

**Highway 101 Jimmycomelately Estuary (Eng Property)
Mitigation Site**

USACE NWP (27) 200500512

Olympic Region

2015 MONITORING REPORT

Wetlands Program

Issued March 2016



**Washington State
Department of Transportation**

Environmental Services Office

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Highway 101 Jimmycomelately Estuary (Eng Property) Mitigation Site

USACE NWP (27) 200500512



General Site Information	
USACE NWP 27 Number	200500512
Mitigation Location	US 101, Jimmycomelately Creek, Blyn, Clallam County
LLID Number	1230053480221
Construction Date	2005-2006
Monitoring Period	2006-2015
Year of Monitoring	10 of 10
Area of Project Impact	0.69 acre ¹
Type of Mitigation	Tidal basin restoration, Stream Relocation, Wetland Establishment
Available Area of Mitigation	1.83 acres ²

¹ This is an advanced mitigation site. The 0.69 acre of impact is from the Blyn Passing Lanes project.

²The site provides 3.00 acres of mitigation. Of those 3.00 acres, 1.17 acres was needed to mitigate for the Blyn Passing Lanes project impact.

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Summary of Monitoring Results and Management Activities (2015)

Performance Standards	2015 Results ³	Management Activities
A functioning hydrological connection shall be restored and self-maintaining between JCL and the estuary.	Present	
80% or more of the Large Woody Debris (LWD) placements should be present in Years 1-10.	Not assessed in 2015.	
The natural recolonization of estuarine vegetation shall be documented with photo points and general site observations, including a plant list.	See Appendix 2 for photos and Appendix 3 for plant list	
Native woody vegetation in the buffer will achieve a minimum of 75% aerial cover.	87% cover (CI _{80%} = 79-95%)	
Noxious weeds will not exceed 20% aerial cover over the entire site. The site shall contain less than 5% aerial cover by Canada thistle (<i>Cirsium arvense</i>), bull thistle (<i>Cirsium vulgare</i>), Scotch broom (<i>Cytisus scoparius</i>), purple loosestrife (<i>Lythrum salicaria</i>), reed canarygrass (<i>Phalaris arundinacea</i>), common reed (<i>Phragmites australis</i>), Bohemian knotweed (<i>Reynoutria X bohemica</i>), Japanese knotweed (<i>Reynoutria japonica</i>), Himalayan knotweed (<i>Reynoutria polystachyum</i>), giant knotweed (<i>Reynoutria sachalinensis</i>), and smooth cordgrass (<i>Spartina alterniflora</i>).	Less than 5% cover	Weed control activity occurred on 3/25 and 7/21 in 2015.

Report Introduction

This report summarizes final-year (Year-10) monitoring activities at the United States (US) 101 Jimmycomelately Mitigation Site. Included are a site description, the performance standards, an explanation of monitoring methods, and an evaluation of site success. Monitoring activities included vegetation surveys, photo-documentation, and assessments of wetland hydrology on August 31 and September 23, 2015, and a wetland delineation on March 30, 2015 (see Appendix 4 for delineation results).

³ Estimated values are presented with their corresponding statistical confidence interval. For example, 87% cover (CI_{80%}= 79-95%) means we are 80% confident that the true aerial cover value is between 79% and 95%.

What is the SR 101 Jimmycomelately (JCL) Estuary Mitigation Site?

This 6.34-acre mitigation site (Figure 1) consists of tidal basin restoration, creek channel relocation, and wetland establishment. The mitigation site provides advanced mitigation for 0.69 acre of anticipated wetland impacts. This mitigation effort is part of a large collaborative project to restore lower Sequim Bay and JCL Creek. Mitigation site goals include restoration of the JCL Creek channel and estuary for waterfowl, shorebirds, shellfish, juvenile salmon, and the ESA-listed Hood Canal summer chum (*Oncorhynchus keta*).

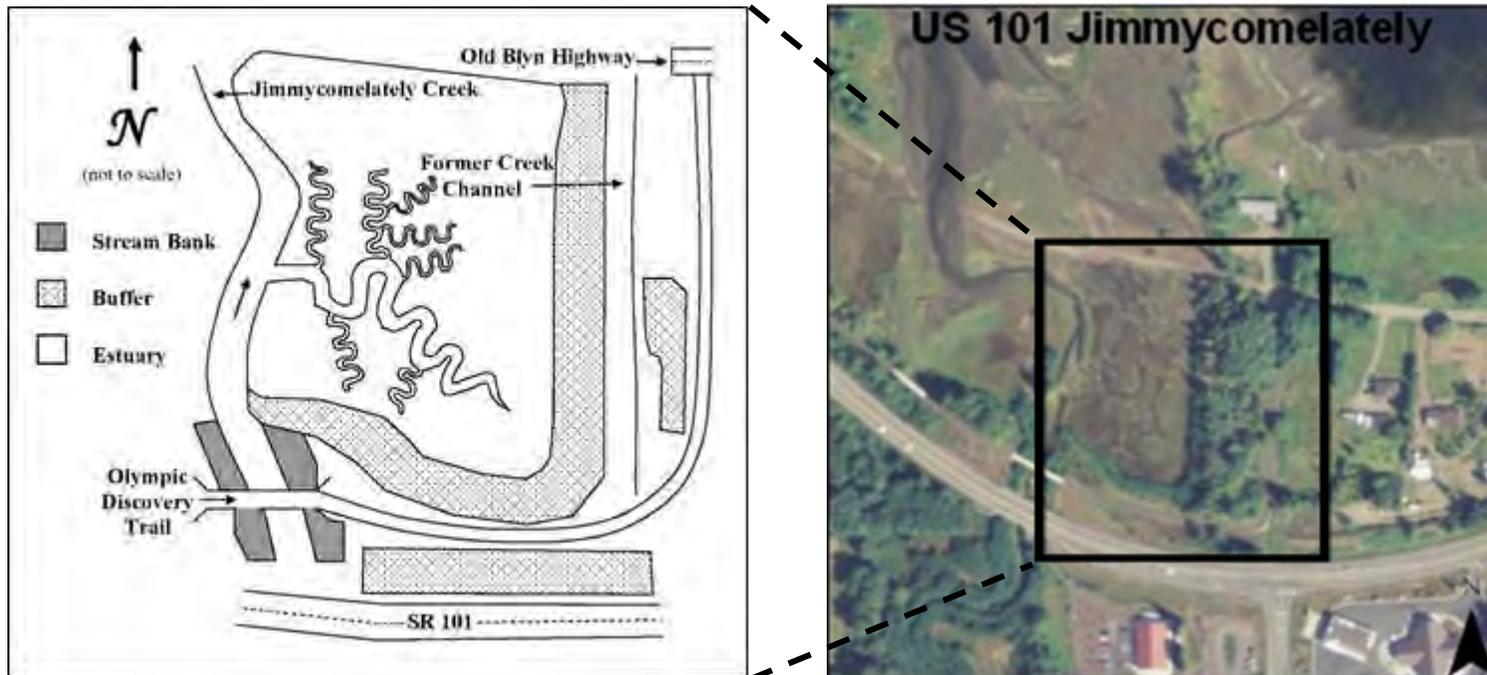


Figure 1 Site Sketch

The site is located along US 101 on the north side of the replacement bridge spanning JCL Creek. Wetland buffer surrounds the tidal basin with sinuous channels connecting to JCL Creek. Directions to the site are in Appendix 2.

