

**Response to Comments Submitted on**  
**Addendum No. 2 to the Everett Riverfront**  
**Redevelopment Final Environmental Impact Statement**  
**Addressing the Riverfront Development**  
**Public Amenities Master Plan**

**February 24, 2010**

**A. Email from Marianne Nelsen**

1. The 3-Acre Park at the north end of the development is being planned as a multi-use facility, with a level lawn area for festivals, farmer's market, small gatherings, and informal play. Two structures are planned for the park, one a combination restroom and open air picnic shelter with movable tables, a counter, and fireplace will provide for range of activities to support these types of events. In addition, a second structure is planned at the riverfront as an overlook and small gathering space, also open air, or possibly with a high canopy cover to provide some protection from the elements. The programming for events in the park will come from the City, but these facilities will provide the venue for a range of small, intimate gatherings.

**B. Email from Mark Eberlein, FEMA Region 10**

1. Thank you for the comments. The last sentence has been deleted as requested. See revised page 24.

**C. Email from Dick McManus**

1. Thank you for the comment. The Mayor and City Council will decide the appropriate time to construct improvements. Your comments will be provided to them.
2. Section 4.3.5 of the FEIS addressed "Potential Effects of Climate Change on Surface Water Elevations at the Everett Riverfront Development." A model was used to evaluate the impact at the Riverfront site of increases of sea level of 1, 3, and 5 feet. If sea level were to rise by 5 feet, it would raise the 100-year flood elevation at the site by inches, with the greatest rise occurring at the north end of the site near Pacific Avenue where the 100-year flood elevation would increase by just over 11 inches. The reason for these minimal changes is the influence the tides and tidal elevations have on flood elevations. The level of Puget Sound has a controlling effect on the flood elevations such that as the tidal elevation rises, river floods have less control on the water elevations in the tidally influenced areas. See Section 4.3.5 of the FEIS for additional detail.

A large portion of the site is in the floodplain of the Snohomish River. All structures described in the Public Amenities Master Plan will either be designed to withstand flooding, or will be elevated 2 feet above the 100-year floodplain of the river.

**D. Letter from Peggy Toepel, Everett Shorelines Coalition**

1. Table 2 in Addendum No. 2 represents the most current and up to date information. As the Public Amenities features are being refined, permit requirements change and/or become more certain.

To provide some clarification, the Department of Ecology requires an NPDES permit for stormwater discharges related to construction activities when one acre or more on a site is disturbed. Both tables list the sites that disturb one or more acres and would require this permit.

Table 2 in Addendum No. 2 includes a separate section that is related to fill associated with the restrictive covenants placed on the property in some areas related to contaminated fill. This approval is not related to the NPDES permit; it is a result of legal agreements related to the parcel.

Table 2 also lists BNSF permission as it has become clear that some work may occur within property controlled by BNSF.

2. All of the wetlands on the Riverfront site are in shoreline jurisdiction. Since the portion of the project sites in shoreline jurisdiction are greater than one acre in size, the development will be reviewed under Review Process IIIA (EMC 15.16). Preliminary wetland mitigation plans are submitted with the JARPA applications for shoreline permits. Staff reviews the reports and makes recommendations to the Hearing Examiner on conditions that should be applied to the project. In some cases the staff recommends compliance with the plans as proposed. In other cases, staff may recommend that the plans be revised to meet code requirements, or that additional detail is provided on some aspects prior to issuance of construction permits. At this stage, the public is encouraged to comment on the mitigation plans. A public hearing is held, public comment taken, and the Hearing Examiner issues a decision with the requirements for the project. Those requirements are forwarded to the Department of Ecology. After review by the Department of Ecology the Shoreline Substantial Development Permit goes into effect.

Prior to issuance of any construction permits, Planning staff review the construction drawings and final plans to make sure that the plans are consistent with the Shoreline Substantial Development Permit and code requirements, such as monitoring. The final approval by staff is a sign off on the construction plans.

3. Thank you for the comments.

**E. Letter from John Lindstrom**

1. Thank you for the comments.

**F. Email from Snohomish County Public Works Surfacewater Management**

1. The project will include compensatory fill removal for any fill placed in the floodway, as required by code and approved by permit.
2. Bank stabilization measures to address river bank erosion will be bioengineered using large woody debris and rootwads where possible to enhance habitat. Riparian plantings will be provided.
3. Final design of the wetland rehabilitation and enhancements to the Bigelow Creek will maximize habitat access by juvenile salmonids and habitat complexity to the extent practicable given funding considerations, regulatory requirements, and site constraints. Constraints identified in the addendum include property boundaries, existing easements, and other real property considerations, restrictive covenant areas, and potential conflicts with abandoned industrial facilities. In addition, the final site design will be influenced by as yet to be determined geotechnical studies and hydraulics and hydrologic studies.
4. Thank you for the comment. The project will use bioretention and infiltration to the extent that site conditions allow.
5. The City routinely communicates with Diking District 1 and Marshland Flood Control District and will continue to do so as appropriate.
6. Final design of shoreline habitat enhancements and any bank stabilization will consider the goals of the conservation plan and utilize applicable designs from other project examples to the extent possible. As you are aware, the lower Snohomish River is a complex system and the Everett Riverfront District is a complex site that has many unique constraints given the site's history as discussed in detail in the EIS and associated addenda. The site has potential conflicts and constraints associated with abandoned industrial facilities. In addition, the final shoreline restoration treatment will be influenced by as yet to be determined geotechnical studies and hydraulics and hydrologic analyses, and potential impacts to and from the adjoining federal navigational channel.
7. Refer to the response to comment #6 above in relation to considerations associated with shoreline enhancements. The City anticipates that implementation of the Public Amenities Master Plan, including proposed shoreline enhancements, will occur over a period of time as funding becomes available. Specifically in relation to the channel outlets, the City will include as much habitat complexity as is practicable given financial limitations and real property constraints. It should be noted that the City does not own the majority of the shoreline parcels in this area and will need to

negotiate agreements with the owner of the shoreline parcels (the State of Washington) to construct the planned enhancements. Additional shoreline restoration would require significant involvement by the State and the State has not indicated to the City that it has any specific plans for shoreline restoration or enhancements on State-owned lands adjacent to the Riverfront District. The City recognizes that a certain level of efficiency can be gained by completing as much of the shoreline restoration work as possible at one time and would welcome the opportunity to work with the State, the Forum, and the Technical Committee as it moves to implement the Master Plan to explore opportunities to coordinate projects.

8. Thank you for the recommendations. The City's floodplain regulations (EMC 19.30.050) require that nonresidential structures in the flood fringe area have the lowest floor elevated to two feet above the base flood elevation. Alternatively, the structures can be floodproofed so that (a) the structure is watertight with walls substantially impermeable to the passage of water below a level which is two feet above the base flood level, and (b) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and (c) be certified by a registered professional engineer or architect.

Everett's regulations are consistent with FEMA's requirements. Ecology audited Everett most recently through Ecology's Community Assistance Visit on July 9, 2009. The result of that effort was that the City was fully compliant with the National Flood Insurance Program (NFIP) and State floodplain regulations.

The Public Amenities Plan proposes to floodproof some structures and to elevate others. The group picnic area and parking in the 3-acre park, the adjacent sewer lift station, and the multipurpose building/interpretive center and parking in Lowell Riverfront Park are proposed to be elevated 2 feet above the 100-year floodplain elevation. All other structures would be floodproofed. Elevating the structures and parking areas allows them to be usable during flooding events and will reduce the City's long term costs for maintenance after flooding events.

On both sites, the parking is located to the west of the site, leaving the areas closest to the river usable for open space park purposes. In Lowell Riverfront Park, only a very narrow landscape strip would be provided between the BNSF property and the parking area. In the 3-acre park, the parking would be adjacent to the roadway access.

9. Comment noted. Specific bank treatments have not been identified at the Master Plan stage of design. Final shoreline stabilization treatment will be determined by as yet to be completed geotechnical studies and hydraulics and hydrologic analyses, potential impacts to and from the adjoining federal navigational channel, and the adjoining land use. To clarify the discussion, "fill" in the context used in this part of the Addendum is used in relation to its definition under city, state, and federal regulations and should not be interpreted to indicate a preference for a particular

stabilization approach. For example, many bioengineered stabilization techniques involve the placement of a soil matrix reinforced by biodegradable fabric and vegetation. Any treatment that involves the placement of unconsolidated material of any type along the shoreline would be considered “fill” under local, state, and federal regulations.

