



NON-WETLAND DETERMINEATION

July 16, 2020 (revised November 4, 2020)



KCPW Recycling Center
Poulsbo, WA

Prepared for
Edward Rose and Sons
PO Box 2011
Bloomfield Hills, MI 48303
(248) 686-5500

Prepared by
Ecological Land Services
1157 3rd Avenue, Suite 220A • Longview, WA 98632
(360) 578-1371 • Project Number 2407.02

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APPENDIX A

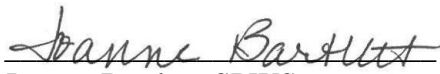
Wetland Determination Data Forms

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WDFW Stream Typing Letter, dated June 5, 2020

SIGNATURE PAGE

The information and data in this report were compiled and prepared under the supervision and direction of the undersigned.

A handwritten signature in cursive script, reading "Joanne Bartlett", written over a horizontal line.

Joanne Bartlett, SPWS
Senior Biologist

INTRODUCTION

Ecological Land Services, Inc. (ELS) was contracted by Edward Rose and Sons (Rose) to complete a non-wetland determination report for the Kitsap County Public Works (KCPW) Recycling Center on Viking Way, parcel number 102601-4-028-2003, within a portion of Section 10, Township 26 North, Range 1 East of the Willamette Meridian, in Poulsbo, Washington (Figure 1). This report summarizes findings of the non-wetland determination according to the Poulsbo Municipal Code (*PMC*), *Chapter 16.20*. This report has been revised to reflect the designation of the drainage as a Type Ns1 stream. It includes the 2016 data and photos but both the data forms and most of the photoplates were revised to show current conditions.

METHODOLOGY

The wetland determination followed the Routine Determination Method in the Western Mountains, Valleys, and Coast Region according to the U.S. Army Corps of Engineers, *Wetland Delineation Manual* (Environmental Laboratory 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0)* (U.S. Army Engineer Research and Development Center, 2010).

The Routine Determination Method examines three parameters—vegetation, soils, and hydrology—to determine if wetlands exist in a given area. Hydrology is critical in determining what is wetland, but is often difficult to assess because hydrologic conditions can change periodically (hourly, daily, or seasonally). Consequently, it is necessary to determine if hydrophytic vegetation and hydric soils are present, which would indicate that water is present for long enough duration to support a wetland plant community. By definition, wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are regulated as “Waters of the United States” by the U.S. Army Corps of Engineers (USACE), as “Waters of the State” by the Washington Department of Ecology (DOE), and locally by the City of Poulsbo.

To determine the presence or absence of critical areas on this property, ELS biologists collected data on vegetation, hydrology, and soils. Vegetation, hydrology, and soil data was collected at six test plots conducted across the property. Data collection was focused in areas where the maps show potential wetlands (hydric soil). The test plots were conducted primarily in the forest at the around the stream corridor with several conducted along the stream channel to verify the absence of wetland conditions (Figure 2). The site was evaluated by Wiltermood Associates in 1999 and no wetlands were identified because the data revealed no positive indicators for any of the three wetland parameters. The 2016 ELS site visit revealed that there had been no change to the onsite conditions, but the data was collected to document the absence of wetlands. The 2016 data reflects 2020 property conditions except that the drainage is classified as a Type Ns stream.

PROPERTY DESCRIPTION

The property is located on the east side of Viking Way NW in Poulsbo, Washington (Figure 1). It is an L-shaped property that was purchased by Edward Rose and Sons from Kitsap County Public Works, Solid Waste Division and housed the local recycling center (Photoplate 1). The recycling center was removed, and the property is currently undeveloped except for the large gravel pad and

the stormwater pond on the east side (Photoplate 1). The remainder of the site is undeveloped upland forest (Photoplates 4 and 5). The property is bordered by undeveloped forest to the south, residential development to the east, and the recently developed Kitsap Transit Center to the north (Figure 2). The property is level across the gravel pad with a short steep bank up to the north. Above the bank, the terrain is level to undulating to the north property line. To the east the topography slopes gradually down into the seasonal, Type Ns stream (Photoplates 3 and 4). The property is forested around the active recycling center with a small open meadow immediately north of the recycling center vegetated with portions dominated by Scot's broom (*Cytisus scoparius*, FACU).

The stream enters the north property line from via a culvert that discharges stormwater from the Kitsap Transit Center, which lies immediately north. It flows southerly through a shallow, sometimes dry channel across the northern section of the study area (Figure 2). The stream crosses a property that is not included in the project and reenters a southern section of the project site. The stream becomes more channelized on the southern section because of the steep slopes along the ravine. Wetland B lies at the south end of the stream and extends to the culvert under SR 305.

VEGETATION

Vegetation was evaluated specifically in the area mapped as hydric soil through which the intermittent drainage flows at Test Plots 1 through 4. These areas are dominated by big leaf maple (*Acer macrophyllum*, FACU), and western red cedar (*Thuja plicata*, FAC) in the tree canopy. The shrub layer is dominated by oso-berry (*Oemleria cerasiformis*, FACU), salmonberry (*Rubus spectabilis*, FAC), salal (*Gaultheria shallon*, FACU), evergreen huckleberry (*Vaccinium ovatum*, FACU), and red huckleberry (*Vaccinium parvifolium*, FACU). The herbaceous layer was very sparse and composed of low percentages of sword fern (*Polystichum munitum*, FACU), trailing blackberry (*Rubus ursinus*, FACU), creeping buttercup (*Ranunculus repens*, FAC), Dewey's sedge (*Carex deweyana*, FAC), and lady fern (*Athyrium cyclosorum*, FAC). Individual test plots also contained low cover of fringe cup (*Tellima grandiflora*, FACU), bracken fern (*Pteridium aquilinum*, FACU), and enchanter's nightshade (*Circaea alpina*, FAC). The vegetation in the area mapped as hydric soil does not meet the hydrophytic vegetation criterion because there is less than 50-percent dominance by FAC species.

The upland forest areas of the property were represented by Test Plots 5 and 6 north of the recycling center. These areas were dominated by Douglas fir (*Pseudotsuga menziesii*, FACU) in the canopy, with one occurrence of western red cedar (Test Plot 6). The shrub layer was dominated by salal and evergreen huckleberry with smaller percentages of pacific rhododendron (*Rhododendron macrophyllum*, FACU), honeysuckle (*Lonicera ciliosa*, UPL), and Himalayan blackberry (*Rubus armeniacus*, FAC). The herbaceous layer was sparsely vegetated due to the dense canopy and thick shrubs. It was dominated by trailing blackberry, sword fern, and western starflower (*Trientalis latifolia*, FACU). The hydrophytic vegetation criterion is not met in these areas because there is less than 50-percent dominance by FAC species.

The dominant vegetation found onsite is recorded on the attached wetland determination data forms (Appendix A). The indicator status, following the common and scientific names, indicates how likely a species is to be found in wetlands. Listed from most likely to least likely to be found in wetlands, the indicator status categories are:

- **OBL** (obligate wetland) – Almost always occur in wetlands.
- **FACW** (facultative wetland) – Usually occur in wetlands, but may occur in non-wetlands.
- **FAC** (facultative) – Occur in wetlands and non-wetlands.
- **FACU** (facultative upland) – Usually occur in non-wetlands, but may occur in wetlands.
- **UPL** (obligate upland) – Almost never occur in wetlands.
- **NI** (no indicator) – Status not yet determined.

