Exhibit D-3

Robert St. Clair

From: Judy Graves <judyjgraves@gmail.com>
Sent: Monday, October 16, 2023 7:32 AM
To: Planning Group
Subject: Wetland Overlay Amendments
Attachments: 115 Elliot Way Wetland Determination_final.pdf; WD20210600 AgencyDecision.pdf Wetland Final.pdf

To: Cannon Beach Planning Commission,

From: Judy Graves, property owner (lots 10 & 11, Spruce Park)

To whom it may concern,

In the summer of 2021, I contacted the Cannon Beach Planning department to inquire about the status of lots 10 and 11, Spruce Park bordered by Elliott Way and Hemlock. I was told by the planning department that I needed to have a Wetland Study completed since the possibility of wetlands had been noted in a previous study and that Columbia River Estuary Study Taskforce (Crest) did such work. Upon my request Crest completed the study. (See first attachment). In March of 2022 the Department of State Lands reviewed the study by Crest and approved the study with revisions.

These documents should be in your city records, but I'm not assuming anything since all this work took place during the pandemic years and things may have gone astray. For this reason, I am attaching two documents that will be useful on the Wetland Overlay work you are doing.

With regards,

Judy Graves

Exhibit D-3

Oregon
Kate Brown, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl

March 17, 2022

Judy Graves
6611 SE Yamhill Ct
Portland, OR 97215

Re: WD # 2021-0600 **Approved with Revisions**
Wetland Delineation Report for 115 Elliot Way
Clatsop County; T5N R10W S30DA TL6900
Cannon Beach Local Wetlands Inventory, Wetland 23

Dear Judy Graves:

The Department of State Lands has reviewed the wetland delineation report prepared by CREST for the site referenced above. upon the information presented in the report, a site visit on February 17, 2022, and additional information submitted upon request, we concur with the wetland boundaries as mapped in revised Figure 6 of the report. Please replace all copies of the preliminary wetland map with this final Department-approved map.

Within the study area, 2 wetlands (Wetland 1 and 2, totaling approximately 0.008 acres) were identified. They are subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high-water line (OHWL) of the waterway (or the 2-year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. We recommend that you attach a copy of this concurrence letter to any subsequent state permit application to speed application review. Federal, other state agencies or local permit requirements may apply as well. The U.S. Army Corps of Engineers will determine jurisdiction under the Clean Water Act, which may require submittal of a complete Wetland Delineation Report.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. If you have any questions, please contact the Jurisdiction Coordinator for Clatsop County, Daniel Evans, PWS, at (503) 986-5271.

Sincerely,

Peter Ryan, SPWS
Aquatic Resource Specialist

Enclosures

ec: April Silva, CREST
Cannon Beach Planning Department (Maps enclosed for updating LWI)
Brad Johnson, Corps of Engineers
Dan Cary, SPWS, DSL
Oregon Coastal Management Program (coast.permits@state.or.us)

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

Exhibit D-3

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

Ways to submit report:

- **Under 50MB** - A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.
- **50MB or larger** - A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- OR a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

Ways to pay review fee:

- By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy OR attached to the complete signed cover form if report submitted electronically.

Contact and Authorization Information

☐ Applicant ☒ Owner Name, Firm and Address:
Judy Graves
6611 SE Yamhill Ct
Portland, OR 97215-2036

Business phone #
Mobile phone # (optional) (503) 720-5907
E-mail: judyjgraves@gmail.com

☒ Authorized Legal Agent, Name and Address (if different):
April Silva
CREST
818 Commercial St Ste 203
Astoria,OR 97103

Business phone # (503) 325-0435
Mobile phone # (optional) (503) 440-0434
E-mail: asilva@columbiaestuary.org

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

Typed/Printed Name: April Silva **Signature:** April Silva Digitally signed by April Silva Date: 2022.03.04 11:23:21 -08'00'

Date: 03/04/2022 Special instructions regarding site access: N/A

Project and Site Information

Project Name: 115 Elliot Way

Latitude: 45.887094 Longitude: -123.962136
decimal degree - centroid of site or start & end points of linear project

Proposed Use:
residential development

Tax Map # 51030DA06900
Tax Lot(s) 6900

Tax Map #
Tax Lot(s)

Project Street Address (or other descriptive location):
On the corner of Hemlock and Elliot Way near south of midtown entrance into Cannon Beach on west side of HWY 101.