What are the performance standards for this site?

Year 10

Performance Standard 1

A functioning hydrological connection shall be restored and self-maintaining between JCL Creek and the estuary.

Performance Standard 2

Eighty percent or more of the LWD placements should be present in Years 1-10.

Performance Standard 3

The natural recolonization of estuarine vegetation shall be documented with photo points and general site observations, including a plant list.

Performance Standard 4

Native woody vegetation in the buffer will achieve a minimum of 75 percent aerial cover.

Performance Standard 5

Noxious weeds will not exceed 20 percent aerial cover over the entire site. The site shall contain less than five percent cover by Canada thistle, bull thistle, Scot's broom, purple loosestrife, reed canarygrass, common reed, Bohemian knotweed, Japanese knotweed, Himalayan knotweed, giant knotweed, and smooth cordgrass.

Appendix 1 shows the planting plan (Beall 2005)

How were the performance standards evaluated?

WSDOT staff visually confirmed a hydrologic connection (Performance Standard 1) and performed a wetland delineation using methods described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0) (USACE 2010) and a Global Positioning System (Trimble Mapping Grade). The tables below document the sampling methodology utilized for performance standards (PS) 4 and 5. For additional details on the methods see the [WSDOT Wetland Mitigation Site Monitoring Methods Paper](#) (WSDOT 2008).

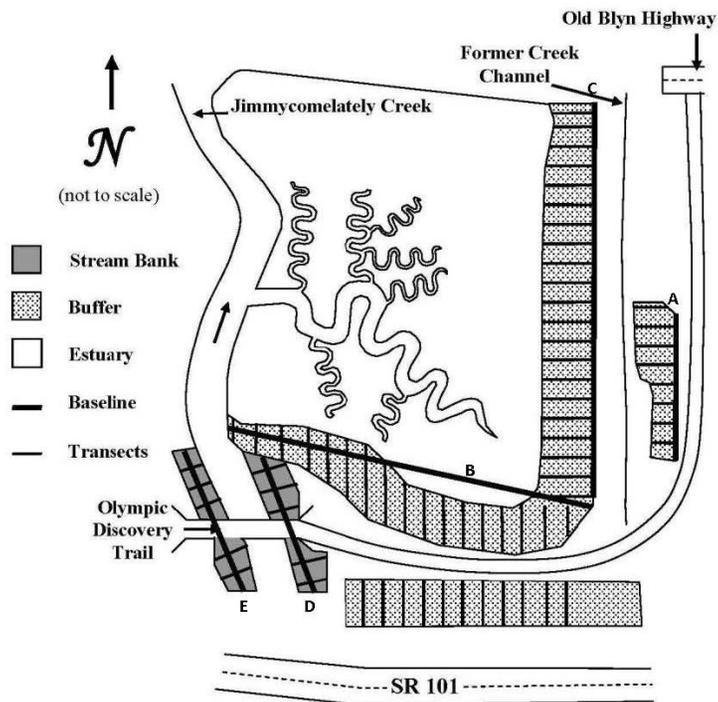


Figure 2 Site Sampling Design (2015)

Placement of Baseline: Section A was placed on the east side of the east outer buffer. Section B was placed on the north side of the portion of the inner buffer running east to west. Section C was placed along the east side of the inner buffer. Section D was placed through the middle of the east riparian buffer. Section E was placed through the middle of the west riparian buffer. Seventeen transects were placed systematically throughout the segmented baseline.

Segmented Baseline Lengths: A: 59m, B: 71m, C: 128m, D: 29m, E: 41m

	PS 4	PS 5
Attribute	Cover	Cover
Target pop.	Native Woody	Invasive Species
Zone	Buffer	Entire Site
Sample method	Line-intercept	Qualitative
SU length	10 m	NA
SU width	NA	NA
Points per SU	NA	NA
Total # of SU	17	NA

Is this site a success?

This site is successful. All but one of the final-year (Year-10) performance standards are being met. The hydrological connection between the estuary and Jimmycomelately creek remains unobstructed and was observed at the time of monitoring.

The vegetation communities on the site are thriving. The estuary has been naturally recolonized by a predominantly native herbaceous community. A total of 26 species provide an estimated cover of 90 percent within the estuary (Appendix 3). The buffer with the addition of volunteer red alder (*Alnus rubra*) has developed into a dense community.

The large woody debris (LWD) present on site is likely less than the required 80 percent of the original LWD placed on site. Impacting the estuary to add additional LWD to the site does not seem appropriate. The estuarine plant community is so well established with native emergent salt marsh species that the equipment needed to replace LWD to achieve the performance standard would have a negative impact on the estuarine plant community. Impacting the estuarine plant community to replace LWD in this dynamic tidal system may be counterproductive to the development of the site on a whole.

Results for Performance Standard 1

(Maintain a hydrological connection between Jimmycomelately Creek and the associated estuary):

A functioning connection was observed at the time of monitoring with no fish stranding (Photo 1). Salmon were observed swimming upstream in the creek.

Results for Performance Standard 2

(80% of the LWD placements present):

This was not assessed this year as no additional LWD was added to the site. 2012 data indicated that 70 percent of the LWD placements were present. This standard is still not being met; however, replacing the LWD could negatively impact the estuarine vegetation community, and thus the development of the site as a whole. LWD was observed throughout the estuary during 2015 monitoring. Although the LWD pieces likely have floated and redistributed during high tides, all were observed to be scattered evenly throughout the estuarine wetland where they do not pose a threat to infrastructure, properties, or to the channel morphology.