SOILS

As referenced on the U.S.D.A. Natural Resources Conservation Service (NRCS 2015) website, Poulsbo sandy gravelly loam, 0 to 6 percent slopes (39) and Norma fine sandy loam (37) are mapped from west to east across the property (Figure 3). Norma soils are considered hydric and Poulsbo soil types are not classified as hydric (NRCS 2015). Areas mapped as hydric soils do not necessarily mean that an area is or is not a wetland—hydrology, hydrophytic vegetation, and hydric soils must all be present to classify an area as a wetland. In the case of this property, the areas mapped as hydric soil do not exhibit positive indicators for any of the three wetland parameters.

The soil profiles in the area mapped with Norma soil (Test Plots 1 through 4) were composed of gravelly sandy loam with brown to brownish-orange (10YR 2/2 to 10YR 5/3) matrix colors. No redoximorphic features occurred in any of the plots. The soil sampled did not match descriptions of Norma fine sandy loam, but more closely matched descriptions of Poulsbo gravelly sandy loam, mapped on the remainder of the property. The soil revealed in these test plots have high matrix chromas and lack redoximorphic concentrations, so they do not exhibit characteristics for any of the hydric soil indicators and therefore, do not meet the hydric soil criteria.

The upland soils evaluated on the upland forested areas of the property were also composed of gravelly sandy loam with light brown to bright orange (10YR 3/3 to 10YR 4/4) matrix colors. The upland soils contained no redoximorphic features and meet none of the hydric soil indicators because of the high matrix chromas observed. The profiles sampled were consistent with the descriptions of Poulsbo gravelly sandy loam.

HYDROLOGY

The 2016 data records no hydrology or evidence of wetland hydrology in the test plots, including those conducted within the stream path. The areas outside of the test plots were also dry and did not show any evidence to indicate wetland hydrology. The stream enters the property from a 36-inch culvert that emerges from beneath the concrete block wall the supports the south end of the Kitsap Transit Center. The stream corridor did not exhibit evidence of wetland hydrology but there was evidence that water temporarily flows through the channel during winter months and following heavy storm events. Because the water flow events occur mainly during and following severe storm events, the flow is heavy and flashy due to upslope development, as observed in early June 2020.

CRITICAL AREAS INVENTORIES¹

National Wetlands Inventory (NWI) maps a palustrine, forested, seasonally flooded wetland along the east side of the property (Figure 4). ELS biologists disagree with the mapping because there was no evidence of wetlands on or adjacent to this property based on data collected in the field and general site observations.

The Kitsap County GIS website maps potential wetlands in the same location as the hydric soil mapping and the NWI mapping and the drainage is mapped as a stream (Figure 5). ELS biologists disagree with the mapping because, based on data collected in the field and general site observations, no wetlands were identified on or within 300 feet of the property.

CRITICAL AREAS SUMMARY

WETLAND DETERMINATION

The central portion of the property is mapped as having hydric soils (Norma fine sandy loam) so data collection was focused in that area to document the absence of wetland conditions. The forest on the north, east, and south of the gravel pad was determined to upland because the data collected revealed a lack of positive indicators for each of the three wetland parameters. The data collected along the stream channel also indicated the absence of wetland conditions. The vegetation was dominated by upland species and the soil profiles consisted of bright orange, sandy soils, so hydrophytic vegetation and hydric soil criteria are not met. Water was not observed at any of the test plots and there was no evidence to indicate wetland hydrology onsite. Wetland was not identified within 300 feet of the property so the project will not be affected by offsite wetland buffers.

WATER TYPING

The stream conditions continue north from Wetland B ending at the Kitsap Transit Center property as determined during the June 3, 2020 site visit with the City of Poulsbo, Suquamish Tribe, Washington Department of Fish and Wildlife (WDFW), and Grette Associates (Grette). The site visit was conducted to determine whether the swale identified during numerous visits to the property met the definition of a stream. The onsite swale has been affected by the increased discharge of stormwater from the Kitsap Transit property over the past couple of years. The increased stormwater discharge has resulted in a more channelized discharge to the subject property, resulting in development of more definitive stream conditions. It was determined to be a stream and on June 9, 2020, the ordinary high-water mark (OHWM) was flagged and surveyed to identify the extent of the Type F and Type Ns portions for regulatory purposes.

The City of Poulsbo has three categories of Type N and two categories of Type F water types and requires different buffers for each type. The water type and buffers as they apply to the on and offsite segments of the stream are described below.

- ☐ The onsite segment is a Type Ns1 water because it is seasonally flowing, lacks fish use, and connects to a Type S, F, or Np water.
 - ☐ Type Ns1 waters require a 75-foot buffer.

¹ Critical Area Inventories should be used with discretion because they are used to gather general wetland information about a regional area and therefore are limited in accuracy for smaller areas because of their large scale.

- The offsite segment that crosses a separately owned property and enters the south end of the project site, is a Type F2 water because it is a fish bearing stream that does not support salmonid species. This segment of stream is directly connected to the onsite segment.
 - Type F2 waters require a 150-foot buffer.

The 75 foot buffer for the onsite Type Ns1 segment is largely composed of upland coniferous forest with a dense low shrub and herbaceous layer; the high shrub layer is dense in some areas but non-existent in others. A section of the western buffer lies adjacent to the stormwater pond on the former recycling center site, which are within 56 feet of the stream. Because the stormwater pond lie within the buffer and are a legally established, nonconforming, use, they represent an interrupted buffer based on the definition in the PMC as quoted below:

“Interrupted buffer” means a critical area buffer width established by this chapter, where a legally established, nonconforming use of the buffer exists (e.g., a road or structures that lies within the width of the buffer required for the critical area).

□

The PMC further defines buffer interruptions as follows:

- 1.□ *Where a legally established, pre-existing use of the buffer exists (such as a road or structure that extends into the regulated wetland buffer), those proposed activities that are within the wetland or stream buffer, but are separated from the critical area by an existing permanent substantial improvement, which serves to eliminate or greatly reduce the impact of the proposed activity upon the critical area, are exempt; provided, that the detrimental impact to the critical area does not increase. However, if the impacts do increase, the planning director shall determine if additional buffer may be required along the impact area of the interruption. A substantial improvement may include, but is not limited to, a paved area, dike, levee, or other permanent structure. An exemption request for an interrupted buffer may require a functional analysis report. In determining whether a functional analysis is necessary, the planning director shall consider the hydrologic and habitat connection potential and the extent and permanence of the interruption.*

The old recycling center property, which is composed of a large gravel area and a stormwater pond, is situated just west of the stream. The east edge of the stormwater pond lies within the 75-foot stream buffer. The recycling center pond is an existing feature that is regularly maintained and does not function as part of the forested buffer. The fence around the pond further interrupts the buffer function by creating a vertical barrier that prevents human intrusion but also prevents use of the upland and stream by local wildlife species. Therefore, the functional portion of the buffer ends at the chain link fence. Development will be proposed for the recycling center property in the future and it will utilize the existing gravel pad and stormwater pond. Because the pond and fence will remain in place, they function to prevent future detrimental impacts of future development on the former recycling center property. The interrupted buffer is partially vegetated with blackberry thickets (Photoplate 5), which will be removed to install native plants as part of the habitat management plan mitigation.