Township 5N Range 10W Section 30 QQ
Use separate sheet for additional tax and location information

City: Cannon Beach County: Clatsop

Waterway: N/A River Mile: N/A

Wetland Delineation Information

Wetland Consultant Name, Firm and Address:
April Silva
CREST
818 Commercial St Ste 203
Astoria,OR 97103

Phone # (503) 325-0435
Mobile phone # (if applicable) (503) 440-0434
E-mail: asilva@columbiaestuary.org

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

Consultant Signature: April Silva Digitally signed by April Silva Date: 2022.03.04 11:23:42 -08'00' Date: 03/04/2022

Primary Contact for report review and site access is ☒ Consultant ☐ Applicant/Owner ☐ Authorized Agent

Wetland/Waters Present? ☒ Yes ☐ No Study Area size: 0.02 Total Wetland Acreage: 0.0080

Check Applicable Boxes Below

☐ R-F permit application submitted
☐ Fee payment submitted **$** _____
☐ Mitigation bank site
☐ Resubmittal of rejected report ($100)
☐ EFSC/ODOE Proj. Mgr: _____
☐ Request for Reissuance. See eligibility criteria. (no fee)
DSL # _____ Expiration date_____
☐ Wetland restoration/enhancement project (not mitigation)
☐ Previous delineation/application on parcel
If known, previous DSL # _____
☒ LWI shows wetlands or waters on parcel
Wetland ID code 23

For Office Use Only

DSL Reviewer: DE Fee Paid Date: ____/____/____ DSL WD # 2021-0600

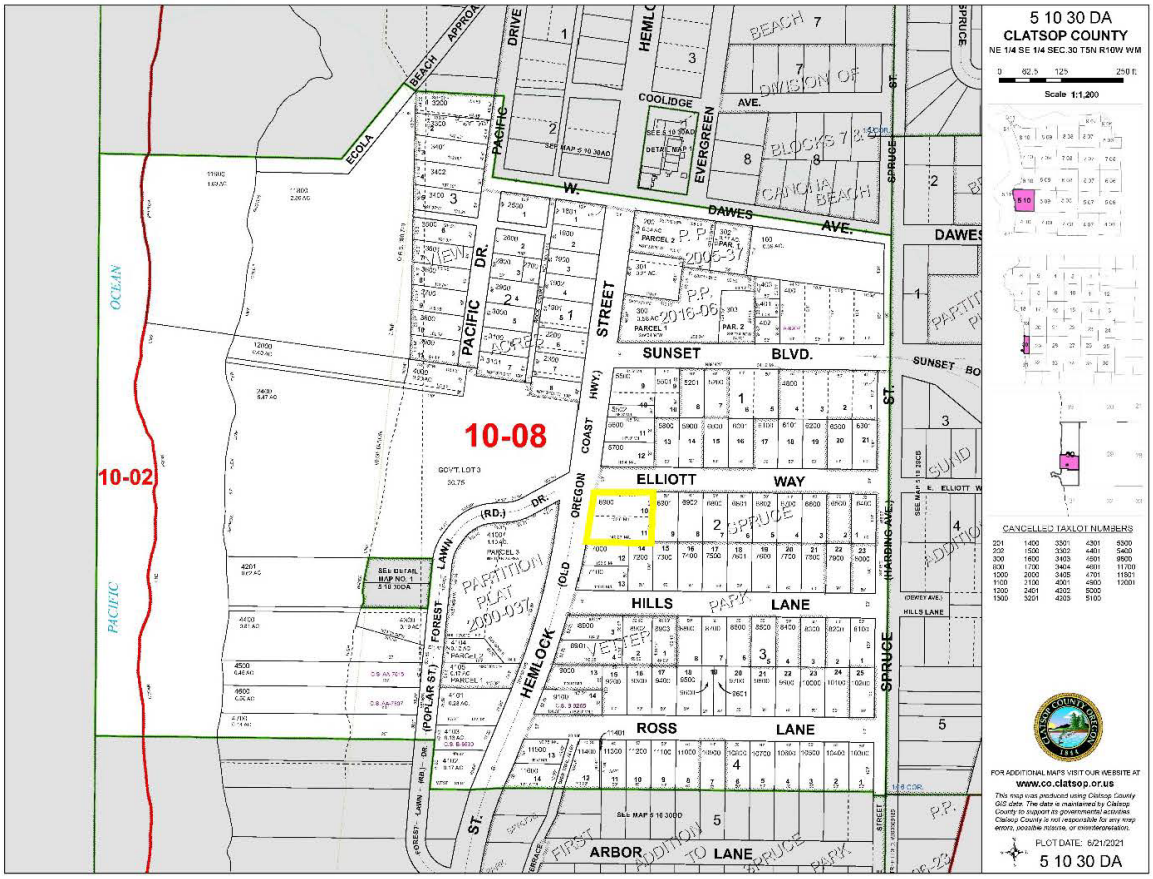
Date Delineation Received: ___/___/___ DSL App.# _____