Photo 1
JCL Creek (September 2015)

Results for Performance Standard 3

(Document estuarine vegetation with photo points, site observations, and a plant list):

Twenty-six salt and freshwater tolerant plant species provide an estimated 90 percent cover (Photo 2). Twenty of the 26 herbaceous species observed are native. Seventeen species are salt-tolerant (Hutchinson 1988). See Appendix 3 for a list of species recorded, and Appendix 2 for photo points.

Results for Performance Standard 4

(Native woody vegetation in the buffer will achieve 75% cover):

Cover of native woody vegetation in the buffer is estimated at 87 percent (CI_{80%}= 79-95%) (Photo 3). Dominant species include red alder, Scouler's willow (*Salix scouleriana*), and Pacific willow (*Salix lasiandra*).

Results for Performance Standard 5

(Less than 20% cover noxious weeds across the entire site and less than 5% cover by specific species):

Cover of noxious weeds across the site is qualitatively estimated at less than five percent. Reed canarygrass and Himalayan blackberry were observed in the buffer with less than one percent cover. Narrowleaf cattail (*Typha angustifolia*), reed canarygrass, Canada thistle, and climbing nightshade (*Solanum dulcamara*) were observed in the wetland with less than five percent cover.



Photo 2
Estuarine vegetation (September 2015)



Photo 3
Native woody cover in the buffer (September 2015)

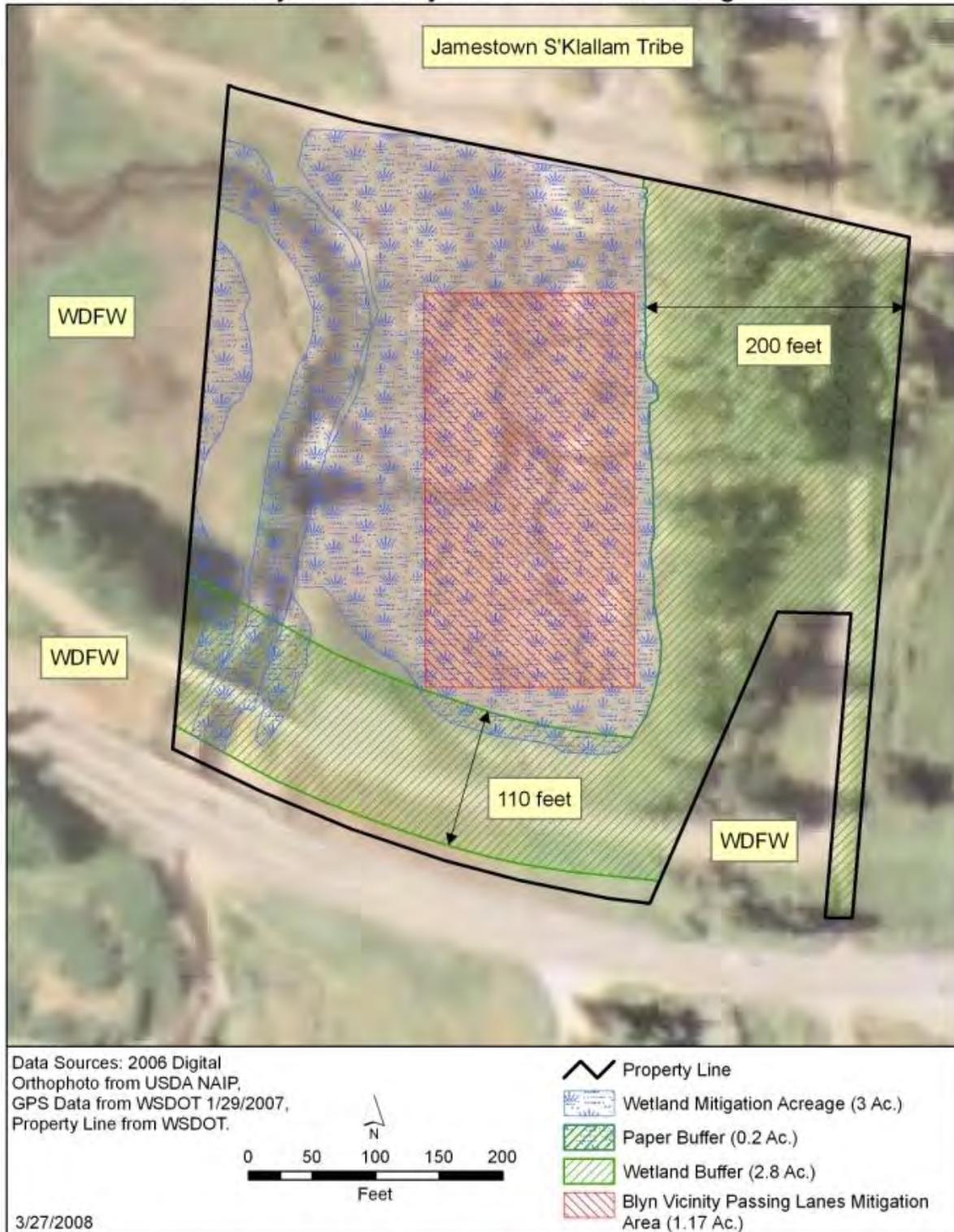
What is planned for this site?

The region has plans to continue weed control on an as needed basis

Appendix 1 – Planting Plan

(from Beall 2008)

SR 101 Jimmycomelately Creek Wetland Mitigation Area



Appendix 2 – Photo Points

The photographs below were taken from permanent photo-points on September 23, 2015 and document current site development.



