offer some observations and recommendations.

The county’s cover letter on the Determination of Significance notes that the Smith Island Restoration Project will allow multiple uses, including recreational and public access opportunities. Allow me to expound on the economic significance of those opportunities.

Birdwatching is a major economic force. According to a U.S. Fish and Wildlife Service study, birdwatchers contributed $36 billion to the US economy in 2006, and 20% of all Americans are identified as birdwatchers. The income level of birders has been found to be well above average.

Birders come from many walks of life and watch a variety of birds in different settings. Their enthusiasm also translates into spending, thereby contributing significantly to national and local economies. The high values birders place on their birding trips is a solid indicator of birding’s benefit to society.

Snohomish County already draws a large number of birders every winter from across the nation, even internationally, to see wintering Snow Geese and Trumpeter Swans. Judging from the plans the Smith Island Project could draw birders in the spring and fall to see migrating shore birds. The chance to see Black Bellied and Pacific Golden plovers is a draw for all serious birders.

It’s estimated by the Stanwood Chamber of Commerce that the average visitor to the annual Snow Goose Festival every February spends $200 in the community. I suspect that few Chamber members are birdwatchers but they do recognize economic opportunity. Snohomish County would be remiss if it failed to follow suit.

An economic approach to birdwatching on Smith Island should entail creating a trail system on the Smith Island dikes. It would not be necessary to blacktop the trails. Creating hummocks in the wetlands for nesting waterfowl and roosting shorebirds should also be considered, as well as building barn owl boxes, and most assuredly keep the existing barn, which is excellent barn owl habitat.

Hopefully this information will allow the Snohomish County policy makers to make an informed management decision where the Smith Island Project and birds are involved, which would benefit all Snohomish County citizens.

Thank you for the opportunity to share this information and recommendations with you.

Mike Blackbird, President
Pilchuck Audubon Society
Mr. Mark Stamey  
EIS Project Manager  
Snohomish County Public Works  
3000 Rockefeller Avenue, MS-607  
Everett, WA 98201  
mark.stamey@snoco.org

July 5, 2011

Dear Mr. Stamey,

I am writing to voice my strong support for the Proposed Action Alternative described in the Draft Environmental Impact Statement for the Smith Island Restoration Project.

The lack of estuarine habitat severely limits the productivity of ESA-listed Chinook salmon in the Snohomish River. Estuarine habitat is of critical importance to juvenile salmon, which rest and grow there as they transition to life in marine waters. However, more than 80 percent of the Snohomish River’s historic estuary habitat has been diked or drained. Implementing the Proposed Action Alternative would restore habitat-forming processes to the estuary and move us all closer to our goal of sustainable, fishable Chinook salmon populations.

The Smith Island Restoration Project also helps achieve other goals. As you know, the Smith Island project is one of five estuary projects identified in the Snohomish Basin Salmon Conservation Plan that if completed, would help achieve the Plan’s 10-year estuary restoration goals. Therefore, it will also assist the region with moving toward the Puget Sound Partnership’s new target of achieving 10-year salmon recovery goals for Chinook natal river deltas.

I am pleased to see that the Proposed Action Alternative would provide enhanced protection to about 105 acres of designated farmland. I believe it is crucial to find ways to produce local food at the same time as we produce local fish.

Thank you for the opportunity to comment. Please do not hesitate to contact me if you have any questions at laura@blackmoreconsulting.com.

Sincerely,

Laura L. Blackmore
July 6, 2011

Executive Aaron Reardon
Snohomish County
3000 Rockefeller Avenue
Everett, WA 98201

RE: DEIS Smith Island Restoration Project

Executive Reardon:

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the Smith Island Restoration Project. As the advisory body appointed to provide balanced, scientifically accurate guidance to Snohomish County on issues concerning the marine environment, we strongly support this project that will restore tidal and riverine hydrology to approximately 400 acres on Smith Island.