Figure 1

115 Elliot Way Location Map

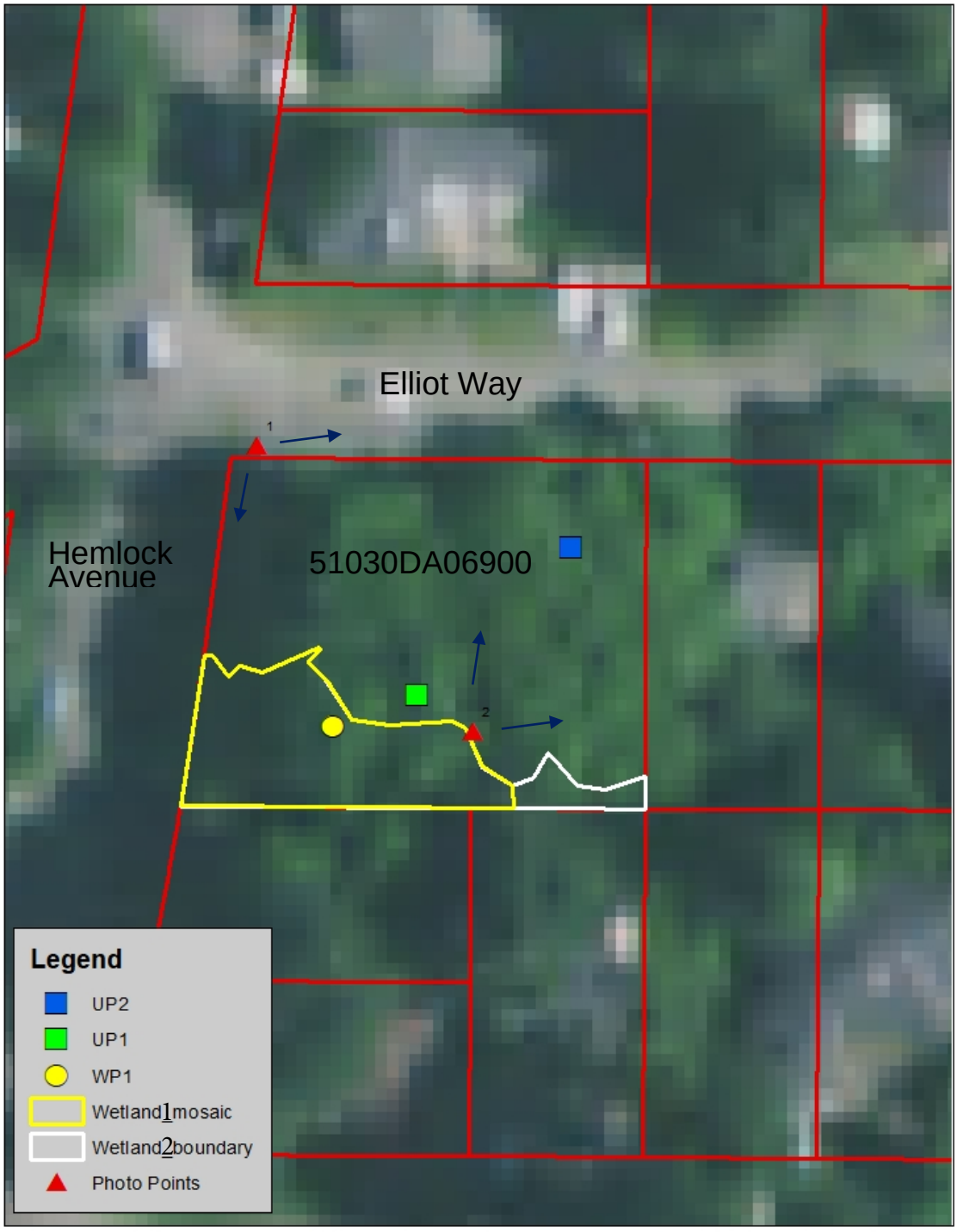
Figure 2

Tax Lot Map



DSL WD # 2021-0600
Approval Issued 3/17/2022
Approval Expires 3/17/2027

Figure 6
115 Elliot Way Wetland Map



Wetland 1: 0.006 acres (70% wetland) PFO-Depressional-Closed Nonpermanently Flooded