Photo Point 1-1



Photo Point 1-2



Photo Point 1-3



Photo Point 1-4



Photo Point 1-5



Photo Point 2-1



Photo Point 2-2



Photo Point 2-3



Photo Point 2-4



Photo Point 2-5



Photo Point 3-1



Photo Point 3-2



Photo Point 3-3



Photo Point 3-4



Photo Point 3-5/6



Photo Point 3-7



Photo Point 4-1



Photo Point 4-2



Photo Point 4-3/4



Photo Point 4-5



Photo Point 5-1



Photo Point 5-2



Photo Point 5-3



Photo Point 5-4



Photo Point 5-5

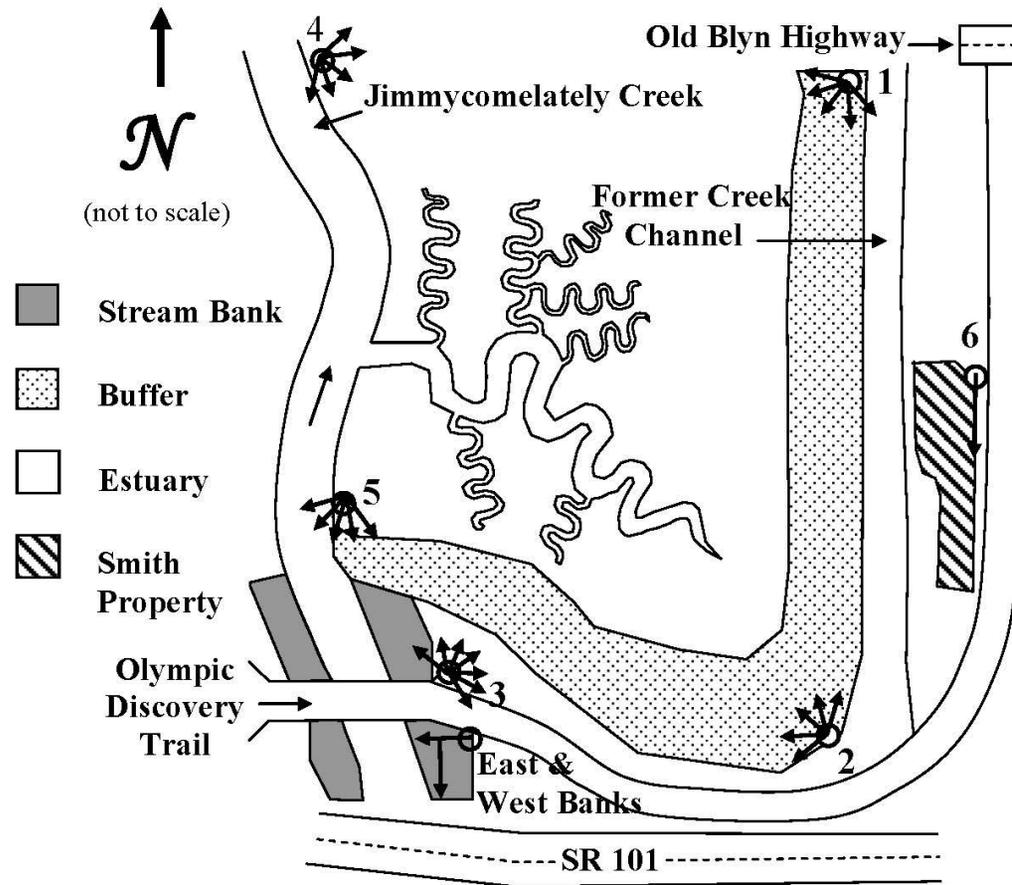


Photo Point 6-1



Photo Point 6-2

Photo Point Map



Driving Directions:

From I-5, take highway 101 North. In Blyn, take a right on Blyn Xing, then a left on Old Blyn Highway. Pull to the end of the road and park in front of the road block.

Appendix 3 – Data Table

Table 1 - Species Observed in Tide Flat at Jimmycomelately (September 2015)

Scientific Name	Common Name	Old Wetland Indicator Status	Nativity	Salt Tolerance
<i>Agrostis stolonifera</i>	creeping bentgrass	FAC	Non-native	unknown
<i>Atriplex patula</i>	spear saltbush	FACW	Native	Very tolerant
<i>Bolboschoenus maritimus</i>	seacoast bulrush	OBL	Native	Very tolerant
<i>Carex lyngbyei</i>	Lyngbye's sedge	OBL	Native	Tolerant
<i>Cotula coronopifolia</i>	common brassbuttons	FACW+	Non-Native	Very tolerant
<i>Distichlis spicata</i>	inland saltgrass	FACW	Native	Very tolerant
<i>Eleocharis acicularis</i>	needle spikerush	OBL	Native	Tolerant
<i>Eleocharis palustris</i>	common spikerush	OBL	Native	Moderately tolerant
<i>Elymus repens</i>	quackgrass	FAC-	Non-native	Moderately tolerant
<i>Epilobium ciliatum</i>	fringed willowherb	FACW	Native	unknown
<i>Grindelia integrifolia</i>	Puget Sound gumweed	FACW	Native	Very tolerant
<i>Holcus lanatus</i>	common velvetgrass	FAC	Non-Native	Sensitive
<i>Juncus articulatus</i>	jointleaf rush	OBL	Native	Sensitive
<i>Juncus bolanderi</i>	Bolander's Rush	OBL	Native	unknown
<i>Juncus effusus</i>	soft rush	FACW	Native	Sensitive
<i>Plantago maritima</i>	goose tongue	FACW+	Native	Very tolerant
<i>Polypogon monspeliensis</i>	annual rabbitsfoot grass	FACW	Non-Native	Moderately tolerant
<i>Potentilla anserina</i>	Silverweed cinquefoil	OBL	Native	Moderately tolerant
<i>Puccinellia nuttalliana</i>	Nuttall's alkaligrass	FACW+	Native	Very tolerant
<i>Salicornia depressa</i>	pickleweed	OBL	Native	Very tolerant
<i>Schoenoplectus acutus</i>	hardstem bulrush	OBL	Native	Moderately sensitive
<i>Scirpus microcarpus</i>	small-fruited bulrush	OBL	Native	Sensitive

Table 1- Continued

Scientific Name	Common Name	Old Wetland Indicator Status	Nativity	Salt Tolerance
<i>Spergularia canadensis</i>	Canadian sandspurry	FACW	Native	Very tolerant
<i>Triglochin maritima</i>	seaside arrow-grass	OBL	Native	Very tolerant
<i>Typha angustifolia</i>	narrowleaf cattail	OBL	Non-Native	Tolerant
<i>Typha latifolia</i>	broadleaf cattail	OBL	Native	Sensitive

Appendix 4 – Wetland Delineation

WETLAND DELINEATION REPORT

US 101 Jimmycomelately Estuary Mitigation Site

US 101 Blyn Vicinity Passing Lanes
USACE (NWP 27) 200500512
Ecology WQC Order 5561

Clallam County, Washington

Prepared by:
Tatiana Dreisbach
WSDOT Environmental Services Office
Olympia, Washington

January 2016



Washington State
Department of Transportation

Introduction

This report was prepared by the Washington State Department of Transportation (WSDOT) to describe the wetland boundary delineation for the US 101 Jimmycomelately Estuary mitigation site. Field work was conducted by WSDOT wetland biologists Tatiana Dreisbach and Tony Bush, on March 30, 2015. The delineation identifies a total of 3.14 acres of wetland within the mitigation site boundaries and an additional 0.2 acres of wetland occurring in the regulatory buffer (paper buffer) areas of the site. The 3.14 acres includes a 0.2 acre reach of the Jimmycomelately Creek channel occurring beyond the regulatory buffer and within the mitigation site boundary.