LIMITATIONS

ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at your own risk until it has been approved in writing by the appropriate regulatory agencies. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report.

REFERENCES

- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1. U.S. Army Corps of Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Kitsap County. Critical Areas Inventory Parcel Search Website. <https://psearch.kitsapgov.com/psearch/>. Website accessed June 2016 (link updated April 2020).
- Natural Resource Conservation Service (NRCS). 2012. *Web Soil Survey*; WA015 Kitsap County Area. Online document <<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>>. Website accessed June 2016 (link updated April 2020).
- U.S. Army Corps of Engineers (USACE). 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-13. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Fish & Wildlife Service. 2012. National Wetlands Inventory. Online document <<https://www.fws.gov/wetlands/Data/Mapper.html>>. Website accessed June 2016 (link updated April 2020).
- Wiltermood Associates, Inc. *Wetland Analysis Report for the 5 Lots located at State Routes 305 and 307, Poulsbo Washington*. December 1, 2010, Revised April 13, 2011.

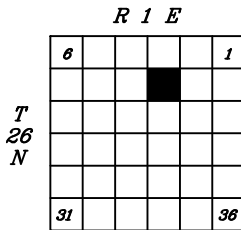
FIGURES & PHOTOPLATES

WASHINGTON

SITE

47.7524° Latitude
-122.6456° Longitude

LOCATION MAP



NOTE:

USGS topographic quadrangle map reproduced using
MAPTECH Inc., Terrain Navigator Pro software.

**PROJECT
VICINITY MAP**

SITE

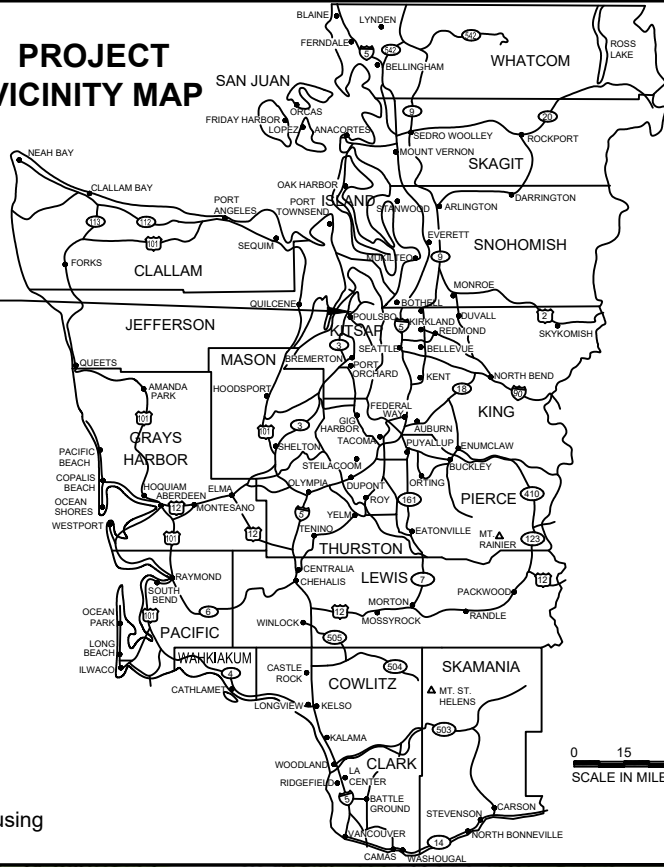


Figure 1

VICINITY MAP

KCPW Recycling Center
Edward Rose & Sons
City of Poulsbo, Kitsap County, WA
Section 10, Township 26N, Range 1E, W.M.

DATE: 11/04/20

DWN: JLL

REQ. BY:

PRJ. MGR: JB

CHK:

PROJECT NO:
2407.02

1157 3rd Ave., Suite 220A
Longview, WA 98632

Phone: (360) 578-1371

Fax: (360) 414-9305

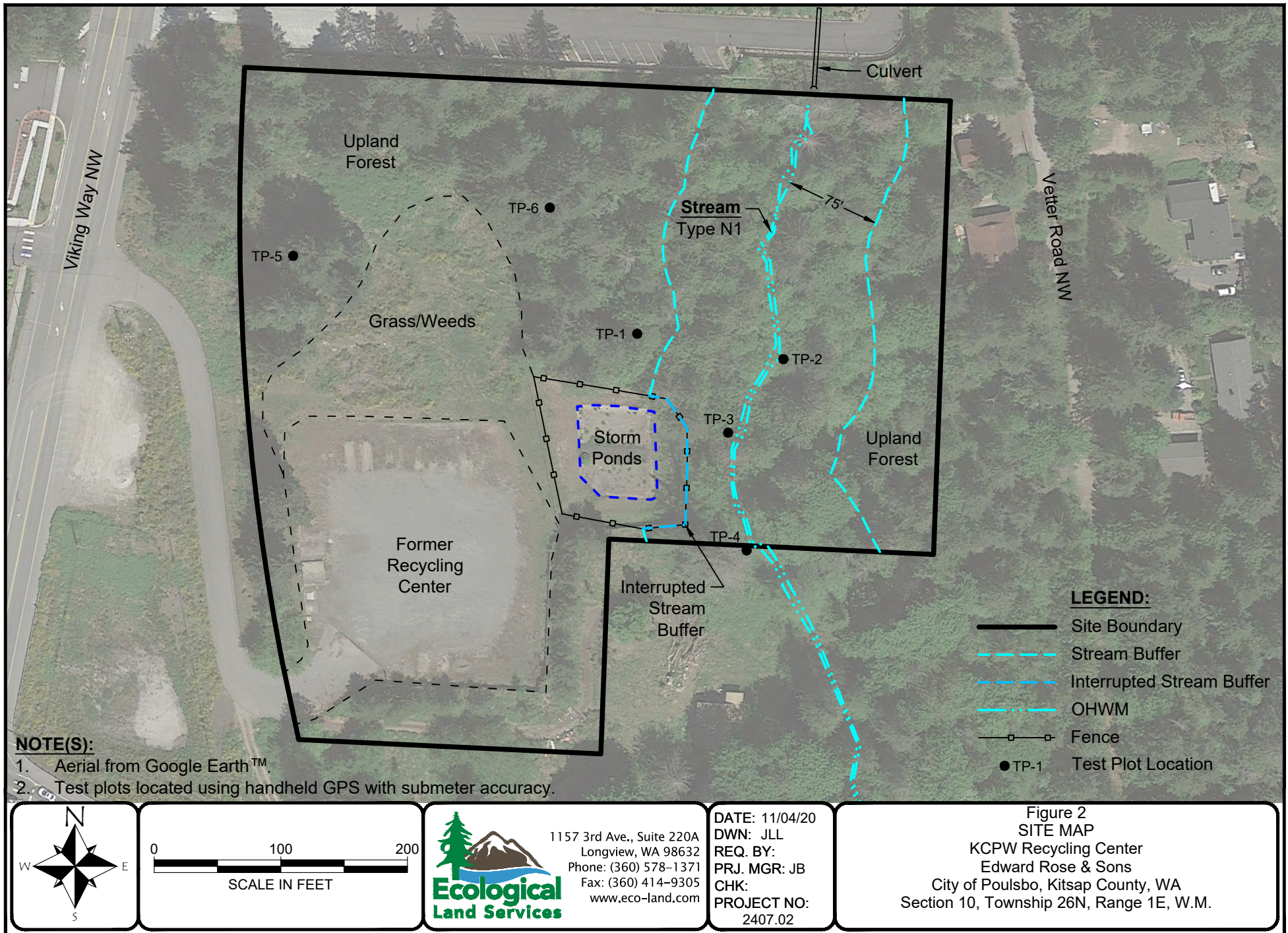
www.eco-land.com

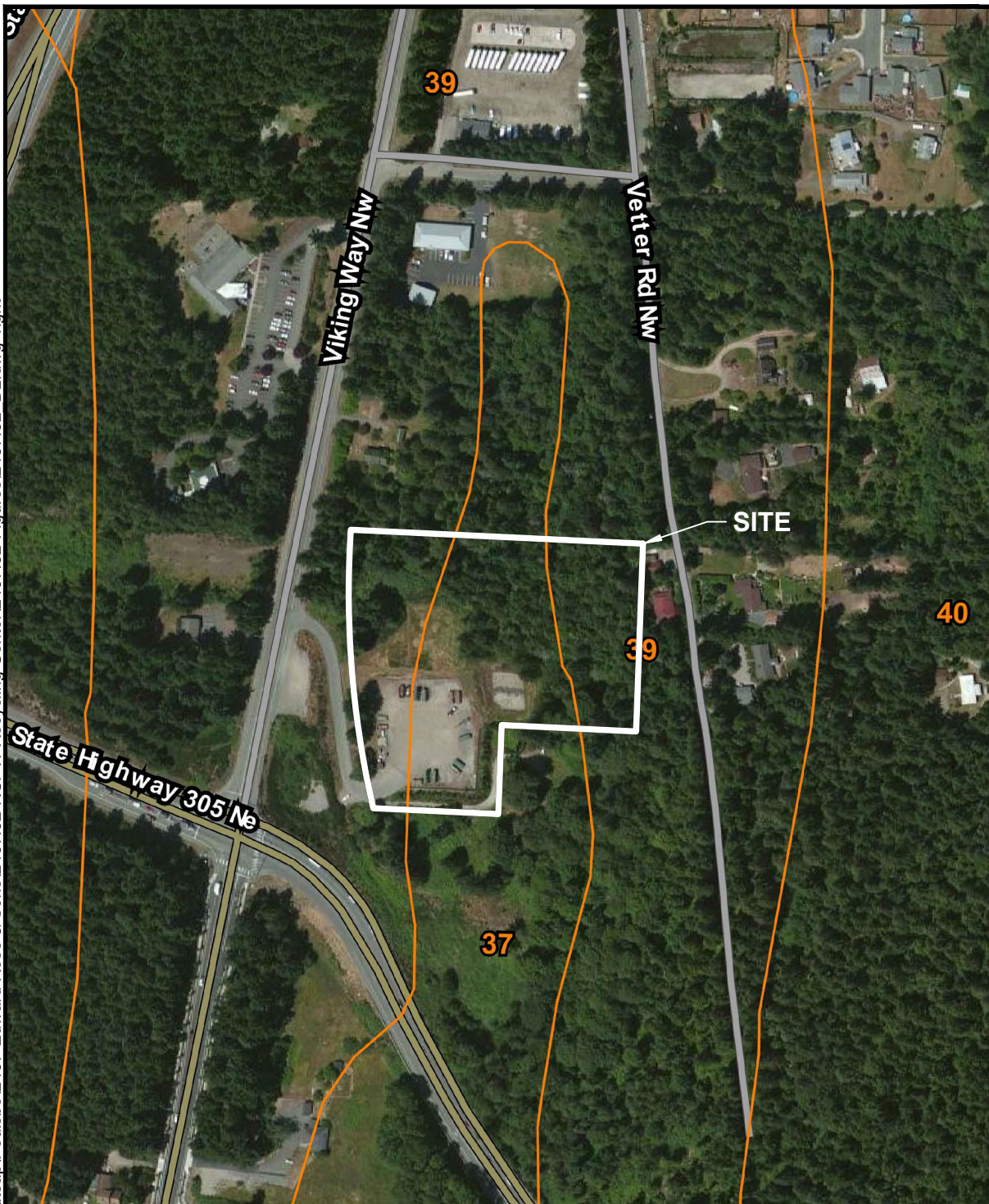


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SCALE IN FEET





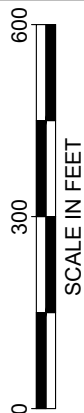


LEGEND:

- 37** Norma fine sandy loam. Hydric.
39 Poulsbo gravelly sandy loam, 0 to 6 percent slopes. Not hydric.

NOTE(S):

- Map provided on-line by NRCS at web address:
<http://websoilsurvey.nrcs.usda.gov/app/>



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 Phone: (360) 578-1371
 Fax: (360) 414-9305
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 CHK:
 PROJECT NO:
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Figure 3
 SOIL SURVEY MAP
 KCPW Recycling Center
 Edward Rose & Sons
 City of Poulsbo, Kitsap County, WA
 Section 10, Township 26N, Range 1E, W.M.



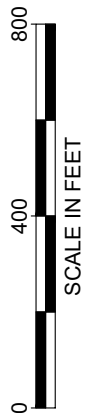
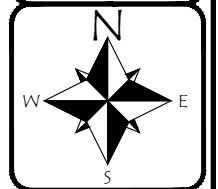
LEGEND:

 Freshwater Forested/Shrub Wetland

PFOC Palustrine, forested, seasonally flooded.