Ensuring a healthy future for Puget Sound is currently one of the most pressing issues of our region. While Snohomish County and others have made a great deal of progress towards this goal, the future of Puget Sound is not secure. The marine ecosystem is showing symptoms of the stress caused by our rapid population growth. Currently eleven Puget Sound species are listed under the Endangered Species Act, including Chinook salmon, Bull Trout and, most recently steelhead. The list continues to grow: Pacific Smelt have just been proposed for listing from California to British Columbia. Many species have been pushed to the brink and our collective impact grows along with our population. We need to pay our debt to Puget Sound, recovering the ecosystems that support us.

Our local Snohomish River Basin Salmon Conservation Plan (2005) and the Puget Sound Partnership’s Action Agenda (2008) have developed coordinated, stakeholder driven strategies for Puget Sound recovery, including listed salmonid species. A number of key restoration projects will take significant strides in moving toward recovery. The Smith Island tidal marsh restoration project is one of those projects. This pivotal project has both local and regional significance, and is identified in both the Salmon Conservation Plan and the Action Agenda as a high priority. As stated in the DEIS, only one-sixth of the original tidal marsh area downstream of the head of Ebey Slough...
remains intact and accessible to fish. The 2005 Plan targeted a net gain of 1,200 acres of this habitat restoration within the first decade of implementation. The proposed Smith Island project would achieve approximately one-third of that amount in a single project.

As the mixing zone for fresh and salt-water, estuaries are very high in biotic diversity and support a multitude of species in complex habitats. Tidal marsh is one of the key bottlenecks to continuing salmonid productivity in Puget Sound.

The DEIS clearly addresses competing land uses, including agriculture. We recognize the importance of agriculture, but the Smith Island restoration project is in the second decade of planning, and significant funding is in place to allow its completion. This project must move forward. The project concentrates restoration in a large, contiguous area and has a minimal threat to agricultural lands.

Again, we strongly support the Smith Island Restoration Project as a key project in the process leading to a healthy future for Puget Sound.

Sincerely,

Jared Bond, Chair
Snohomish County Marine Resources Committee

cc: Dave Somers, Chair, Snohomish County Council
Mark Stamey, EIS Project Manager; E-mail: mark.stamey@snoco.org
Steve Thomsen, P.E., Public Works Director
Debbie Terwilleger, Surface Water Management Director
Snohomish County Marine Resources Advisory Committee members
Hello Mr. Stamey,

I am providing my comments regarding the Smith Island restoration project. I am supportive of the proposed project alternative. I believe that Snohomish County has worked hard to reach a balance between competing demands. The proposed project alternative will provide improved flood protection with the new levee alignment. It will also provide habitat that is critical to the recovery of salmon stocks. The County with its partners is also developing a framework for preserving much needed farm land through the Sustainable Land Strategy. Thank you for the opportunity to comment on this project.

Sincerely,

Jason Lehto

**************************************************************************
Jason Lehto / NOAA Restoration Center
7600 Sand Point Way NE / Seattle, WA 98115-0070
Phone: 206-526-4670 / Fax: 206-526-6665
**************************************************************************
Mr. Mark Stamey  
Snohomish County  
3000 Rockefeller Avenue, M/S 607  
Everett WA 98201

RE: Smith Island Restoration Project (Project No. RR49206)

Dear Mr. Stamey,

I am writing to express support for the full restoration option for the Smith Island restoration project as described in the Draft Environmental Impact Statement issued by Snohomish County. This option involved construction of a new setback dike and breach of the existing dike along Union Slough which would restore tidal marsh habitat on approximately 400 acres of land owned by the County and City for the purposes of salmon habitat restoration and compensatory mitigation.

In 2008, Snohomish County submitted a grant proposal to The Estuary and Salmon Restoration Program (ESRP) with a $2.6 million request for restoration at Smith Island. This project was the 2nd ranked new project and 4th ranked overall project in ESRP's 2009 Spending Plan. At $2.6 million, this award was the largest award ever given by our program. The high ranking and unprecedented award level attests to the high ecological value of this project which would restore natural processes to 400 acres within one of Puget Sound’s 16 major river deltas. Historically, the Snohomish Estuary was one of the most productive major river deltas in Puget Sound, and has been identified as a site with high restoration potential by the Puget Sound Nearshore Ecosystem Project (PSNERP) which is developing an ecosystem restoration strategy for Puget Sound.

The award also reflects high confidence by ESRP program staff and the technical review team that Snohomish County will be able to meet the ecological objectives identified in the project proposal. Snohomish County has been a leader in salmon recovery and high quality conservation planning and full completion of the Smith Island restoration project would be an important contribution to meeting the region's obligations for salmon recovery. We urge the County to move forward with the full restoration option described in the EIS which is consistent with the intent of the proposal funded by ESRP. It should be noted that any significant changes to the design would require a re-evaluation of the existing award contract. We look forward to working with the County to advance this project of regional significance.

Sincerely,

Betsy Lyons  
Manager, Estuary and Salmon Restoration Program

Cc: Mike Ramsey, Tim Walls, Craig Garric
July 5, 2011

Mark Stamey
EIS Project Manager
Snohomish County Public Works
Transportation and Environmental Services
3000 Rockefeller Avenue, M/S 607
Everett, WA 98201

Re: Smith Island Restoration Project Draft EIS

Dear Mr. Stamey:

This letter is in response to the referenced Smith Island Draft EIS -- a project that restores estuarine habitat in waters of the United States and the Tulalip Tribes of Washington. With this project, Snohomish County is proposing to restore up to 400 acres of historical tidelands. The Tulalip Tribes of Washington's Natural and Cultural Resources staff has reviewed the EIS and have the following comments:

- The Tulalip Tribes is a federally-recognized Indian Tribe located on the Tulalip Reservation at the mouth of the Snohomish River north of Everett, Washington. The Tulalip Tribes are successor in interest to the Snohomish, Snoqualmie, Skykomish and other bands of Indians located in the Snohomish Basin. The 1855 Treaty of Point Elliott preserved the tribes' right to fish, hunt and gather in their traditional areas. The proposed Action Alternative is within the ancestral grounds of the Tribes and if implemented could potentially provide a significant improvement in estuarine habitat conditions. These habitats are critical to treaty reserved salmon resources that are a cultural foundation to the Tribes.

- The referenced restoration effort has been in progress for over a decade, since 2001. The Smith Island Restoration project is highlighted in the Snohomish Basin Salmon Conservation Plan and the Puget Sound Partnership Early Action Agenda. It is one of several large estuary projects that were identified within the plan to reach a 1,200 acre tidal marsh restoration goal. This restoration is critical to recovering threatened salmon species in the Snohomish Watershed.
The importance of the estuary for fish and wildlife habitat has long been recognized. It provides highly productive habitats for Chinook and other threatened species. Estuary wetland and tidal channels provide nursery habitat and a physiological transition zone for adaptation to the saltwater environment. It is used for foraging and cover by juvenile salmon. Adequate growth while salmon occupy habitats in the estuary ensures greater marine survival, and improved survival to adulthood.

The Tulalip Tribes of Washington support the preferred Action Alternative. This Action Alternative begins the process of reversing a century of wetland losses and degradation within the nearshore and estuarine environment. These losses have contributed to the decline of salmon populations within the Snohomish River basin. Human development in the estuary has disconnected the river from adjoining tidal marsh habitats reducing the quantity of rearing habitat and inhibited ecological processes (e.g. organic material production and transport). The Action Alternative restores habitats and processes for the benefit of native fish and wildlife.

The Growth Management Act and the County Comprehensive Plan requires a balanced approach to maintaining fisheries resources in parity with other resource uses like agriculture and forestry. The GMA provides local governments flexibility to adopt plans that provide protection for all manner of land use, including natural habitat for fish and wildlife. The land planned for restoration under the Action Alternative will have a minimal affect on agriculture. These lands are in public ownership, are isolated, and have largely reverted to their historical condition as wetlands.

The no action alternative discussed in the EIS results in no change to the present condition and no loss of designated farmland. It appears unlikely, because of ownership and conditions, that the project area will be commercially farmed in the future. Maintaining these lands in their present condition and as designated farmland would result in a lost opportunity to improve habitats necessary to restore fisheries resources and provide other public benefits.

Over the last 150 years salmon resources the Tribes have depended upon have diminished to a fraction of their historical levels, because of the impacts of human development, including agriculture. The Tulalip Tribes urge Snohomish County to consider our comments, and implement the Smith Island Restoration Project, reversing the trend in wetland losses and degradation of the estuarine environment. Restoration opportunity that is critical to recovering threatened salmon species in the Snohomish Basin, as is this one on Smith Island, must be fully taken advantage of, and implemented without further delay.

Sincerely,
The Tulalip Tribes

Kurt Nelson
The Tulalip Tribes
Environmental Division Manager
June 27, 2011

The Honorable Aaron Reardon, Snohomish County Executive
Attention Mary Stamey
3000 Rockefeller Ave
Everett, WA 98201

Re: Draft EIS Snohomish County’s Smith Island Restoration project – Letter of Support for Action

Dear Executive Reardon:

The Puget Sound Partnership is a community effort of citizens, governments, tribes, scientists and businesses working together to restore and protect Puget Sound. We believe we can have both a thriving Puget Sound economy and a clean and healthy Puget Sound ecosystem. The Partnership developed an Action Agenda in 2008 for restoring Puget Sound by 2020 while supporting a healthy economy. In addition, the Partnership is the salmon recovery organization for Puget Sound, responsible for implementing the NOAA approved Puget Sound Salmon Recovery Plan. Both the Action Agenda and the Puget Sound Salmon Recovery Plan are based on best available science and have strong community support.

The Smith Island Restoration Project advances implementation of both the Action Agenda and NOAA approved Salmon Recovery Plan. The Smith Island Restoration project is one of the largest estuary restoration projects in the region and is an integral part to supporting and rebuilding endangered salmon runs in the Snohomish River Basin and the entire Puget Sound. In addition, this project provides a unique opportunity to provide for salmon habitat and recreational opportunities in an urban environment. This project has been identified as a key priority for Puget Sound and salmon recovery in the following Action Agenda and Salmon Recovery documents:

- **Action Agenda near term priority** (page 90): “Complete large-scale restoration projects at the mouths of major river systems in Puget Sound where there is a high likelihood of re-creating ecosystem function.”
- **Action Agenda restoration priority** (page 46): Smith Island Restoration project is specifically identified.
- **Action Agenda, Whidbey Action Area priority** (page 178): “Complete large-scale estuary restoration projects in the Skagit, Snohomish, and Stillaguamish rivers and meet restoration targets of salmon recovery plans.”
- **Action Agenda near term priority and Whidbey Action Area priority** (page 90 and 178): Implement projects on the salmon recovery 3-year work plan.
- **Snohomish Basin salmon recovery 3-year work plan updates 2006-2009**: Project is included as a tier 1 project on the Snohomish Basin 3 year work plan.
- **Snohomish River Conservation Plan**: Strongly advances priority restoration projects in the Snohomish River estuary sub basin (Chapter 11 page 5) and can propel the Snohomish basin approximately 38.6% of the way toward achieving their 10-year goals and targets for acreage gained in the estuary if "Dike Alternative A" is implemented.
- **Action Agenda**: Increase the success rate of mitigation projects to achieve, at a minimum, no-net-loss of ecosystem function on a watershed scale...pilot in-lieu-fee mitigation program (page 64). It appears that
there may be an opportunity to meet mitigation needs of several major projects in the Snohomish Estuary with the Snohomish in-lieu-fee program. This will provide an excellent opportunity to restore an important system and experiment with implementation of an in lieu fee program.

- In addition, this project will advance the pioneering work of the Snohomish Sustainable Lands Strategy and begin to implement the findings of that work.

The Puget Sound Partnership strongly supports the Smith Island Restoration Project moving forward in full. If you have any questions about this letter of support or the Partnership's work to advance recovery of Puget Sound, please contact Morgan Schneidler at (360) 464-2013 or morgan.schneidler@psp.wa.gov.

Sincerely,

Gerry O'Keefe
Executive Director

cc: Julie Highton, SEPA Senior Environmental Planner, Snohomish County, Trans. and Env. Services Division
    Steve Thomsen, Public Works Director, Snohomish County
Hi Mark.
As a private citizen and Everett resident I can say that I support the Smith Island restoration project. Best available information indicates that estuary restoration is a very sensible thing to do for salmon recovery. I would also point out that designation of diked estuary ag lands as "prime" would not be supported by a rigorous cost/benefit analysis.

Casey Rice
Everett

1521 Lakes Avenue
Everett, WA 98201
Hi Mark - please find my comments below in support of the proposed action alternative of the Snohomish County Smith Island Restoration Project, Draft Environmental Impact Statement.

Overall, this project represents a very important step for salmon recovery efforts within the Snohomish River watershed. Many acres of historical estuarine tidal marsh have been altered, diked and drained, and utilized for other purposes. The loss of simple habitat area for Chinook salmon within the estuary environment is substantial, and the Smith Island site and the proposed alternative dike breaches represent a positive action by the County towards salmon recovery goals. These goals are generally accepted throughout Puget Sound as necessary to achieve recovery, specifically of Chinook salmon.

There is no doubt that breaching of dikes (removal would be preferred) and subsequent tidal action into historic marsh channels and tidelands provides valuable habitat that is utilized by juvenile Chinook salmon, as well as, other juvenile salmonid species. Data collected at tidal marsh sites in the mid-Spencer island site between 2004 and 2007 (across Union Slough from the proposed Smith Island site) indicate utilization of these habitats throughout the periods of sampling (typically February thru August) by juvenile salmonids. This marsh area has had natural breaches in the dikes since the mid 1960's, with no other active restoration projects implemented. I have observed juvenile salmon of all species (present in the Snohomish system) utilizing both the borrow ditch channel and smaller tidal channels that infiltrate this marsh. In particular, juvenile Chinook salmon are found in these tidal channels from as early as January and February (early fry life history type) and both fry and fingerling life history types later in the spring and through summer months. A limiting factor of marsh habitat utilization by Chinook salmon may be only that temperatures during late summer can be elevated above 21°C, at which point many salmon exit the estuarine habitat system. However, sampling of distributary channel and tidal marsh areas in the Snohomish River estuary in October indicate continued use of these marsh channels by juvenile coho salmon throughout the fall and winter months.

Given this known utilization and importance to juvenile salmonids within the Snohomish River basin, and the current status of Chinook salmon listed under the Endangered Species Act, the restoration of this tidal marsh is very important. I commend the County for the actions and persistence that have been taken to move this project forward in the context of salmon recovery goals. It represents a tremendous effort towards both mitigation and restoration from prior human activity that has caused damage to Chinook salmon habitat and the populations throughout Puget Sound. This effort in the Snohomish River estuary is one of many actions around the Sound that collectively will lead us towards Chinook salmon recovery.

Thank you for the opportunity to comment on this draft Environmental Impact Statement.

Sincerely,

Mindy Rowse
8220 NE 166th St.
July 6, 2011

Mark Stamey, EIS Project Manager
Snohomish County Public Works
3000 Rockefeller Ave., M/S 607
Everett, WA 98201

RE: Smith Island Restoration Project Draft Environmental Impact Statement

Dear Mr. Stamey:

Thank you for providing the Department of Ecology (Ecology) the opportunity to comment on the Smith Island Restoration Project Draft Environmental Impact Statement (DEIS). Ecology offers the following comments for the record as Snohomish County (County) moves forward with this important estuarine restoration project.