General Information for the US 101 Jimmycomelately Estuary mitigation site		
Location:	S12, T29N, R3W. Clallam County. (Vicinity map, Figure 1)	
	USACE NWP 27 Number	200500512
	Long./Lat. ID Number	1230053480221
	Land Resource Region (LRR)	A
	Major Land Resource Area (MLRA)	2
	Construction Date	2005 - 2006
	Monitoring Period	2006 - 2015
	Year of Monitoring	10 of 10 (in 2015)
Project Impacts¹	0.69 acre	
Type of Mitigation	Required Acreage	2015 Delineated Acreage
Advance intended wetland mitigation including steam channel	1.83	1.74
Blyn Vicinity Passing Lanes mitigation	1.17	1.17
Excess beyond intended wetland mitigation	n/a	0.23
Totals	3.00	3.14
Paper buffer	0.20	0.20

¹ Project impact numbers from US 101 Blyn Vicinity Passing Lanes Wetland Mitigation Plan Addendum (WSDOT 2008). The US 101 Jimmycomelately Estuary Mitigation Site is advance mitigation for several projects and anticipated impact numbers of up to 0.97 acre are based on proposed projects. The US 101 Blyn Vicinity Passing Lane Project has been completed with 0.69 acre permanent impacts and debited 1.17 mitigation acres from the US 101 Jimmycomelately Estuary Mitigation Site.

Location

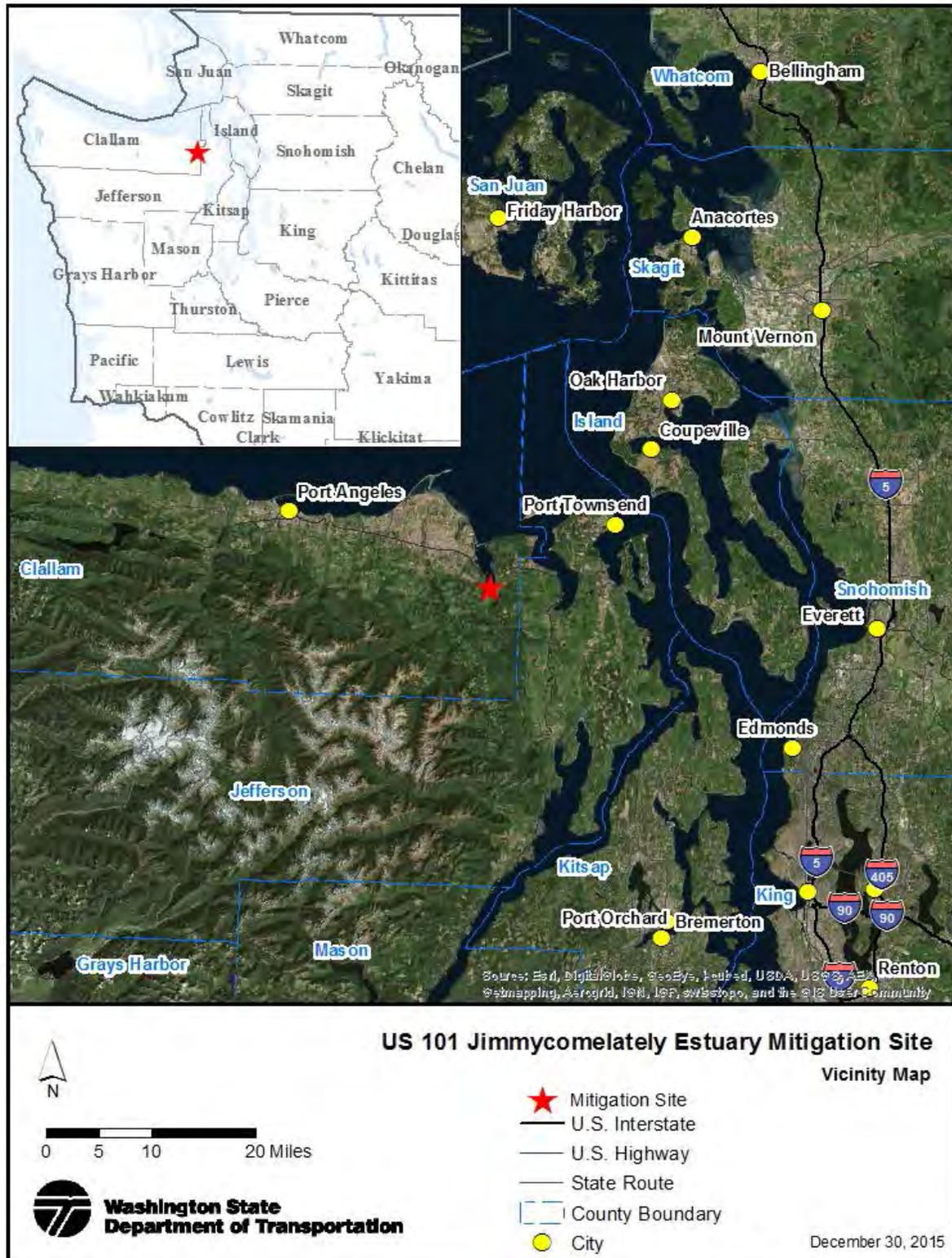


Figure 1. Vicinity Map

Methods

Wetland boundaries within the US 101 Jimmycomelately Estuary mitigation site were delineated using routine methods described in the:

- Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987),
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010)

Wetland boundaries were delineated based on on-site observations of hydrology, soils, and plant communities, in conjunction with background information.

A Global Positioning System (GPS) Trimble GeoXT mapping grade unit was used to record the wetland boundaries and sampling point locations (Figure 2). Wetland boundary points were recorded at regular intervals and at any change in direction along the boundary.

Wetland Delineation and Study Area

Study Area

Wetlands described in this report were assessed only within the wetland mitigation site boundary (Figure 2). The mitigation site is contiguous with a larger estuarine wetland at the mouth of Jimmycomelately Creek.

Wetlands

The US 101 Jimmycomelately Estuary mitigation site is dominated by estuarine emergent (EEM) wetland communities where Jimmycomelately Creek enters Sequim Bay. The EEM community has developed a diversity of salt-tolerant emergent species which are predominantly native. Young palustrine forested (PFO) plant communities are also present in several small pocket on the mitigation site. Sinuous channels cut through the estuary between the higher flat terraces of the estuary and provide habitat form many aquatic species including juvenile salmonid habitat. Large woody debris piles further add habitat complexity to the site.