NOTE(S):

1. Map provided on-line by US Fish & Wildlife Service at web address:
<http://www.fws.gov/wetlands/data/index.html>

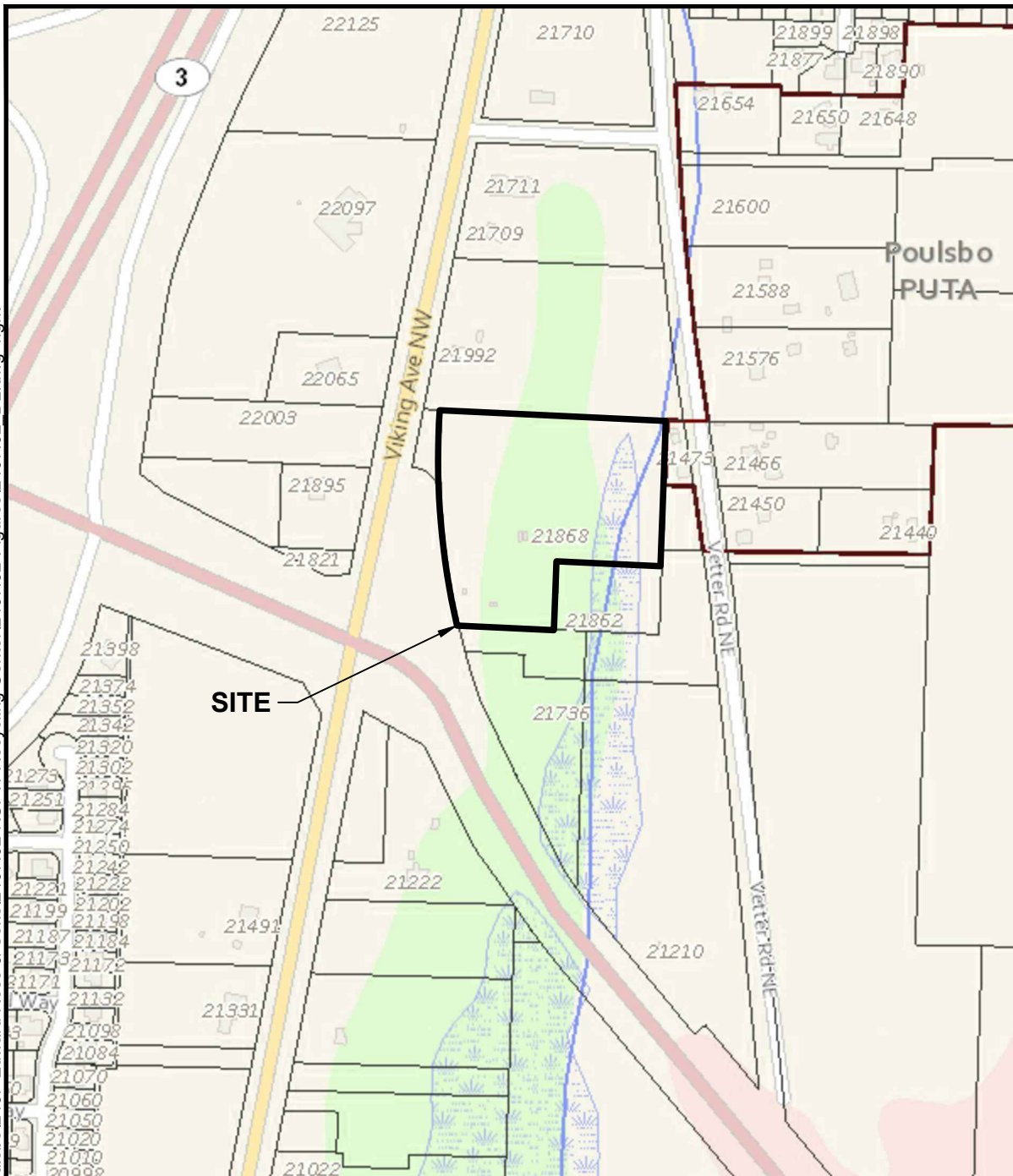


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Figure 4

NATIONAL WETLANDS INVENTORY MAP
KCPW Recycling Center
Edward Rose & Sons
City of Poulsbo, Kitsap County, WA
Section 10, Township 26N, Range 1E, W.M.



Roads

Roads

Local Roads

- State Highway
- Collector / Arterial
- Local Roads

Parcels

Tax Parcels Outlines



Streams

WA DNR Water Courses

- (S) Designated Shorelines
- (F) Fish Habitat
- (N) Non-fish Habitat
- (U) Unknown

Boundary Borders

- City Boundary
- City Boundary

Critical Areas

Waterbodies (defined in WAC 222-16-030)

- Includes DNR, NWI, and Surveyed Wetlands

Wetlands (DNR, NWI, Surveys)

- DNR, NWI, Surveyed Wetlands

FEMA Flood Hazard Areas

- 100 Year Floodplain

Hydric Soils (SCS Soil Survey)

- Potential Wetlands

Geohazards

- High Hazard Areas
- Moderate Hazard Areas

NOTE(S):

1. Map provided on-line by Kitsap County at web address:
<https://psearch.kitsapgov.com/webappa/>

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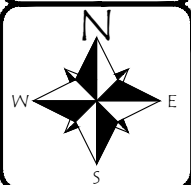
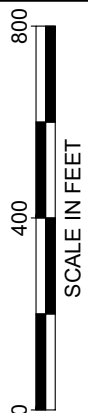


Figure 5
KITSAP COUNTY CRITICAL AREAS MAP
KCPW Recycling Center
Edward Rose & Sons
City of Poulsbo, Kitsap County, WA
Section 10, Township 26N, Range 1E, W.M.



Photo 1 was taken looking east from the gravel pad of the former recycling center. It shows the stormwater ponds that interrupts the function of the western stream buffer.



Photo 2 was taken from the same location as Photo 1 and looks southeasterly. The fence continues along the east edge of the gravel pad and around the south end of the property.



Photo 3 was taken from the south end of the existing stormwater ponds. The 75-foot stream buffer is interrupted by the fence and ponds. The blackberry coverage within the interrupted buffer will be removed and replaced with native plants as part of the mitigation plan.



1157 3rd Ave., Suite 220A
Longview, WA 98632
(360) 578-1371
Fax: (360) 414-9305

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PROJ.#: 2407.02

Photoplate 1
Project Name: KCPW
Recycling Center
Client: Ed Rose & Sons LLC
Kitsap County, Washington



Photo 4 was taken in the upland forest north of the open grassy portion of the property. It looks west towards an example of the vegetation on the north half of the property.



Photo 5 was taken from the same location as Photo 4 facing south. It demonstrates an even aged stand of conifer trees with a relatively bare understory.



Photo 6 was taken from the same location as Photos 4 and 5. It looks at deciduous stands with upland understory vegetation.



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(360) 578-1371
Fax: (360) 414-9305

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PROJ.#: 2407.02

Photoplate 2
Project Name: KCPW
Recycling Center
Client: Ed Rose & Sons LLC
Kitsap County, Washington



Photo 7 was taken of the area where Test Plot 1 was conducted. It was located about halfway between the open grassy area and the Type N1 stream in the upland forest.



Photo 8 was taken of the area where Test Plot 2 was conducted. It was located on the east side of the Type N1 stream. There was no evidence to indicate wetland indicators in this area.



Photo 9 was taken in July 2016 of the area where Test Plot 3 was conducted. This area is a designated stream per WDFW and the Suquamish Tribe as of June 2020. There were no wetlands present in 2016 or 2020.



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(360) 578-1371
Fax: (360) 414-9305

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Photoplate 3
Project Name: KCPW
Recycling Center
Client: Ed Rose & Sons LLC
Kitsap County, Washington



Photo 10 was taken of the northern portion of the Type N1 stream just downstream of the discharge from the transit center pipe. Several trees have died in this location due to the sudden increases in discharge to the stream from offsite stormwater ponds.