10. We assume this comment is related to the work in the North Wetland Complex. The current proposal to increase tidal exchange through construction of a limited number of small distributary tidal channels is based upon site analysis by ESA Adolfsen and the Department of Ecology, as partially documented in a memo from Ecology to the City included in Addendum No. 1 to the EIS. That information is also attached to this response. As noted in the memo, the design needs to be refined through additional modeling/engineering and third party review by local experts on estuarine ecosystems.
11. To clarify the discussion relative to this comment, none of the wetland restoration, mitigation, or enhancement areas are being designed to provide any level of stormwater treatment for any new impervious surface. In addition, the stormwater treatment wetland associated with Bigelow Creek is not intended to treat any new impervious surface or runoff from the proposed project. All stormwater treatment facilities proposed to treat project-generated runoff will be sized and designed to meet all appropriate standards.

The Bigelow Creek retrofit project is a wholly complete and separate project effort that has received a planning and design grant from the Department of Ecology. One purpose of the Bigelow Creek project is to provide some level of improvement in the quality of both existing baseflows and storm peak flows already flowing to Bigelow Creek. The retrofit project is not driven by any regulatory requirement, and has been included in Addendum No. 2 to allow the public a more comprehensive understanding of planned projects on the site. As with other elements of the Public Amenities Master Plan, it will be constructed in phases as funding and other resources allow.

In response to the comment, the level of treatment is entirely limited by hydraulic and hydrologic constraints, available space, and regulatory constraints relative to wetland impact and mitigation standards per City of Everett Shoreline Management Act code. There is simply not enough space to create enough volume to treat all flows from the contributing basin. The City is planning to design a system that maximizes treatment area and volume in the space available. Site constraints include: (1) being situated low in the drainage basin with high groundwater, (2) the BNSF rail corridor to the west, and (3) numerous jurisdictional wetlands to the north, east, and south. Further, the entire site is within the 100 year floodplain of the Snohomish River. With these constraints, there is not room for sufficient volume to meet prescriptive design standards of the 2005 Ecology Manual or similar.

The City intends to design the treatment wetland to maximize treatment provided within the available area. The City is proposing a system that will be designed to convey all flow from Bigelow Creek through the constructed wetland. At high stormflows, we expect that retention time, and therefore treatment capacity, will be limited. However, since all flow will be directed through the treatment wetland, we anticipate at least some level of treatment occurring during most flows. Initial modeling has shown that as long as water in the adjoining floodplain does not exceed the elevation of the berm around the constructed wetland, flows to and in excess of a 100-year event in the Bigelow Creek basin will pass through the treatment area. At these volumes, retention time will be very low and treatment will be minimal.

All new development in the surrounding area will be required to comply with the new State and local stormwater regulations.

12. The issue of connections to the river are generally addressed in the responses to comments 6 and 7 above. The potential connection points to the river are constrained by the same conditions that affect the type and location of shoreline enhancements, the most significant being property ownership, conflicts with foundations of prior industrial facilities, and existing and proposed land uses. In addition, topography is a significant limiting factor in connecting wetland areas and the river. Under the existing condition, Wetland C (the north wetland complex) has not been artificially disconnected from the river. Elevations in the wetland are, and appear to have historically been, in the range of 10 to 12 feet in elevation (project datum). Existing wetland surface elevations within the South and East wetland complexes are generally between 12 and 15 feet. Mean Higher High Water in this portion of the river is generally between 9 and 10 feet. Therefore, meaningful tidal influence beyond the limited network of wetland channels can only be accomplished through extensive excavation within the existing riparian wetlands. In the instance where existing wetlands provide limited function (such as in Wetland N and D in the South Wetland Complex), the City is proposing to do this; however, the City, in consultation with the Department of Ecology, Corps of Engineers, and WDFW, have determined that this level of modification is not warranted within Wetland C (North Wetland Complex). The proposed layout for wetland enhancements within Wetland C was developed based on a conceptual plan prepared by the Department of Ecology where the intent was to enhance the potential for tidal exchange within lower functioning areas of the complex, while preserving areas with higher existing ecologic value.
- 13 Thank you for the recommendations. The City, Department of Ecology, and appellants of Everett's Shoreline Master Program (SMP) completed a comprehensive analysis of required buffers for properties in Everett's shoreline jurisdiction when the SMP was updated. The analysis looked at existing buffer conditions, and actions other than larger buffers to improve wetland and buffer functions. Where buffers are highly disturbed along the Snohomish River bank, the SMP allows buffer reductions down to 50 feet when the buffers are enhanced to

provide better functions. Public access is allowed to be in the buffers where it will not result in significant adverse impacts. The SMP added conditions for specific sections of the shoreline to ensure adequate buffers are provided to maintain and improve wetland and stream functions.

Existing buffers on much of the Riverfront site are limited and degraded from past development. Enhanced plantings along the river's edge, along with the wetland, stream, and buffer restoration / enhancements will result in much larger areas of vegetated open space along the vast majority of the site. For example, the Bigelow Creek restoration area and North Wetland Complex provide large vegetated spaces adjacent to the River. The open space between the Simpson Pad and the Snohomish River is approximately 200 feet wide, with an existing trail and additional proposed public access improvements. Towards the northeast corner of the Simpson Pad and along the south side of the North Wetland Complex, the existing trail will be relocated further from the River/wetland to provide additional buffer enhancements. The proposed restoration work in the North Wetland Complex (Wetland C) is also required mitigation in order to compensate for smaller buffers adjacent to Wetland C.

Overall buffers and open spaces adjacent to the River on the public amenities portion of the site will far exceed 50 feet in width. The enhanced buffers and wetland / stream restorations on the site should result in improved ecological conditions over what currently exists on the site.

14. Detailed hydraulic analysis will be done in order to inform final design. The Public Amenities Master Plan and early schematic level design concepts for the Bigelow Creek crossing identify this as a bridge which is the most desirable option.
15. We agree that Sitka spruce is an appropriate tree for planting on portions of the Riverfront site. This Addendum clarifies that plantings on the site will include a wide variety of native plantings, including but not limited to, the additional plantings listed in Appendix N to the Snohomish River Basin Salmon Conservation Plan. Planting designs will be based on site elevations, hydrology, and other applicable site conditions.
16. More engineering evaluation is necessary to determine the best solution to address the bank erosion occurring at the existing Lowell Riverfront Park. The plan calls for more planting of native trees and shrubs along this reach, as well as leaving accessible some areas of the bank where the public can gain access for fishing. Planning for this segment will require both protection of the riverbank from erosion as well as enhancement of portions of the riverbank for safer use by the public, which will clearly be a challenge. Bioengineering techniques are preferred over the use of rip rap or sheet pile, but final design will be dependant on evaluation of river bathymetry and flows as well as soil conditions. The plan for surfacing the parking lot will address storm drainage, and may provide the opportunity to control surface run-off where it currently causes surface erosion on the riverbank.

17. The City is not working under the assumption that beavers should or even could be eliminated from the site. Water level monitoring has shown that existing beaver dams currently limit tidal exchange in the wetland. Presently there is a single main outlet to the river under normal flow conditions. The City only proposes to remove a few of the smaller dams along the main channel that are in conflict with the proposed channel enhancements to increase tidal exchange (see response to comment 12). The City expects that over time beavers will build new dams within the wetland; however, the expectation is that the larger channel network will allow for a more dynamic system.
18. The City is definitely willing to discuss the concept of working with the Port, County and Tulalip Tribes to create an estuary-wide monitoring bank.
19. We agree that monitoring and maintenance plans need to be developed for the wetland and riparian areas. The City's SMP requires a minimum 5 years monitoring and maintenance for buffer restoration, and a minimum of 10 years monitoring and maintenance for wetland mitigation projects. (EMC 19.33D.090.A.32, 33, 35a(10-12), and 35b.(8). Preliminary monitoring and maintenance plans are typically provided at time of application for shoreline substantial development permits, and final plans submitted with the construction permit applications.
20. Thank you for the comment. The SEWIP and SEWIP SO have been added to the list on page 81.
21. Thank you for the comments.

**G. Letter from Rick Hunter**

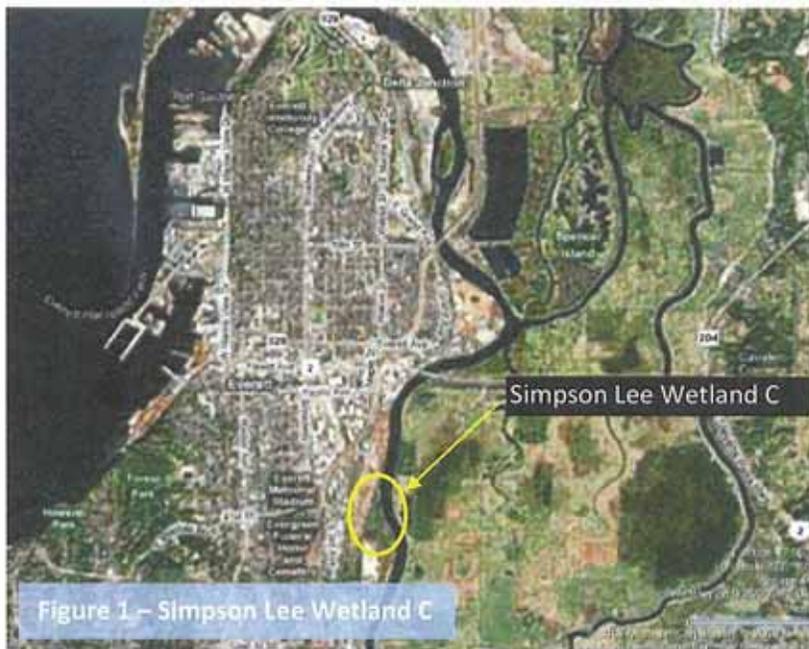
1. The planting proposed for the project will build upon and expand the current efforts by the City of Everett to supplement existing vegetation along the Snohomish shoreline with native trees and shrubs. Preservation and enhancement of native plantings throughout Wetland C and at strategic points along the Snohomish River are planned. New plantings along the expanded trail system will be selected to blend with native, non-invasive vegetation, and provide buffer between the river and adjacent commercial and residential development. With more natural plantings, the intent is to both minimize the high cost of maintenance of non-native plantings and provide a pleasant environment for the park user.

September 26, 2008

To: Dave Koenig, Dave Davis and Mary Cunningham

From: Stephen Stanley, Paul Anderson and Erik Stockdale

RE: Information to Assist Amending City of Everett/DOE MOU for Restoration Goals at Simpson Lee Wetland C



At our September 10<sup>th</sup>, 2008 meeting with the City of Everett, it was generally agreed that it was not desirable to undertake extensive dredging within the Simpson Lee Category 1 wetland, Wetland C, (See Figure 1) or remove the adjoining shoreline berm (overgrown railroad trestle) in order to achieve dendritic channel formation. The City requested that we assist them in drafting new language for the revised Wetland C MOU addressing restoration goals and objectives for this wetland. Based on a September 19, 2008 site visit by the memo authors to Wetland C, and preliminary discussion with Si

Simenstad of the University of Washington, the following goals and objectives are recommended:

- 1) Goal 1 – Re-establish, over a 50 year period, a tidally influenced forested, scrub-shrub and emergent marsh similar to Otter Island.
- 2) Goal 2 – Increase tidal exchange within the wetland through construction of a limited number of strategically located “distributary” tidal channels. Figure 2 presents the preliminary location of these channels which should be refined through additional modeling/engineering and third party review by local experts on estuarine ecosystems. These channels are intended to distribute tidal waters throughout the wetland and not to generate sufficient tidal prism to initiate formation of dendritic tidal channels. The channels should be large enough to be self maintaining. This should include:
  - a. Extending existing channels through the marsh and out again to the Snohomish River in order to create a flow-through distributary channel system.
  - b. Broaden the mouths of existing channels through the shoreline berm.
  - c. Remove old channel blocks in the main east-west channel (see Figure 2).

9/26/08

- d. Extend distributary channel into the southwest corner of Wetland C which is presently dominated by cattails.
- 3) Goal 3 – Create small planting islands, using dredge spoils from the new channels to establish forested (e.g. Sitka Spruce and Cedar) and scrub-shrub (black twinberry, ninebark, dogwood, willows) wetland communities.