The delineation determined 3.14 acres of wetland were present within the US 101 Jimmycomelately Estuary mitigation site. Delineation data were collected at six sampling points and recorded on wetland determination data forms (Appendix A). Paired wetland and upland sample points were used to define the wetland edge. Additional wetland sample points characterize various wetland vegetation communities. Data recorded on wetland determination data forms characterize typical wetland and upland conditions observed on site. Vegetation, soils, and hydrology were examined in many additional sampling locations to determine the wetland boundary.

Precipitation

The Regional Delineation Supplement Version 2.0 (USACE 2010) recommends using methods described in Chapter 19 in *Engineering Field Handbook* (NRCS 1997) to determine if precipitation occurring in the three full months prior to the site visit was normal, drier than normal, or wetter than normal. Actual rainfall is compared to the normal range of the 30-year average. When considering the three prior months as a whole, wetter than normal precipitation conditions were present prior to field work. Each of the three months prior to field work were wetter than normal (Appendix B-1).

Light to moderate precipitation was recorded in the ten days preceding field work (Appendix B-2).

Growing Season

The following evidence of the growing season was observed at the time of the delineation:

- New vegetative growth was present on many herbaceous plants.
- Leaves on most woody species were partially or fully emerged.



Digital Orthophoto from USDA NAIP
 GPS Data from WSDOT 1/29/2007 & 3/2015
 Property Line from WSDOT

**SR 101 Jimmycomelately Creek
 Advance Mitigation Site
 GPS Data: 3/30/2015**



Figure 2. Study area is the property boundary (black), wetland boundary in red, and sampling point locations in black.

US 101 Jimmycomelately Estuary Mitigation Site – Wetland Delineation Summary		
Total Delineated Wetland Area	3.14 acres	
	Wetland Determination Data Forms	Appendix A; Sampling Points W1-SP1, W1-SP2, W1-SP4, W2-SP1, W2-SP2
	Upland Determination Data Forms	Appendix A; Sampling Point W1-SP3
	Delineators	Tatiana Dreisbach Tony Bush
	Delineation Date	March 30, 2015
Vegetation	Trees – red alder (<i>Alnus rubra</i>), Shrubs – red alder, spreading gooseberry (<i>Ribes divaricatum</i>), western red cedar (<i>Thuja plicata</i>) saplings, salmonberry (<i>Rubus spectabilis</i>), Herbs – common plantain (<i>Plantago major</i>), seaside plantain (<i>Plantago maritima</i>), seacoast bulrush (<i>Schoenoplectus maritimus</i>), Lyngbye's sedge (<i>Carex lyngbyei</i>), silverweed (<i>Potentilla anserina</i>), narrowleaf cattail (<i>Typha angustifolia</i>), giant horsetail (<i>Equisetum telmateia</i>), quackgrass (<i>Elymus repens</i>), tall fescue (<i>Schedonorus arundinaceus</i>).	
Soils	In many locations soils were saturated or a high water table was present making excavation of soil profiles impossible. In drier areas of the wetland where soil profiles were able to be extracted and observed, soils examined to a depth of 18 inches exhibited hydric characteristics. Matrix colors of 10YR 3/1, 10YR 3/2, 10YR 4/1, 2.5Y 5/1, 5GY were observed. Redoximorphic concentrations and depletions were observed in some layers. Indicators Depleted Matrix (A11) and Depleted Matrix (F3) met.	
Hydrology	Tidal influence supplies both a subsurface high water table as well as inundation in dendritic channels for most parts of the year. Flows in Jimmycomelately Creek also contribute hydrologic inputs. Freshwater seeps are present in several slope locations near the wetland boundary. Surface water to 8 inches was observed in lower elevation areas in the tide flat portion of the wetland in the dendritic channels. Depressions in the higher elevation areas of the tide flat had inundation to 3 inches deep. Water in the observation pits ranged from 0 inches (at the soil surface) to 12 inches below the surface.	
Rationale for Delineation	Positive indicators of all three wetland criteria are present. Placement of boundary determined by vegetation, hydrology indicators, and topographic break. Wetland vegetation and hydrology indicators stopped abruptly and upland areas directly adjacent to wetland were dominated by bare ground or upland species and lacked wetland hydrology indicators. Distinct topographic break present in many locations along the wetland boundary. The wetland mitigation site is contiguous with a larger estuarine wetland complex at the mouth of Jimmycomelately Creek where the creek meets Sequim Bay.	

Limitations

This wetland delineation report documents the investigation, best professional judgment and conclusions of WSDOT based on the site conditions encountered at the time of this study. The wetland delineation was performed in compliance with accepted standards for professional wetland biologists and applicable federal, state, and local ordinances. It is correct and complete to the best of our knowledge. It should be considered a preliminary jurisdictional determination of wetlands and other waters until it has been reviewed and approved in writing by the appropriate jurisdictional authorities.

References

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Appendix A —Wetland Determination Data Forms

Wetland Delineation Data Forms for:

W1-SP1

W1-SP2

W1-SP3

W1-SP4

W2-SP1

W2-SP2

Wetland polygons, sampling point locations, and wetland names shown in Figure 2.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: 101 Jimmycomelately City/County: Clallam/Blyn Sampling Date: 30-Mar-15
 Applicant/Owner: WSDOT State: WA Sampling Point: w1-sp1
 Investigator(s): Tatiana Dreisbach, Tony Bush Section, Township, Range: S 12 T 29N R 3W
 Landform (hillslope, terrace, etc.): tide flat Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °
 Subregion (LRR): LRR A Lat.: 48.021 Long.: -123.006 Datum: NAD83HARN
 Soil Map Unit Name: Hoypus gravelly sandy loam, 0 - 15 percent slopes NWI classification: EEM

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Rel.Strat. Cover	Indicator Status	
Tree Stratum (Plot size: <u>20 x 20 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>10 x 10 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>75</u> x 1 = <u>75</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>75</u> (A) <u>75</u> (B) Prevalence Index = B/A = <u>1.000</u>
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	_____	<input type="checkbox"/> 0.0%	_____	
	0	= Total Cover		
Herb Stratum (Plot size: <u>5 x 5 feet</u>)				
1. <u>Typha angustifolia</u>	20	<input checked="" type="checkbox"/> 26.7%	OBL	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Carex lyngbyei</u>	40	<input checked="" type="checkbox"/> 53.3%	OBL	
3. <u>Potentilla anserina</u>	15	<input checked="" type="checkbox"/> 20.0%	OBL	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
	75	= Total Cover		
Woody Vine Stratum (Plot size: <u>5 x 5 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
	0	= Total Cover		
% Bare Ground in Herb Stratum: <u>25</u>				
Remarks:				

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: 101 Jimmycomelately City/County: Clallam/Blyn Sampling Date: 30-Mar-15
 Applicant/Owner: WSDOT State: WA Sampling Point: w1-sp2
 Investigator(s): Tatiana Dreisbach, Tony Bush Section, Township, Range: S 12 T 29N R 3W
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): concave Slope: 20.0 % / 11.3 °
 Subregion (LRR): LRR A Lat.: 48.021 Long.: -123.005 Datum: NAD83HARN

Soil Map Unit Name: Hoypus gravelly sandy loam, 0 - 15 percent slopes NWI classification: PFO

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

VEGETATION - Use scientific names of plants.