Photo 11 was taken from a point south of Photo 10 and shows another section of the stream where there is a defined channel.



Photo 12 was taken of the stream channel during the June 2020 site visit. This section is one of the wide swale like locations where water seems to sheet flow rather than create a defined channel.



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Photoplate 4
Project Name: KCPW
Recycling Center
Client: Ed Rose & Sons LLC
Kitsap County, Washington



Photo 13 was taken along the south end of the onsite section of the stream channel. This area is slightly channelized and did not contain water during the OHWM delineation visit in June 2020.



Photo 14 was taken of the area where Test Plot 5 was conducted. It was near the west property line and represented the upland forest west of the grassy, open area.



Photo 15 was taken of the area where Test Plot 6 was conducted. It was located east of the open grassy area in the upland forest. This area was located just west of the mapped hydric soil and data revealed there were no positive indicators for any of the three wetland parameters.



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Photoplate 5
Project Name: KCPW
Recycling Center
Client: Ed Rose & Sons LLC
Kitsap County, Washington

APPENDIX A

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

Dr _____ R _____
_____ / _____ d _____ d _____
_____ r _____
d _____ r _____
RR _____ M _____ R _____ 4 _____ 14 _____
M _____ 0 _____
dr _____ d _____ r _____
Are "Normal Circumstances" present? ☒ ☐
d _____ r _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

[illegible]

VEGETATION – Use scientific names of plants

[illegible]

11/11/2019 11:11:11 AM

[illegible]

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

[illegible]

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

[illegible]

VEGETATION – Use scientific names of plants

[illegible][illegible]

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

[illegible]

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

<input type="checkbox"/> Cdr		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<input type="checkbox"/> Cdr		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> Cdr		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Remarks: M						

VEGETATION – Use scientific names of plants

[illegible]

[illegible][illegible]

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

[illegible]

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

[illegible]

VEGETATION – Use scientific names of plants

[illegible]

HYDROLOGY

Western Mountains, Valleys, and Coast – Version 2.0

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

[illegible]

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

<input type="checkbox"/> Cdr	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<input type="checkbox"/> Cdr	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
<input type="checkbox"/> d	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
R	C	M	d	r	d	r

VEGETATION – Use scientific names of plants

[illegible]

SOIL

Form E-100 (Rev. 10/2017)

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

Depth	Moisture	Redox	Redox	Redox	Redox	Redox	Redox	Redox
0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
30-40	40-50	50-60	60-70	70-80	80-90	90-100		
40-50	50-60	60-70	70-80	80-90	90-100			
50-60	60-70	70-80	80-90	90-100				
60-70	70-80	80-90	90-100					
70-80	80-90	90-100						
80-90	90-100							
90-100								

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1. Mottling	<input type="checkbox"/> 2. Redox	<input type="checkbox"/> 3. Mottling
<input type="checkbox"/> 4. Mottling	<input type="checkbox"/> 5. Mottling	<input type="checkbox"/> 6. Mottling
<input type="checkbox"/> 7. Mottling	<input type="checkbox"/> 8. Mottling	<input type="checkbox"/> 9. Mottling
<input type="checkbox"/> 10. Mottling	<input type="checkbox"/> 11. Mottling	<input type="checkbox"/> 12. Mottling
<input type="checkbox"/> 13. Mottling	<input type="checkbox"/> 14. Mottling	<input type="checkbox"/> 15. Mottling
<input type="checkbox"/> 16. Mottling	<input type="checkbox"/> 17. Mottling	<input type="checkbox"/> 18. Mottling
<input type="checkbox"/> 19. Mottling	<input type="checkbox"/> 20. Mottling	<input type="checkbox"/> 21. Mottling
<input type="checkbox"/> 22. Mottling	<input type="checkbox"/> 23. Mottling	<input type="checkbox"/> 24. Mottling
<input type="checkbox"/> 25. Mottling	<input type="checkbox"/> 26. Mottling	<input type="checkbox"/> 27. Mottling
<input type="checkbox"/> 28. Mottling	<input type="checkbox"/> 29. Mottling	<input type="checkbox"/> 30. Mottling

Restrictive Layer (if present):

Hydric Soils Present?

Yes

No

☒

HYDROLOGY

Wetland Hydrology Indicators:

<input type="checkbox"/> 1. Mottling	<input type="checkbox"/> 2. Mottling	<input type="checkbox"/> 3. Mottling
<input type="checkbox"/> 4. Mottling	<input type="checkbox"/> 5. Mottling	<input type="checkbox"/> 6. Mottling
<input type="checkbox"/> 7. Mottling	<input type="checkbox"/> 8. Mottling	<input type="checkbox"/> 9. Mottling
<input type="checkbox"/> 10. Mottling	<input type="checkbox"/> 11. Mottling	<input type="checkbox"/> 12. Mottling
<input type="checkbox"/> 13. Mottling	<input type="checkbox"/> 14. Mottling	<input type="checkbox"/> 15. Mottling
<input type="checkbox"/> 16. Mottling	<input type="checkbox"/> 17. Mottling	<input type="checkbox"/> 18. Mottling
<input type="checkbox"/> 19. Mottling	<input type="checkbox"/> 20. Mottling	<input type="checkbox"/> 21. Mottling
<input type="checkbox"/> 22. Mottling	<input type="checkbox"/> 23. Mottling	<input type="checkbox"/> 24. Mottling
<input type="checkbox"/> 25. Mottling	<input type="checkbox"/> 26. Mottling	<input type="checkbox"/> 27. Mottling
<input type="checkbox"/> 28. Mottling	<input type="checkbox"/> 29. Mottling	<input type="checkbox"/> 30. Mottling

Field Observations:

Wetland Hydrology Present?

Yes

No

☒

Remarks:

Remarks:

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

[illegible]

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

[illegible]

VEGETATION – Use scientific names of plants

[illegible]

SOIL

Form E-100 (Rev. 10/2017)

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

Depth	Moisture	Redox	Redox	Redox	Redox	Redox	Redox	Redox
0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
30-40	40-50	50-60	60-70	70-80	80-90	90-100		
40-50	50-60	60-70	70-80	80-90	90-100			
50-60	60-70	70-80	80-90	90-100				
60-70	70-80	80-90	90-100					
70-80	80-90	90-100						
80-90	90-100							
90-100								

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1. Mottling	<input type="checkbox"/> 2. Redox	<input type="checkbox"/> 3. Mottling
<input type="checkbox"/> 4. Mottling	<input type="checkbox"/> 5. Mottling	<input type="checkbox"/> 6. Mottling
<input type="checkbox"/> 7. Mottling	<input type="checkbox"/> 8. Mottling	<input type="checkbox"/> 9. Mottling
<input type="checkbox"/> 10. Mottling	<input type="checkbox"/> 11. Mottling	<input type="checkbox"/> 12. Mottling
<input type="checkbox"/> 13. Mottling	<input type="checkbox"/> 14. Mottling	<input type="checkbox"/> 15. Mottling
<input type="checkbox"/> 16. Mottling	<input type="checkbox"/> 17. Mottling	<input type="checkbox"/> 18. Mottling
<input type="checkbox"/> 19. Mottling	<input type="checkbox"/> 20. Mottling	<input type="checkbox"/> 21. Mottling
<input type="checkbox"/> 22. Mottling	<input type="checkbox"/> 23. Mottling	<input type="checkbox"/> 24. Mottling

Restrictive Layer (if present):

Hydric Soils Present?

Yes

No

☒

HYDROLOGY

Wetland Hydrology Indicators:

<input type="checkbox"/> 1. Mottling	<input type="checkbox"/> 2. Mottling	<input type="checkbox"/> 3. Mottling
<input type="checkbox"/> 4. Mottling	<input type="checkbox"/> 5. Mottling	<input type="checkbox"/> 6. Mottling
<input type="checkbox"/> 7. Mottling	<input type="checkbox"/> 8. Mottling	<input type="checkbox"/> 9. Mottling
<input type="checkbox"/> 10. Mottling	<input type="checkbox"/> 11. Mottling	<input type="checkbox"/> 12. Mottling
<input type="checkbox"/> 13. Mottling	<input type="checkbox"/> 14. Mottling	<input type="checkbox"/> 15. Mottling
<input type="checkbox"/> 16. Mottling	<input type="checkbox"/> 17. Mottling	<input type="checkbox"/> 18. Mottling
<input type="checkbox"/> 19. Mottling	<input type="checkbox"/> 20. Mottling	<input type="checkbox"/> 21. Mottling
<input type="checkbox"/> 22. Mottling	<input type="checkbox"/> 23. Mottling	<input type="checkbox"/> 24. Mottling

Field Observations:

Wetland Hydrology Present?

Yes

No

☒

Remarks:

Remarks:

APPENDIX B



SEAL OF THE STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop 40000, Olympia, WA 98511 • (360) 902-2200 • TDD (360) 902-2200
Fax (360) 902-2200 • Email: ecology@dcyf.wa.gov

Friday, June 05, 2020

Poulsbo Planning & Economic Development
200 NE Moe Street
Poulsbo, WA 98370

SUBJECT: Stream Typing; Oslo Bay Apartments, Kitsap Parcels 102601-4-028-2003, 102601-4-027-2004, 112601-3-044-2004, and 102601-4-022-2009.

Mrs. Boughton,

On June 3rd, 2020 I met with Marla Powers and Michael Bateman of City of Poulsbo, Alison O'Sullivan with the Suquamish Tribe; as well as consultants Joanne Bartlett, Robbyn Myers, Berni Kenworthy, and Chad Wallin on site to determine the stream type of the unnamed tributary to Dogfish Creek on the subject parcels. During this site review we identified the initiation of stream to be approximately 15 ft south/downstream of a stormwater outfall and rock rip rap scour pad coming from the Kitsap Transit Center to the north. At this location (47.758795, -122.649871), the Type N stream begins and continues to run south through the subject parcels to the location of the type break (47.75699, -122.64948) where the stream begins to exhibit Type F characteristics. Please see figure below.



This stream typing determination was based on observed physical characteristics of the stream such as presence of sorted sediment and scoured banks, as well as determinations made during previous site inspections by WDFW personnel in August 2001 (attached letter by Jeff Davis), May 2011 (attached email by Gina Piazza), and January 2018 (attached WDFW Fish Passage and Diversion Screening Inventory Database Site Description Report for Site 934421).

Note should be taken that although the Type N segment of this stream exhibits bankfull widths greater than 2 ft the type break determinations were made using observations from those previous site inspections referenced above as it appears that site conditions have changed since those inspections.

It is evident in the site conditions that upstream development has resulted in additional stormwater and hydrology in this stream causing increase scour, sediment sorting, exaggeration of stream characteristics, and development of wetland conditions along this stream. It can be assumed that this condition will continue to increase in the future due to changing hydroperiods and flashier flows associated with climate change. Thus, this letter provides a snapshot in time of the current stream conditions that will likely change in the future.

Thank you for considering these comments in your review. Please contact me at (360) 522-6035 to discuss any questions you might have.

Sincerely,



Nam Siu
Area Habitat Biologist
Washington Department of Fish and Wildlife
Nam.Siu@dfw.wa.gov



State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Region 6 Office: 48 Devonshire Road - Montesano, Washington 98563-9618 - (360) 249-4628

RECEIVED

AUG 29 2001

MAP, LTD.

August 23, 2001

Kitsap County DCD
ATTENTION: Rick Kimball
614 Division Street, MS-36
Port Orchard, WA 98366

Dear Mr. Kimball:

**SUBJECT: Stream Verification; Kitsap County North Maintenance Yard Relocation
Proponent, Section 10, Township 26 North, Range 01 East, Kitsap County,
WRIA 15.MISC**

On August 22, 2001 I met with Mark Ises of MAP Ltd. And the project proponents to review the drainage to the east and determine if a Type NS stream was present on the subject property. After further review, the initiation point for the Type NS stream is offsite to the south of the subject property.

However, within the drainage on the subject property there was the presence of heaving roots found on the mature conifer and alder. Heaving roots can be an indicator of the presence of wetland conditions. Obligate plants were not present within the bottom of this drainage and soil pits were not excavated during this site visit. However, prior to the proposed re-contour of the ravine, soil pits should be excavated to establish whether or not this ravine is a wetland area.

Thank you for the opportunity to provide these comments. If you have any questions, please contact me at (360) 895-3965.

Sincerely,

A handwritten signature in cursive script that reads "Jeff Davis".

Jeff Davis
Area Habitat Biologist

JD:jd

cc: Rich Brooks, Suquamish Tribe
Mark Ises, MAP Ltd., P.O. Box 720, Silverdale, WA 98383

Siu, Nam (DFW)

From: Piazza, Gina L (DFW) <Gina.Piazza@dfw.wa.gov>
Sent: Wednesday, June 1, 2011 9:49 AM
To: bberezowsky@cityofpoulsbo.com
Cc: Alison Osullivan
Subject: MDNS 04-07-11-1, Rose Master Plan

Dear Ms. Berezowsky,

The Washington Department of Fish and Wildlife (WDFW) received your request for review and response of the above noted proposal and offers the following comments at this time. Additional comments may be offered as project review progresses.