Wetland 2: 0.002 acres, PFO-Depressional-Closed Nonpermanently Flooded

9/23/2021

Wetland Determination Report

115 Elliot Way, Cannon Beach, OR

April Silva
COLUMBIA RIVER ESTUARY STUDY TASKFORCE

Introduction & Site Description

This report was prepared for Judy Graves by the Columbia River Estuary Study Taskforce. On September 13th, 2021, CREST's Lead Ecologist completed a wetland determination for taxlot 51030DA06900 in Cannon Beach, Oregon. The site is bordered to the west by Hemlock Street, to the north by Elliot Way, and by developed lots on the east and south. The site is entirely vegetated with a Red Alder canopy (*Alnus rubra*), a shrub layer of Red Elderberry (*Sambucus racemosa*), Black twinberry (*Lonicera involucrata*), Sword fern (*Polystichum munitum*), and Armenian blackberry (Rubus armeniacus). The herbaceous layer is dominated by Slough sedge (Carex obnupta), English ivy (*Hedera helix*), False Lily of the valley (*Maianthemum dilatatum*), and sword fern (Polystichum munitum), with patches of Pacific water parsley (*Oenanthe sarmentosa*).

Left: Elliot Way looking east.

Right: looking south into study area.

Methods

A routine onsite determination was performed to identify any wetlands or waters of the state within the project area. At each plot vegetation, hydrology, and soils were examined for wetland indicators. Depth of soil pits ranged from 15 to 16 inches. A 1-meter^2 quadrat was used for herbaceous vegetation, with a 3 meter and 5 meter circle used for shrubs and trees, respectively. Data collection followed the Field Guide for Wetland Delineations (Army Corp of Engineers 1987), and the Western Mountains, Valleys, and Coast Regional Supplement Version 2.0 for plant, soil, and hydrology wetland indicators (Army Corp of Engineers 2010). Prior to selecting sampling points the entire site was walked, around the borders and then in transects throughout to evaluate changes in microtopography, vegetation, and look for wetland or stream indicators. Once familiar with the site specific sampling plot locations were selected. Two plots were completed in the most 'suspicious' locations: lowest elevation and with vegetation with the highest wetland rating.

Findings

Three wetland indicators are used for a determination: vegetation, soil, and hydrology. The study area has only one of the three indicators: hydrophytic vegetation. No evidence of a stream, even an ephemeral one, was found. Examination of soils at the plots revealed a complete lack of hydric soil and hydrologic indicators. Data plots were done in the lowest areas onsite with the premise that if there are no wetland indicators in the lowest most likely to be wetland areas, there will not be indicators at higher elevations with less hydrophytic vegetation present.

The National Wetland Inventory does not show any mapped wetlands in the study area. Soils are mapped as Walluski Silt Loam (71C), 7% to 15% slopes, these are non-hydric and moderately well drained non-wetland soils (NRCS Web Soil Survey). The study area represents a temperate forest environment, where enough shade and precipitation support typically wetland plants, but has neither a hydrologic input or poorly drained soils that would promote and support wetland establishment and persistence. The study area is not a depressional feature that would pond water to support wetland conditions, and the growth conditions of all vegetative strata (tree, shrub, herb) species attests to this as the non-wetland plants are thriving, and the wetland (hydrophytic) species are stunted and stressed.

Presence of Wetland Indicators		
Indicator	**Plot 1**	**Plot 2**
Vegetation	Yes	Yes
Soils	No	No
Hydrology	No	No

In conclusion, no wetlands were found in the study area. Wetland adapted plants are present and dominate the herbaceous layer, however dominant shrubs and tree species are species found in uplands as often as they are wetlands. Surface water was not present, soil was not saturated at 16 inches, and there was no water table present at that depth. No redox signatures, either relict or current, were visible in the soil.