Stratum	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: <u>10 x 10 feet</u>)				Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Alnus rubra</u>	20	<input checked="" type="checkbox"/> 100.0%	FAC	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
20 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>46</u> x 3 = <u>138</u> FACU species <u>4</u> x 4 = <u>16</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>70</u> (A) <u>194</u> (B) Prevalence Index = B/A = <u>2.771</u>
Sapling/Shrub Stratum (Plot size: <u>10 x 10 feet</u>)				
1. <u>Alnus rubra</u>	20	<input checked="" type="checkbox"/> 76.9%	FAC	
2. <u>Ribes divaricatum</u>	2	<input type="checkbox"/> 7.7%	FAC	
3. <u>Thuja plicata</u>	2	<input type="checkbox"/> 7.7%	FAC	
4. <u>Rubus spectabilis</u>	2	<input type="checkbox"/> 7.7%	FAC	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
26 = Total Cover				
Herb Stratum (Plot size: <u>5 x 5 feet</u>)				
1. <u>Equisetum telmateia</u>	20	<input checked="" type="checkbox"/> 83.3%	FACW	
2. <u>Taraxacum officinale</u>	2	<input type="checkbox"/> 8.3%	FACU	
3. <u>Galium aparine</u>	2	<input type="checkbox"/> 8.3%	FACU	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
24 = Total Cover				
Woody Vine Stratum (Plot size: <u>5 x 5 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum: <u>76</u>				
Remarks:				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: W1-sp2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input checked="" type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
 Saturation to the surface on hillside seep. Soils too wet to dig. Meets definition of hydric soil due to prolonged saturation.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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Field Observations:

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <input type="text" value="0"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:
 saturation in upper part due to seep.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: 101 Jimmycomelately City/County: Clallam/Blyn Sampling Date: 30-Mar-15
 Applicant/Owner: WSDOT State: WA Sampling Point: w1-sp3
 Investigator(s): Tatiana Dreisbach, Tony Bush Section, Township, Range: S 12 T 29N R 3W
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): concave Slope: 20.0 % / 11.3 °
 Subregion (LRR): LRR A Lat.: 48.021 Long.: -123.005 Datum: NAD83HARN

Soil Map Unit Name: Hoypus gravelly sandy loam, 0 - 15 percent slopes NWI classification: Upland

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:
 Hydrology lacking in upland areas despite the presence of hydrophytic vegetation and hydric soils (soils were graded to create the mitigation site, hydric soil indicators are present but are not influenced by active/current hydrology).

VEGETATION - Use scientific names of plants.

Stratum	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: <u>20 x 20 feet</u>)				Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)
1. <u>Alnus rubra</u>	40	<input checked="" type="checkbox"/> 100.0%	FAC	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
40 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>95</u> x 3 = <u>285</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>115</u> (A) <u>365</u> (B) Prevalence Index = B/A = <u>3.175</u>
Sapling/Shrub Stratum (Plot size: <u>20 x 20 feet</u>)				
1. <u>Alnus rubra</u>	40	<input checked="" type="checkbox"/> 72.7%	FAC	
2. <u>Pseudotsuga menziesii</u>	10	<input type="checkbox"/> 18.2%	FACU	
3. <u>Thuja plicata</u>	5	<input type="checkbox"/> 9.1%	FAC	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
55 = Total Cover				
Herb Stratum (Plot size: <u>5 x 5 feet</u>)				
1. <u>Agrostis capillaris</u>	10	<input checked="" type="checkbox"/> 50.0%	FAC	
2. <u>Tellima grandiflora</u>	10	<input checked="" type="checkbox"/> 50.0%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
20 = Total Cover				
Woody Vine Stratum (Plot size: <u>5 x 5 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum: <u>80</u>				

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrologic Vegetation
 2 - Dominance Test is > 50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants¹
 Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: W1-sp3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²				
0-3	10YR	3/1	85	5YR	4/6	10	C	M	Silt Loam	
				10YR	4/2	5	D	M		
3-18	2.5Y	4/2		5YR	4/6	20	C	M/PL	Silt Loam	concentration is prominent

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: 101 Jimmycomelately City/County: Clallam/Blyn Sampling Date: 30-Mar-15
 Applicant/Owner: WSDOT State: WA Sampling Point: w1-sp4
 Investigator(s): Tatiana Dreisbach, Tony Bush Section, Township, Range: S 12 T 29N R 3W
 Landform (hillslope, terrace, etc.): tide flat Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °
 Subregion (LRR): LRR A Lat.: 48.022 Long.: -123.006 Datum: NAD83HARN
 Soil Map Unit Name: Mukilteo muck NWI classification: EEM

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: <u>20 x 20 feet</u>)				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>40</u> x 1 = <u>40</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>80</u> (A) <u>120</u> (B) Prevalence Index = B/A = <u>1.500</u>
Sapling/Shrub Stratum (Plot size: <u>10 x 10 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				
Herb Stratum (Plot size: <u>5 x 5 feet</u>)				
1. <u>Plantago maritima</u>	<u>40</u>	<input checked="" type="checkbox"/> <u>50.0%</u>	<u>FACW</u>	
2. <u>Schoenoplectus maritimus</u>	<u>30</u>	<input checked="" type="checkbox"/> <u>37.5%</u>	<u>OBL</u>	
3. <u>Carex lyngbyei</u>	<u>10</u>	<input type="checkbox"/> <u>12.5%</u>	<u>OBL</u>	
4. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
5. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
6. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
7. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
8. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
9. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
10. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
11. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
80 = Total Cover				
Woody Vine Stratum (Plot size: <u>5 x 5 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum: <u>20</u>				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>				
Remarks:				