### Discussion of Basis for Goals

The elevations in Wetland C are reported by ESA Adolfson as ranging from 9 to 11 feet NAVD88. Wetland researchers have found that most intertidal vascular emergent species occur primarily between mean lower high water and mean higher high water (MHHW) (Lewis 1982). Based on the NOAA tidal station at Marysville (Figure 3), MHHW in the Snohomish Estuary is reported to be 11.59 ft. (MSL Datum) or 9.17 ft NAVD88. This elevation is similar to the forested, shrub-shrub and emergent marsh present on Otter Island (9.48 ft NAVD88 – City of Everett et al., 1997). Further, the 1884-1885 Government Land Office topographic sheets (T-Sheets) show this wetland area as being forested (Figure 4) and historical research by Brian Collins (Collins et al. 2003) identifies the site as a riparian tidal forested wetland in the 1800's. Therefore, it appears feasible to re-establish a forested tidal marsh in the Wetland C over several decades.

Because hydrology is key to re-establishing a tidal forested wetland community, we evaluated the water levels relative to the adjacent marsh surface in Wetland C during a 7.78 ft (NAVD 88) tide (10.2 ft MSL) on September 19, 2008. Table 1 presents the location of the sampling points and elevation of water below marsh surface.

During this site visit, we observed numerous small channels that were flooded within 9" to 14" of the adjacent marsh surface. This would indicate that the marsh soils (clay loam), through capillary action, would be saturated to the surface during a tide that is less than a MHHW tide (9.17 ft NAVD88). Tidal flooding appeared to extend up the main channel to the Powerline Channel (Figures 5 and 2). In discussions with Si Simenstad, distributary channels, and not dendritic, are most commonly found in a marsh of this elevation (personal communication 9/15/08). The volume of dredging needed for small distributary channels (3' wide by 3' in depth) was estimated at 1,266 cubic yards based on the conceptual restoration design (Figure 6).

Table 1 – Water Level and Marsh Elevation Sampling in Simpson Lee Wetland, Sept 19, 2008 on a 7.78 NAVD Tide (9:00 AM)

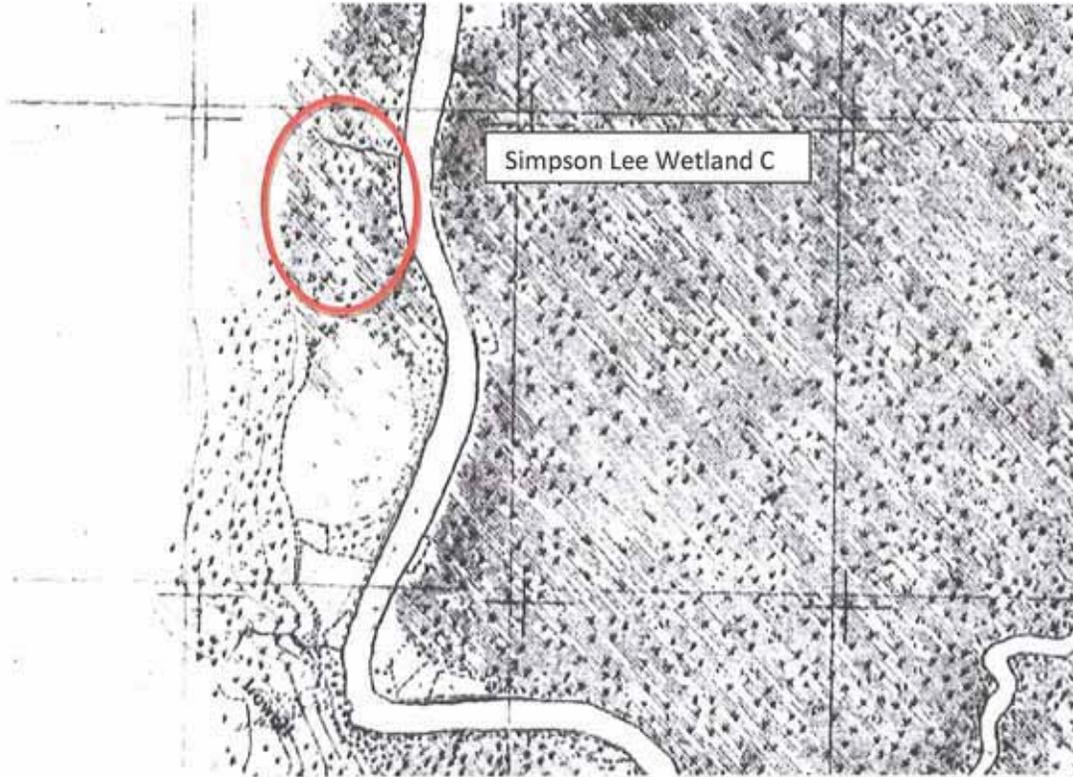
Station	Vertical Distance from Water Level Surface to Adjacent Marsh Surface	Time of Sampling	Dominant Vegetation
Channel 3 Mouth	27"	9:41 AM	Dogwood, Willow, Cottonwood
Beaver Channel 2	14"	10:12 AM	Reed Canary Grass, Cattails, Black Twinberry, Dogwood, Skunk Cabbage
Power Line Channel	9"	10:45 AM	Reed Canary Grass, Skunk Cabbage, Black Twinberry



Figure 2. Proposed Conceptual Restoration Actions based on goals presented in this memo.

While we realize that our analysis of the necessary excavation is very preliminary, we believe it confirms that re-establishing tidal flows within Wetland C is technically feasible and economically viable. This large wetland, identified by the City as a priority for restoration (City of Everett and Pentec Environmental 2001), offers one of the best opportunities for meaningful wetland and off-channel restoration along the lower mainstem of the Snohomish River. We look forward to a continuing collaboration on the restoration of Wetland C and are happy to assist the City however we can in achieving that restoration.





GLO T-Sheet, Snohomish River, 1884-1885

Figure 4. Government Land Office T-Sheet for project site.

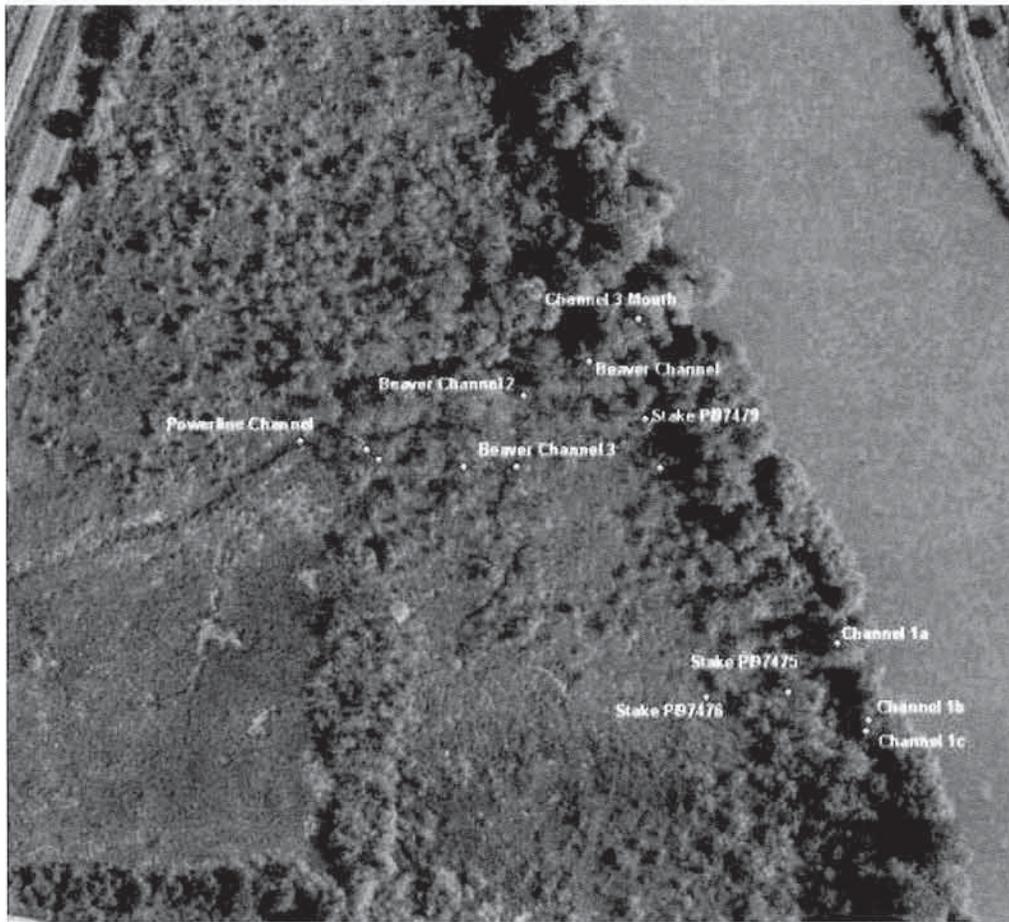


Figure 5. Approximate location of sampling points for water level elevations taken on September 19, 2008 by Department of Ecology.

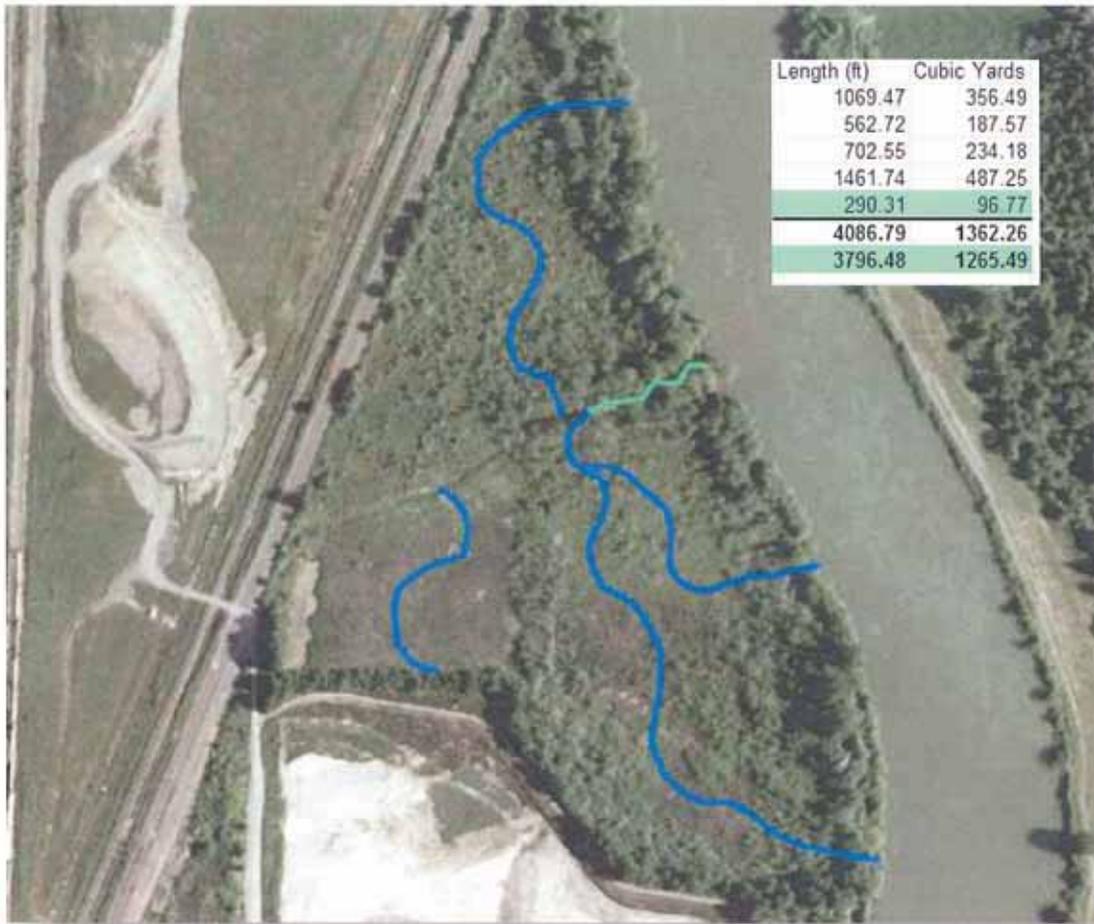


Figure 6. Potential restoration channels, Wetland C Simpson Lee site and calculated excavation quantities.

Note: The turquoise reach shown in Figure 6 and shaded rows on the table show the stream length and estimated volume of excavation for this reach. Excavation of this may not be necessary to achieve tidal circulation and the last shaded row in the table shows the stream length and volume of excavation if this reach is not included in the totals.