Plot 1. Left: Soil profile. Right: Vegetation

A 16 inch soil pit was excavated to investigate soil and hydrology conditions. Adjacent to the soil pit a 1 meter squared quadrat was used to evaluate vegetation.

Plot 2. Left: Soil profile. Right: Vegetation

Exhibit D-3

Soil Map—Clatsop County, Oregon
(115 Elliot Way, Cannon Beach, OR)

Soil Map—Clatsop County, Oregon
(115 Elliot Way, Cannon Beach, OR)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clatsop County, Oregon
Survey Area Data: Version 18, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 28, 2020—Jun 22, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

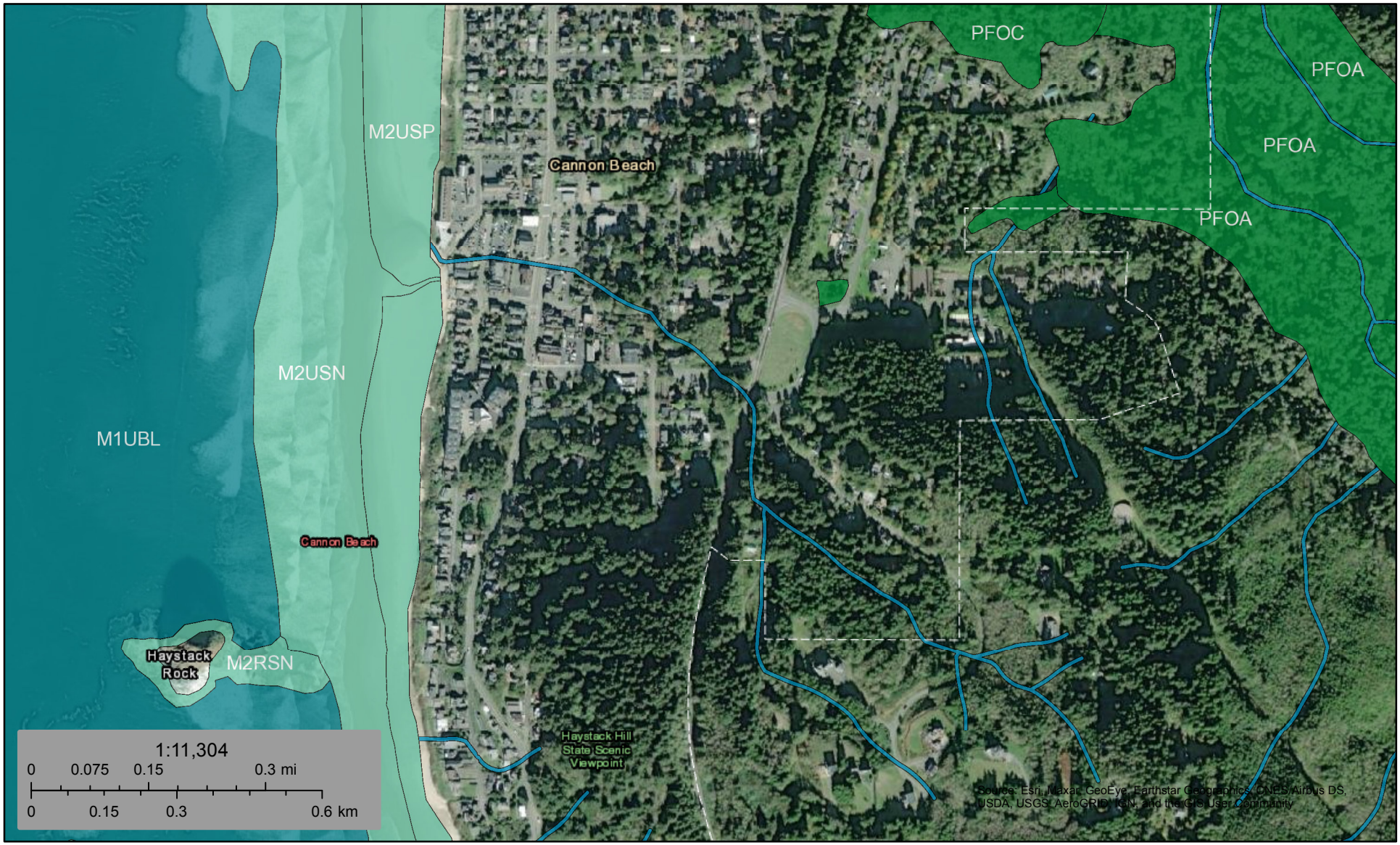
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
71C	Walluski medial silt loam, 7 to 15 percent slopes	0.5	100.0%
Totals for Area of Interest		**0.5**	**100.0%**