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: 101 Jimmycomelately City/County: Clallam/Blyn Sampling Date: 30-Mar-15
 Applicant/Owner: WSDOT State: WA Sampling Point: w2-sp1
 Investigator(s): Tatiana Dreisbach, Tony Bush Section, Township, Range: S 12 T 29N R 3W
 Landform (hillslope, terrace, etc.): tidally influenced flat Local relief (concave, convex, none): flat Slope: 5.0 % / 2.9 °
 Subregion (LRR): LRR A Lat.: 48.022 Long.: -123.007 Datum: NAD83HARN
 Soil Map Unit Name: Mukilteo muck NWI classification: EEM

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: <u>10 x 10 feet</u>)				Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10 x 10 feet</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>10</u> x <u>1</u> = <u>10</u> FACW species <u>0</u> x <u>2</u> = <u>0</u> FAC species <u>70</u> x <u>3</u> = <u>210</u> FACU species <u>2</u> x <u>4</u> = <u>8</u> UPL species <u>0</u> x <u>5</u> = <u>0</u> Column Totals: <u>82</u> (A) <u>228</u> (B) Prevalence Index = B/A = <u>2.780</u>
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				
Herb Stratum (Plot size: <u>5 x 5 feet</u>)				
1. <u>Elymus repens</u>	<u>60</u>	<input checked="" type="checkbox"/> <u>73.2%</u>	<u>FAC</u>	
2. <u>Schedonorus arundinaceus</u>	<u>10</u>	<input type="checkbox"/> <u>12.2%</u>	<u>FAC</u>	
3. <u>Potentilla anserina</u>	<u>10</u>	<input type="checkbox"/> <u>12.2%</u>	<u>OBL</u>	
4. <u>Taraxacum officinale</u>	<u>2</u>	<input type="checkbox"/> <u>2.4%</u>	<u>FACU</u>	
5. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
6. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
7. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
8. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
9. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
10. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
11. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
82 = Total Cover				
Woody Vine Stratum (Plot size: <u>5 x 5 feet</u>)				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum: <u>18</u>				
Remarks:				

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrologic Vegetation
 2 - Dominance Test is > 50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants¹
 Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: w2-sp1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²			
0-3	10YR	3/2	100						Silt Loam	
3-8	2.5Y	5/1	80	5YR	4/6	15	C	M/PI	Gravelly Sandy Loam	concentration is prominent
				10YR	4/2	5	D	M		
8-18	5GY	4/1	85	7.5YR	4/6	10	C	M	Sandy Loam	concentration is prominent
				2.5Y	4/3	5	D	M		

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>
Water Table Present?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <input type="text" value="9"/>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <input type="text" value="7"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: 101 Jimmycomelately City/County: Clallam/Blyn Sampling Date: 30-Mar-15
 Applicant/Owner: WSDOT State: WA Sampling Point: w2-sp2
 Investigator(s): Tatiana Dreisbach, Tony Bush Section, Township, Range: S 12 T 29N R 3W
 Landform (hillslope, terrace, etc.): riverine bench Local relief (concave, convex, none): concave Slope: 5.0 % / 2.9 °
 Subregion (LRR): LRR A Lat.: 48.021 Long.: -123.007 Datum: NAD83HARN
 Soil Map Unit Name: Mukilteo muck NWI classification: PFO

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 20 x 20 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. <u>Alnus rubra</u>	40	<input checked="" type="checkbox"/> 100.0%	FAC	Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
40 = Total Cover				
Sapling/Shrub Stratum (Plot size: 20 x 20 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Prevalence Index worksheet:
1. <u>Alnus rubra</u>	20	<input checked="" type="checkbox"/> 80.0%	FAC	Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>25</u> x 2 = <u>50</u> FAC species <u>70</u> x 3 = <u>210</u> FACU species <u>7</u> x 4 = <u>28</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>102</u> (A) <u>288</u> (B) Prevalence Index = B/A = <u>2.824</u>
2. <u>Rubus armeniacus</u>	5	<input checked="" type="checkbox"/> 20.0%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
25 = Total Cover				
Herb Stratum (Plot size: 5 x 5 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Equisetum telmateia</u>	25	<input checked="" type="checkbox"/> 67.6%	FACW	
2. <u>Agrostis capillaris</u>	10	<input checked="" type="checkbox"/> 27.0%	FAC	
3. <u>Taraxacum officinale</u>	2	<input type="checkbox"/> 5.4%	FACU	
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
37 = Total Cover				
Woody Vine Stratum (Plot size: 5 x 5 feet)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	
1. _____		<input type="checkbox"/> 0.0%		
2. _____		<input type="checkbox"/> 0.0%		
0 = Total Cover				
% Bare Ground in Herb Stratum: <u>63</u>				
Remarks:				

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: w2-sp2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks	
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0-2	10YR	3/1	100				Silt Loam		
2-16	10YR	4/1	75	5YR	4/6	20	C	M/PL	concentration is prominent
				2.5Y	4/2	5	D	M	

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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Field Observations:

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>	Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>
Water Table Present?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches):	<input type="text" value="12"/>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches):	<input type="text" value="7"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

Appendix B — Precipitation Data

Appendix B-1. Comparison of Observed and Normal Precipitation (NRCS 1997)

Monthly precipitation data for Sequim, Washington.

		Long-term rainfall records ^a							
	Month	3 yrs. in 10 less than	Average	3 yrs. in 10 more than	Rain fall ^a	Condition dry, wet, normal ^b	Condition Value	Month weight value	Product of previous two columns
1 st prior month	Mar	0.94	1.24	1.45	2.13	W	3	3	9
2 nd prior month	Feb	0.93	1.47	1.77	2.74	W	3	2	6
3 rd prior month	Jan	1.06	1.89	2.30	2.69	W	3	1	3
								Sum	18

^aNRCS 2015

^b Conditions are considered normal if they fall within the low and high range around the average.

Note: If sum is

- 6 - 9 then prior period has been drier than normal
- 10 - 14 then period has been normal
- 15 - 18 then period has been wetter than normal

Condition value:

- Dry (D) =1
- Normal (N) =2
- Wet (W) =3

Conclusions: Wetter than normal precipitation conditions were present prior to the field visit.

**Appendix B-2. Daily Precipitation 10 days preceding field work,
Sequim, Washington**

Date (2015)	Daily Precipitation (inches)^a
March 29	0.00
March 28	0.03
March 27	0.07
March 26	0.00
March 25	0.00
March 24	0.01
March 23	0.15
March 22	0.01
March 21	0.10
March 20	0.06

^aNRCS 2015

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