The DEIS is a concise and well-written summary of the project. Of the two alternatives proposed in the DEIS (Proposed Action Alternative and the No Action Alternative), Ecology supports the Proposed Action Alternative because it will further salmon restoration, particularly for Chinook salmon (*Oncorhynchus tshawytscha*), will help restore ecological processes in the lower estuary and will allow the County to fulfill prior and future mitigation commitments. The Proposed Action Alternative would restore nearly 400 acres to tidal influence and over 15,000 linear feet of tidal channels available to fish. This will be a significant contribution towards salmon recovery in the basin.

Collaborating with the City of Everett on the south leg of the setback levee is ecologically and economically beneficial. The ecological and economic benefits would be lost should the restoration project not be built, incurring further costs for the County and requiring renegotiation of the permit conditions for the BNSF Delta Yard Expansion and the SR 529 bridge replacement.

In the past decade, considerable public and private resources have been devoted to identifying restoration opportunities for the recovery of listed salmonids within Puget Sound and the Snohomish Basin. The Proposed Action Alternative will aid in achieving the restoration goals of the *Puget Sound Salmon Recovery Plan* (Shared Strategy Development Committee, undated), *Snohomish River Basin Salmon Conservation Plan* (Snohomish Basin Salmon Recovery Forum 2005) and *Salmon Overlay to the Snohomish Estuary Wetland Integration Plan* (Salmon Overlay) (City of Everett 2001). These documents have identified re-establishing rearing and off-channel habitat in the lower estuary as a critical element in the recovery of Chinook salmon. The Salmon Overlay ranks the Smith Island Restoration site as the third highest for restoration potential within the lower estuary. Implementing the Proposed Action Alternative is a key component of restoring ecological function in the lower estuary and restoring Snohomish Basin salmon populations.
Construction of the project will result in the loss of fallow farmland. We understand the concerns voiced by the agricultural community related to this loss. The County’s Sustainable Lands Strategy (SLS) is developing a plan that would allow for habitat restoration in support of salmon recovery while simultaneously providing “net gain” actions for agricultural resource lands. Ecology fully supports this collaborative effort. As a member of SLS Phase II Executive Committee, we are participating in ongoing discussions to further the Sustainable Lands Strategy goals. Preservation of viable agriculture is essential to the economic vitality and cultural fabric of the County. We believe the Sustainable Lands Strategy is the appropriate forum for developing policies and measures that simultaneously support both salmon restoration and agriculture.

Constructing the Proposed Action Alternative will likely benefit the adjacent farmland to the west by improving internal drainage and enhancing flood protection. Given the flat topography, drainage-induced subsidence and high surrounding water table, managing drainage on the property has been challenging. Project construction would provide greater flood protection for the IFF Holdings property (and I-5) by bringing the dike system up to federal dike construction standards, assisting Diking District 5 with the needed dike upgrade.

Nearshore marine areas, including the Snohomish estuary, have been designated as critical habitat essential for the recovery of the Puget Sound Chinook salmon Evolutionarily Significant Unit by the National Marine Fisheries Service (Federal Register 70(170): 52630–52858). The loss of estuarine rearing habitat has been identified as a limiting factor for Chinook recovery (Snohomish Basin Salmon Recovery Forum 2005). Juvenile Chinook salmon require off-channel and estuarine rearing habitat for adaptation to marine waters and for protection from higher velocity flows in mainstem channels (Levings et al. 1991; Simenstad and Cordell 2000; Rowse and Fresh2003; Beamor et al. 2005; Snohomish Basin Salmon Recovery Forum 2005; Limm and Marchetti 2009; USFWS 2010; Hughes et al. 2011; NWIFC 2011; and Shared Strategy for Puget Sound, undated). Dike breaching and removal is an effective and relatively inexpensive method of restoring tidal influence to former estuary (USFWS 2010; Volk et al. 2010). Studies at other sites following dike removal, such as the Puyallup and Nisqually Rivers locally, as well as the Salmon River in Oregon, show that fish and other aquatic life use the newly restored habitat soon after levee removal (Thom et al. 1990; Cordell et al. 2001; Gray et al. 2002; Tanner et al. 2002; USFWS 2010; and Volk et al. 2010). In the Stillaguamish estuary, fish started using formerly diked area within Leque Island after the dike north of State Route 532 failed in 2009 (Andrew Gross, WSDOT, personal communication).

By restoring nearly 400 acres to tidal influence, the Proposed Action Alternative is a critical step towards the stated restoration goals in the Snohomish River Basin Salmon Conservation Plan (Snohomish Basin Salmon Recovery Forum 2005). This is a prime site for estuarine restoration due to its location low in the estuary. Dike breaching to restore tidal influence at this Smith Island site is consistent with the goals of the Snohomish Estuary Wetlands Integration Plan (City of Everett 1997) and the Salmon Overlay, both of which have been incorporated into the City of Everett’s Shoreline Master Program.
We support the Proposed Action Alternative and look forward to seeing this project constructed. We would be happy to assist the County in any way that we can in implementing this important estuarine restoration. We also look forward to realizing the net gains in agricultural economic vitality identified in the Sustainable Lands Strategy framework.

Sincerely,

Erik C. Stockdale, PWS
Wetlands/401 Unit Supervisor
Shorelands & Environmental Assistance Program

cc: Alice Kelly, Department of Ecology
Geoff Tallent, Department of Ecology
Steven E. Thomsen, P.E., Snohomish County Public Works Director

References


July 5, 2011

Mark Stamey
Snohomish County Public Works
3000 Rockefeller Ave., M/S 607
Everett, WA 98201

RE: Smith Island Restoration Project

Dear Mr. Stamey,

On behalf of the Snoqualmie Watershed Forum, I would like to provide this letter of support for the Smith Island Restoration Project’s “Proposed Action Alternative” presented in the Draft project Environmental Impact Statement (DEIS) currently out for comment.

The Snoqualmie Watershed Forum is a partnership of elected officials, citizens, and representatives from conservation organizations. Member governments include King County, the Snoqualmie Tribe, and the cities of Duvall, Carnation, North Bend and Snoqualmie. The Forum advises on environmental policies and implements projects addressing salmon recovery, water quality improvements and flood hazard reduction in the Snoqualmie and South Fork Skykomish Watersheds – spanning the King County portion of the Snohomish Basin (Water Resource Inventory Area 7).

Over the past 12 years, our member governments, conservation partners and local landowners have been actively implementing habitat improvements and salmon recovery actions throughout the basin with an aim of improving watershed health and recovering threatened species like Chinook salmon, steelhead trout and bull trout. To fully realize the benefits of our actions in mainstem and upstream portions of the Snohomish Basin we ultimately rely on restoration of the Snohomish estuary and nearshore habitats as well.

Currently only a fraction of the historic Snohomish estuary and tidal marshes remain intact and little progress has been made in restoring these critical habitat gaps. The Snoqualmie Watershed Forum recognizes the large amount of time it takes to plan and implement large scale restoration projects such as that proposed at Smith Island and at other sites in the estuary. We acknowledge the immense effort that has gone into raising the necessary funds and grants to plan, design and implement this project. We also recognize and commend Snohomish County’s efforts to work across salmon recovery and agricultural interests through its Sustainable Lands Strategy in order to set the groundwork for mutual ag-fish collaboration and benefit in the longer term. We appreciate that all these steps take time and are essential for the long term success of our recovery efforts.

Working to protect and restore the health of the Snoqualmie Watershed in harmony with the cultural and community needs of the Valley
That said, however, we also believe that if we fail to restore critical estuarine habitats in the Snohomish Basin all of our efforts upstream in the Skokomish and Snoqualmie Rivers will be ineffective. The Snoqualmie Watershed Forum therefore supports the **Proposed Action Alternative** for the Smith Island Restoration Project as presented in the DEIS. It is our understanding that this proposed action alternative would include constructing a new setback dike, breaching the existing dike along Union Slough and restoring tidal marsh on approximately 400 acres of land owned by Snohomish County and City of Everett for the purposes of salmon habitat restoration and compensatory mitigation.

The Smith Island Restoration Project is among the highest priority estuarine restoration projects identified in the 2005 *Snohomish River Basin Salmon Conservation Plan* (the Plan) and the 2008 *Puget Sound Partnership Action Agenda*. In planning this project, immense care was taken to identify a site that had lower agricultural value and high habitat potential. It therefore presents an ideal restoration opportunity that will make significant contribution towards the Plan’s estuary restoration goals, while minimizing impacts on agricultural productivity. We feel it is vital that this project move forward.

Thank you for the opportunity to comment. We look forward to our continued collaboration. If you have any questions please contact Yvette Lizée-Smith, Snoqualmie Watershed Coordinator at 206-296-6570.

Sincerely,

[Signature]

Elizabeth Walker  
Chair - Snoqualmie Watershed Forum

Cc: Snoqualmie Watershed Forum Members
6 July 2011

TO:  Mr. Mark Staney  
     Snohomish County Public Works  
     3000 Rockefeller Avenue, MS-607  
     Everett, WA 98201

SUBJECT: Support for Smith Island Estuary Restoration Project

Dear Mr. Staney:

Starting in 1999 with the listing of Puget Sound Chinook salmon, the Snohomish Basin Salmon Recovery Forum (Forum) has worked tirelessly for salmon recovery in our basin. The 41-member Forum is composed of tribes, local jurisdictions, citizens, farmers, environmentalists and interested parties, working together to create a future for fish and people in the basin.

In 2005, the Forum approved the Snohomish River Basin Salmon Conservation Plan, which is one of fourteen chapters in the federally approved Puget Sound Salmon Recovery Plan. The Puget Sound Salmon Recovery Plan is the first approved ESA recovery plan developed by anyone other than a federal agency. As a knowledgeable, committed team, the Forum’s plan is recognized in Puget Sound and the State of Washington as one of the best plans in our area. To illustrate, the Forum’s draft recovery plan was awarded a best plan award by the American Planning Association in 2004.

The Smith Island Estuary Restoration Project is a key project in the Forum’s ambitious ten-year goal of restoring 1,237 acres of tidal marsh in the Snohomish River Estuary. With 85% of potential habitat in the estuary removed, this project will remove one of the most significant bottlenecks for Chinook (and other salmonids) production in the Snohomish Basin. The Smith Island project is also a project of regional significance, mentioned by name in both the Puget Sound Salmon Recovery Plan, and in the Puge: Sound Partnership’s Action Agenda (2008).

We understand the need to balance agriculture and salmon. The Forum has had a strong farming presence in its membership since 2003, and the Plan reflects this input. The Forum’s objectives in restoring habitat on agricultural lands are clear and outlined on pages 9-1 through 9-4. The Smith Island project meets these objectives of not adversely impacting agriculture.

This project will restore almost a third of our ten-year target and is located in one of the main bottlenecks for salmon production in our watershed. This project has been repeatedly supported by the Forum for funding and remains one of Snohomish County’s commitments to us in implementing the Plan (Snohomish County Motion 05-026). For these reasons, we strongly urge you to support full restoration on the Smith Island Restoration Project.

Sincerely,

Terry R. Williams  
Chair, Snohomish Basin Salmon Recovery Forum

CC: Snohomish Basin Salmon Recovery Forum members  
c/o Snohomish County  •  3000 Rockefeller Avenue, M/S 607  •  Everett WA 98201  
425.388.3464  •  www.salmon.surfacewater.info