- The unnamed stream up to the point where it goes subsurface meets the type 3 definition, which includes seasonal streams. The C3 report dated 05/4/2011 and the BGE Environmental report dated May 13, 2011 describe the stream as not meeting type 3 criteria based on the fact that the stream is likely seasonal. According to the DNR definitions which can be found here: http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx "Fish streams may or may not have flowing water all year; they may be perennial or seasonal." The channel is more than 2 feet wide (also mentioned in the Wiltermood Dec 2010 report) and less than 16% gradient, which are the physical criteria for a type 3 stream. It does not meet the type 4 definition, as that is for perennial non-fish habitat. When it sheet flows without a defined bed, it is not jurisdictional for me (but probably still wetland). WDFW recommends maintaining buffers as appropriate for the above stream. An HPA may be required for any changes to the above stream or dogfish, and mitigation will also be required for impacts to resources described above.
- This project area includes a portion of dogfish creek which has two documented ESA listed species, as well as, several additional fish species and wetlands. WDFW recommends that all activity is limited to outside the buffers set for type "F" streams and wetlands. Riparian trees and vegetation provide several benefits to fish and wildlife that are found in and around streams. These benefits include but are not limited to food production, shading, filtration of storm water pollutants, bank protection from erosion and large woody debris for fish habitat and stream channel stability. The wetlands provide water quality improvements, food and habitat for fish and wildlife, flood control, and shoreline erosion control. They also act as sources of food and provide cover from predators, of which most species of freshwater fish are dependent on for these functions.
- WDFW recommends that Low Impact Development (LID) techniques are implemented to remove and reduce impacts from runoff to receiving waters. The loss of permeable surfaces to an impervious surface will contribute to sedimentation and storm water impacts. Changes in turbidity, flow, temperature and other factors from storm water can impact the suitability of shoreline habitat for salmonids and other aquatic plants and animals. LID reduces impacts on watershed hydrology and aquatic resources by mimicking pre-development peak flow and flow duration conditions. LID includes, but is not limited to minimization of total impervious area, rooftop runoff collection, bio retention swales(rain gardens), compost amended soils, retention of native vegetation (minimizing clearing and grading), maintaining natural drainages, replacing curb and gutter with swales along roadways, and use of permeable pavers.
- A Hydraulic Project Approval (HPA; RCW 77.55.021, WAC 220-110) administered by WDFW is required prior to the performance of construction activities that may divert or change the bed or flow of waters of the state.

Thank you for the opportunity to provide these comments. If you have any questions you may contact me at (360) 895-3965 or gina.piazza@dfw.wa.gov.

Gina Piazza
Area Habitat Biologist
Washington Dept. Fish and Wildlife
450 Port Orchard Blvd, Suite 290
Port Orchard, WA 98366
Phone: 360 895 3965
Fax: 360 876 1894



Washington Department of Fish and Wildlife

Fish Passage & Diversion Screening Inventory Database Report Cover Sheet

The following report is extracted from the Washington Department of Fish and Wildlife's (WDFW) Fish Passage and Diversion Screening Inventory Database (FPDSI). WDFW makes every attempt to keep these reports in sync with FPDSI; however, the dynamic nature of the data and workflows associated with maintaining the database may result in short-term differences.

□

Users are encouraged to contact WDFW to discuss appropriate use of the data and how we can assist with fish passage barrier removal or inventory. Please visit the Fish Passage web site for contact information at: <https://wdfw.wa.gov/species-habitats/habitat-recovery/fish-passage/about>

Disclaimers:

- □ Data presented here represent a snapshot observation of conditions in a dynamic environment that is subject to change. Fish passage data are also collected from a variety of agencies and sources. Therefore, WDFW makes no guarantee concerning the data's content, accuracy, completeness, or the results obtained from use of the data. WDFW assumes no liability for the data represented here.
- □ These data are not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife.
- □ Note that some fish passage features, habitats or species may occur in areas not currently known to the WDFW Fish Passage division, and may not be reflected in this database. A lack of data does not necessarily indicate that a feature, habitat, or species are not present.
- □ Unauthorized attempts to alter or modify these data are strictly prohibited.
- □ Bankfull width measurements included in these reports should not be used for fish passage crossing design. They are solely for assessment purposes.
- □ The barrier status reported in this document is based on the swimming abilities of adult salmonids. Passabilities are a qualitative value, and should not be interpreted as a quantitative calculation. Please see page 1-4 of the Fish Passage Inventory, Assessment and Prioritization Manual for further clarification: <https://wdfw.wa.gov/publications/02061>
- □ EXIF data presented with Image Reports may be erroneous due to camera battery failures and resetting of camera clock functions.

Abbreviations:

Most abbreviations in this report are defined in the Quick Reference Tables of the Fish Passage Inventory, Assessment, and Prioritization Manual. Additional commonly used abbreviations are defined as follows:

NFB = no potential salmonid use, **BB** = both banks, **LB** = left bank looking downstream, **RB** = right bank looking downstream, **US** or **U/S** = upstream, **DS** or **D/S** = downstream, **WSDrop** = water surface drop, **BFW** = bankfull width, **OHW** = ordinary high water, **SLW** = scour line width, **CMP** = corrugated metal pipe, **Q_{fp}** = fish passage flow, **V&D** = Velocity and Depth, **ROW** = Right of Way

The FPDSI database often uses default values such as '-99.99' or '-999' to represent null values.

WDFW Fish Passage and Diversion Screening Inventory Database

Site Description Report

Site ID 4421

Project

Geographic Coordinates

Latitude	4
Longitude	122.4
UTM Zone	11N
UTM Easting	100000

Waterbody

Waterbody Name	
Waterbody Type	Drainage
Waterbody ID	100000
Waterbody Code	
Waterbody Description	

General Location

Road Name	Rd
Mileage	
Direction	
Distance	

Owner

Owner Name	
Owner Address	

PI Species

<input type="checkbox"/> Species 1	<input type="checkbox"/> Species 2	<input type="checkbox"/> Species 3
<input type="checkbox"/> Species 4	<input type="checkbox"/> Species 5	<input type="checkbox"/> Species 6
<input type="checkbox"/> Species 7	<input type="checkbox"/> Species 8	<input type="checkbox"/> Species 9

Associated Features

<input checked="" type="checkbox"/> Feature 1	<input type="checkbox"/> Feature 2	<input type="checkbox"/> Feature 3	<input type="checkbox"/> Feature 4
<input type="checkbox"/> Feature 5	<input type="checkbox"/> Feature 6	<input type="checkbox"/> Feature 7	

Location/Directions

Site Comments

Printed 4/22/2011

WDFW Fish Passage and Diversion Screening Inventory Database
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WDFW Fish Passage and Diversion Screening Inventory Database

Level A Culvert Assessment Report

Project ID	934421	Project Name	unnamed	Route	15.0000
Location	47.758795	County	Dogfish Cr	Assessment Status	No
Assessment ID	-122.649871	Assessment Date		Assessment Type	

Data Source		Assessment Date	1/10/2010
Assessment Type	Level A	Assessment Status	No

Culvert Details				Level A Parameters			
ID	Material	Route	Location	Assessment Date	Assessment Status	Assessment Type	Assessment Type
11	RD	001	001	00000			
Assessment Status: No							

Channel Description	
Channel Material	
Channel Slope	
Channel Width	
Plunge Pool	
Plunge Pool Material	
Plunge Pool Slope	
Plunge Pool Width	
Road	
Road Material	



Assessment Results			
Assessment Date	0/0	Assessment Status	0/0
Assessment Type	0/0	Assessment Type	

Comments

Potential Habitat Gain			
Assessment Date		Assessment Status	
Assessment Type	0/0	Assessment Type	
PI Total			

Assessment Date: 4/22/2010

Assessment Status: No