Exhibit D-3

U.S. Fish and Wildlife Service

National Wetlands Inventory

Cannon Beach



September 23, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Exhibit D-3

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

Project/Site: 115 Elliot Way City/County: Cannon Beach/Clatsop Sampling Date: 9/13/2021
Applicant/Owner: Judy Graves State: OR Sampling Point: Plot 1
Investigator(s): April Silva, Ian Edgar Section, Township, Range: Section 30 Township 5 Range 10
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): 0-2%
Subregion (LRR): LRR A Lat: Long: Datum:
Soil Map Unit Name: 71C Walluski Silt Loam NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation N , Soil N , or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation N , Soil N , or Hydrology N 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 X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? Yes No X

Remarks: surveying wasn't possible under the established canopy.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5 m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	100	Y	FAC
2.			
3.			
4.			
	100%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 3 m)			
1. Rubus armeniacus	1	N	FAC
2. Lonicera involucrata	10	Y	FAC
3. Sambucus racemosa	5	Y	FACU
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 1m²)			
1. Hedera helix	15	Y	FACU
2. Carex obnupta	30	Y	OBL
3. Maianthemum dilatatum	15	Y	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	60%	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 40%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	0	x 2 =	0
FAC species	126	x 3 =	378
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	176 (A)		488 (B)

Prevalence Index = B/A = 2.77

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
x 2 - Dominance Test is >50%
x 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

Exhibit D-3

SOIL

Sampling Point: Plot 1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-2	10YR 2/2	100					Silty sand	Heavy roots
2-8	10YR 2/2	100					Silty sand	Less roots
8-11	10YR 3/2	100					Silty sand	No roots

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

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

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators 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** **X**

Remarks: soil profile was consistent throughout in regard to chroma and value, horizons were separated out mostly by the presence of roots and for the lowest profile chroma.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
___ Salt Crust (B11)
___ Aquatic Invertebrates (B13)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Stunted or Stressed Plants (D1) (**LRR A**)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Saturation Visible on Aerial Imagery (C9)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ FAC-Neutral Test (D5)
___ Raised Ant Mounds (D6) (**LRR A**)
___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____
Water Table Present? Yes ___ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

Exhibit D-3

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

Project/Site: 115 Elliot Way City/County: Cannon Beach/Clatsop Sampling Date: 9/13/2021
Applicant/Owner: Judy Graves State: OR Sampling Point: Plot 2
Investigator(s): April Silva, Ian Edgar Section, Township, Range: Section 30 Township 5 Range 10
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): 0-2%
Subregion (LRR): LRR A Lat: Long: Datum:
Soil Map Unit Name: 71C Walluski Silt Loam NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation N , Soil N , or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation N , Soil N , or Hydrology N 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 X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? **Yes** **No X**

Remarks: surveying wasn't possible under the established canopy.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5 m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	100	Y	FAC
2.			
3.			
4.			
	100%	= Total Cover	
Sapling/Shrub Stratum (Plot size: 3 m)			
1. Lonicera involucrata	40	Y	FAC
2.			
3.			
4.			
5.			
	40%	= Total Cover	
Herb Stratum (Plot size: 1m²)			
1. Carex obnupta	15	Y	OBL
2. Maianthemum dilatatum	10	N	FAC
3. Lysichiton americanus	25	Y	OBL
4. Oenanthe sarmentosa	10	N	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	60%	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
	0%	= Total Cover	

% Bare Ground in Herb Stratum 40%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	0	x 2 =	0
FAC species	150	x 3 =	450
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	200 (A)		500 (B)

Prevalence Index = B/A = 2.5

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
x 2 - Dominance Test is >50%
x 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes x** **No**

Remarks:

Exhibit D-3

SOIL

Sampling Point: Plot 2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	10YR 2/2	100					Silty sand	
6-16	10YR 3/2	100					Silty sand	

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

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

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators 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** **X**

Remarks: soil is completely dry, used water to moisten for texture.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks: