1811 NW Hood Street
Wetland Delineation and Assessment
Camas, Washington

Prepared For:
Modern NW
1801 NE Glisan Street
Portland, OR 97213

Prepared By:
Olson Environmental LLC
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June 14, 2021

OLSON ENVIRONMENTAL LLC
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION

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WETLAND DELINEATION AND ASSESSMENT

Project:	**1811 Hood Street**
Applicant:	**Modern NW**
Location:	**1811 Hood Street, Camas, Washington**
Legal Description:	**NE & NW ¼ of Section 09,T1N, R3E W. M., Clark County**
Serial Number(s):	**127415-000 (4.67 ac.) and 127440-000 (1.41 ac.)**
Study Area Size:	**6.08 acres**
Jurisdiction:	**Camas**
Watershed:	**Lacamas Creek/Dwyer Creek (10)**
WRIA	**Salmon – Washougal (28)**
Zoning:	**R-7.5**
ComPlan:	**SFM (Single Family Medium)**
Assessment by:	**Kevin Terlep and Garrett Jordan**
Site Visit:	**6/11/2021 and 6/14/2021**
Report Date:	**06/14/2021**

1.0 INTRODUCTION

This report details the results of a wetland delineation and assessment conducted for Modern NW, by Olson Environmental, LLC. (OE). The study area is located at 1811 Hood Street, Camas, Washington (Fig. 1). This report identifies the extent of any wetlands and associated buffers found within the study area as defined and regulated by the US Army Corps of Engineers (USACE) and the Washington Department of Ecology (Ecology) under sections 401 and 404 of the Clean Water Act, and locally by the City of Camas under Camas Municipal Code (CMC) 16.53.

The 6.08-acre properties include parcel 127415-000 (4.67 acres) and 127440-000 (1.41 acres). The study area includes the entirety of both parcels for a proposed 14-unit single family residential development and associated roads.

The majority of the study area is open grassland, it moderately slopes from the northeast to the southwest (Fig. 2). One existing house is located on the adjacent parcel to southeast. The eastern property line is immediately parallel to Northwest Hood Street and NW Columbia Summit Drive and NW Klickitat Street are to the north and west, respectively. The property is located within the Dwyer Creek sub-watershed of the Lacamas Creek watershed (WRIA 28). Through the course of the assessment one (1) wetland was identified along the western property line of the southern parcel (127440-000).

2.0 WETLAND DELINEATION AND ASSESSMENT METHODS

The wetland delineation was conducted according to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (USACE, 2010.) hereafter, referred to as the manual. According to the manual, jurisdictional wetlands are defined as:

> *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 generally include swamps, marshes, bogs, and similar areas.*

Prior to the on-site investigations, a review of existing information related to determination of the wetland boundaries was conducted. This review included the Clark County topographic data (Fig. 2), Clark County Soil Survey data (Fig. 3), and Clark County Wetland Inventory (LWI) & National Wetland Inventory (NWI) data (Fig. 4).

The manual uses three parameters in making wetland determinations: hydrophytic vegetation, hydric soils, and wetland hydrology. Except in certain situations defined in the manual, evidence of a minimum of one positive indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination.

Hydrophytic vegetation are plants that due to morphological, physiological, and/or reproductive adaptations, have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions. Individual plant species within a single plant community are characterized with a wetland indicator status according to the most current National Wetland Plant List (Lichvar et al. 2016). Wetland indicator status ratings and their ordinal rating categories, based on ecological descriptions, are as follows:

Indicator Status* (abbreviation):
Obligate (OBL) - Almost always is a hydrophyte, rarely in uplands
Facultative Wetland (FACW) - Usually is a hydrophyte but occasionally found in uplands
Facultative (FAC) - Commonly occurs as either a hydrophyte or non-hydrophyte
Facultative Upland (FACU) - Occasionally is a hydrophyte, but usually occurs in uplands
Upland (UPL) - Rarely is a hydrophyte, almost always in uplands
*Source: Lichvar and Gillrich (2011)

Hydrophytic vegetation is present when more than 50 percent of the dominant species have an indicator status of OBL, FACW, and/or FAC.

Hydric soils are soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation. The presence or absence of hydric soils is determined in the field by digging soil pits to a depth of 16 inches and examining the soil for hydric soil

indicators. Organic soils such as peats and mucks are considered hydric soils. Mineral hydric soils are generally either gleyed or have redox concentrations and/or low matrix chroma immediately below the A-horizon or 10 inches (whichever is shallower). Soil colors are determined using the Munsell Soil Color Chart (Munsell Color System 2009).

Wetland hydrology is present when an area is inundated or saturated to the surface for at least 5 percent of the growing season. The growing season is defined as the portion of the year when soil temperature at 19.7 inches below the soil surface is greater than biological zero (5 degrees C). The site was examined for standing water and/or saturated soils, which serve as primary indicators of wetland hydrology. The area was also checked for other wetland hydrologic characteristics such as watermarks, drift lines, wetland drainage patterns, and morphological plant adaptations.

3.0 SITE SPECIFIC METHODS

OE conducted the onsite wetland delineation and assessment on June 11 and 14, 2021 using the methodology found in the Regional Supplement to the Manual (USACE 2010). In addition, applicable guidance and any supporting technical guidance documents issued by the USACE, Ecology, and Clark County were also utilized.

The entire site was first traversed by foot to observe any visible wetland conditions. Once the general location of the wetland boundaries were identified, paired data plots were taken in areas that represented the conditions of the uplands and wetlands, respectively. One and ten meter radius plots were chosen in a uniform topographic position that was representative of a single plant community. The paired plots were located approximately 5 - 10 feet apart to minimize the margin of error. Soils at each sample plot were typically inspected to a depth of 16 inches (or more) to determine the presence or absence of hydric soil characteristics and/or wetland hydrology. Data sheets for the sample plots are attached in Appendix A.

The wetland boundary was determined based on the presence of hydric soils, the presence of wetland hydrology (i.e. oxidized rhizospheres along living roots, soil saturation), and a dominance of hydrophytic vegetation. It should be noted that only paired plots were recorded in the field, however, numerous unrecorded plots were dug to confirm wetland boundaries. The on-site wetlands were classified according the USFWS classification system (Cowardin et al. 1979) and the Hydrogeomorphic (HGM) Classification system (Adamus et al. 2001).

4.0 RESULTS AND DISCUSSION

The Clark County GIS Maps Online and the LWI Map, Figure 4, indicate that wetlands do not occur within the study area. The US Fish and Wildlife Service's National Wetland Inventory map (NWI) was also consulted and likewise, no NWI wetlands occur within the study area. It is noted that Figure 4 and the County GIS maps are derived from NWI and LWI data, aerial photographs, NRCS Maps, previous delineations, and topographic map interpretation. They are not intended to represent the extent of jurisdictional

wetlands. There may be unmapped wetland and waters subject to regulation and all wetlands and waters boundary mapping is approximate. In all cases, actual field conditions determine the presence, absence, and boundaries of wetlands and waters.

The following Map Unit Symbols are mapped (Fig. 3) on this site:

> ***Powell silt loam, 20 to 30 percent slopes (PoE)***. The Powell series consists of moderately drained soils formed in old alluvial silt and underlain by a layer of fragipan at 23-36 inches. These soils are moderately permeable, surface run-off is medium, and the erosion hazard is moderate to severe if left uncovered (McGee 1972). They are classified as **non-hydric** soils according to the Clark County hydric soils list.
>
> ***Powell silt loam, 8 to 20 percent slopes (PoD)***. The Powell series consists of moderately drained soils formed in old alluvial silt and underlain by a layer of fragipan at 23-36 inches. These soils are moderately permeable, surface run-off is medium, and the erosion hazard is moderate (McGee 1972). They are classified as **non-hydric** soils according to the Clark County hydric soils list.

4.1 WETLANDS

Wetland A (11, 480 sq. ft)

During the onsite assessment, one (1) wetland was identified along the west property line (Fig. 5) in the area indicated by the previous wetland study. This wetland appears to remnant of a larger wetland that extended to the northeast and continues onto the property to the west. Vegetation within the wetland is dominated by soft rush (*Juncus effusus* -FACW), teasel (*Dipsacus fullonum* -FAC), velvet grass (*Holcus lanatus* -FAC) and reed canary grass (*Phalaris arundinacea* -FACW). Soils within the wetland are characterized by dark brown to very dark grayish brown matrixes (7.5-10YR 3/1) from 0-16 inches and 2-5% strong brown (7.5YR4-6) redox concentrations from 6-16 inches occurring within the matrix. The hydric soil indicator for these soils was redox dark surface (F6). The wetland hydrology indicators were geomorphic position (D2), oxidational within the rhizosphere of living roots (C3), and passing the FAC-neutral test (D5).

4.2 NON-WETLANDS

The majority of the non-wetlands throughout the site are dominated by open grassland. At the time of the site visit there were no indications that it is mowed on a regular basis. Dominant species within the pasture include velvet grass, red fescue (*Festuca rubra* -FAC), reed canary grass, and meadow foxtail (*Alopecurus pratensis* -FAC). Very few trees occur within the study area but several big-leaf maples (*Acer macrophyllum* -FAC) were observed within the study area. A tree line is also formed by the backyards of adjacent parcels to the west. Some of the species there include Douglas-fir (*Pseudotsuga*

menziesii -FACU), western red cedar (*Thuja occidentalis* -FAC), and Oregon ash (*Fraxinus latifolia* -FACW).

5.0 WETLAND FUNCTIONAL ASSESSMENT

The delineated wetlands were assessed using the Washington State Wetland Rating System for Western Washington (Hruby Update 2014). The system was designed to differentiate between wetlands based on their sensitivity to disturbance, their significance, their rarity, our ability to replace them, and the functions they provide.

Through a series of questions, the wetland rating system generates a number for water quality functions, hydrologic functions, and habitat function, which creates a total score for functions. Based on the total score, the wetland is categorized as a Category I, II, III, or IV wetland. Table 1 below summarizes the wetland type, total score for functions, and category of wetlands identified within the study area.

Table 1. Wetland Function Rating

Wetland	Wetland Type	Water Quality Functions	Hydrologic Functions	Habitat Functions	Total Score	Wetland Category
A	Slope	4	4	3	11	IV

6.0 REGULATORY ISSUES

Through the course of the wetland one (1) wetland was identified within the study area as shown in Figure 5. CMC 16.53.040 provides for the protection of wetlands within Camas's jurisdiction. The ordinance establishes protective buffers associated with wetlands and specifies that certain permits or approvals be obtained for projects containing wetlands or their respective buffers. As shown in Table 1, Wetland A was rated to be a Category IV wetland with a habitat score of 3. CMC requires that Category IV wetlands with habitat function scores of 3 to be protected with a 50-foot high-intensity land use buffer (Fig. 6, CMC Table 16.53.040-1).

In addition to CMC 16.53, jurisdictional wetlands are also regulated at the federal and state levels by the USACE and Ecology under Sections 401 and 404 of the Clean Water Act, respectively. Any impacts to the wetlands may require notification and approval from the USACE and Ecology. It is recommended that the USACE and Ecology be contacted regarding current permit requirements before proceeding with any development activities that would impact wetlands on this site.

The wetland boundaries and classifications shown in this report have been determined using the most appropriate field techniques and best professional judgment of the environmental scientist. It should be noted that USACE and Camas have the final authority in determining the wetland boundaries and categories under their respective jurisdictions. It is recommended that this delineation report

be submitted to these agencies for concurrence prior to purchasing a property, starting any development or planning activities that would affect wetlands or buffers on this site.

7.0 LITERATURE CITED

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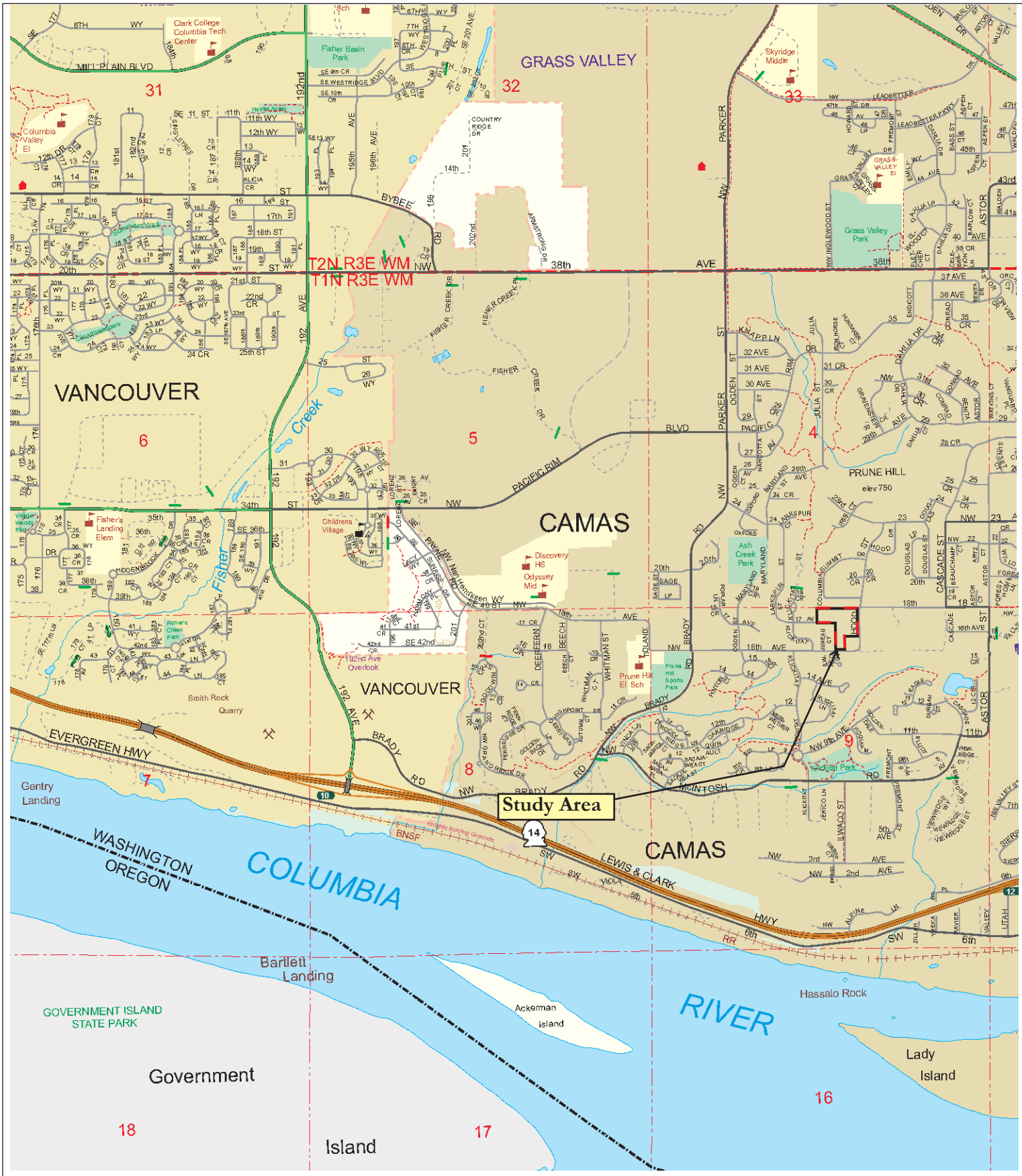
FIGURES

APPENDICIES



APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Delineation

Project Location
1811 NW Hood Street
Camas, Washington

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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Figure 1

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Delineation

Topographic Map [Clark County GIS]

1811 NW Hood Street
Camas, Washington

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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Figure 2

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Delineation

Clark County Soil Survey [NRCS]
1811 NW Hood Street
Camas, Washington

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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Figure 3

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Delineation

Clark County GIS Wetland Inventory [LWI/NWI]
1811 NW Hood Street
Camas, Washington

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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Figure 4

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Delineation

Delineated Wetland Boundary and Sample Plots

1811 NW Hood Street
Camas, Washington

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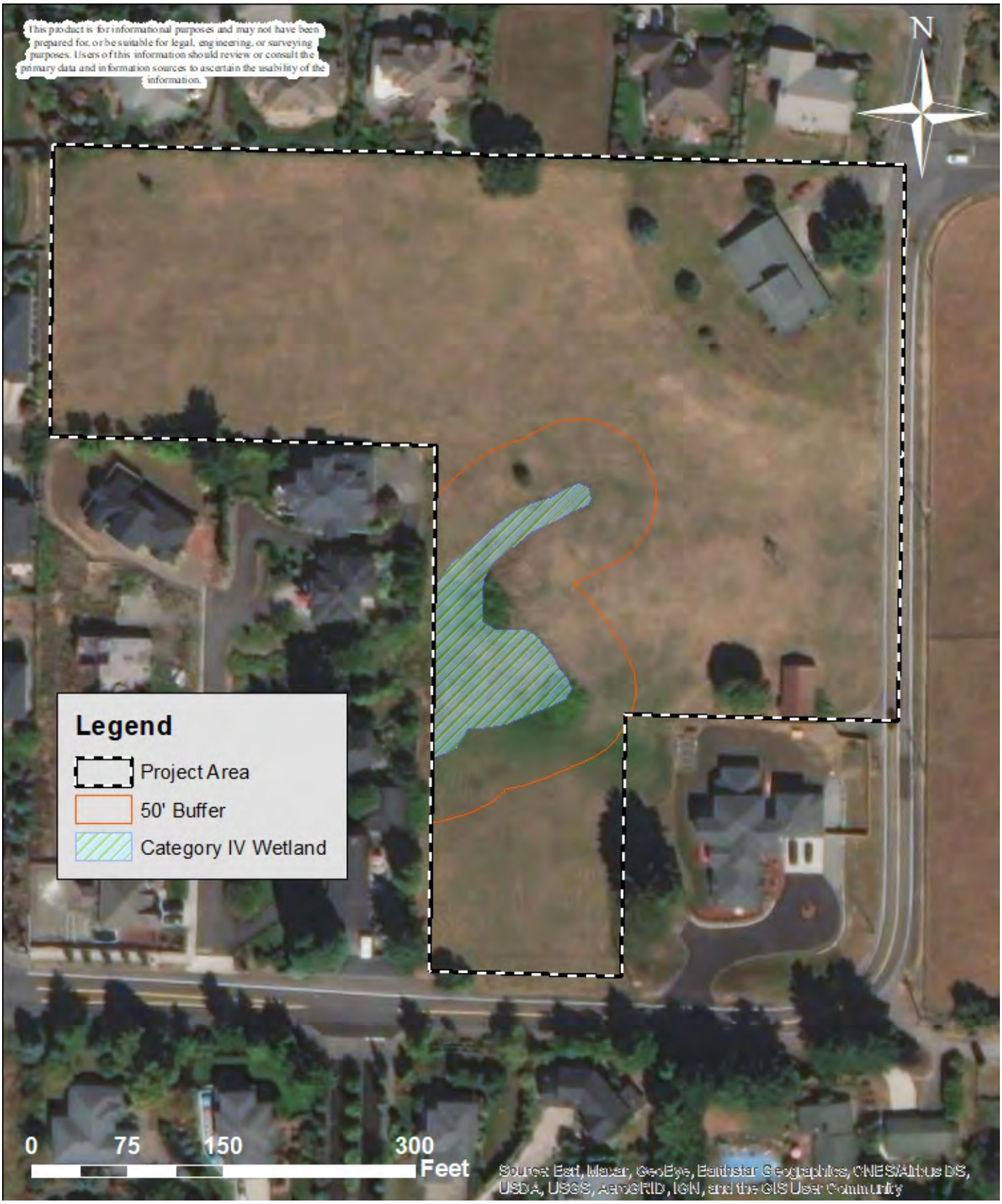
PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Figure 5



APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Delineation

Wetland Buffers - High LUI
1811 NW Hood Street
Camas, Washington

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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Figure 6

Wetland Finger Facing East

Top of Wetland Facing West

Wetland Finger Facing West

Maples Along Northern Property boundary

Bottom of Wetland Facing South

Western Property Boundary Facing 16th Ave

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Delineation

Photo Sheet 1
1811 NW Hood Street
Camas, Washington

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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Photo-Sheet 1

APPENDIX B

WETLAND RATING SYSTEM FOR WESTERN WASHINGTON
WETLAND RATING FORMS

WETLAND A –SLOPE HGM CLASS

Wetland name or number A

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Hood St Date of site visit: 06/11/2021

Rated by Kevin Terlep Trained by Ecology? __ Yes _X_ No Date of training _____

HGM Class used for rating Slope Wetland has multiple HGM classes? ___Y _x_ N

NOTE: **Form is not complete without the figures requested** *(figures can be combined)*.
Source of base aerial photo/map ESRI ArcMap Aerial Imagery basemap

OVERALL WETLAND CATEGORY IV (based on functions___ or special characteristics___)

1. Category of wetland based on FUNCTIONS

_____**Category I** – Total score = 23 - 27

_____**Category II** – Total score = 20 - 22

_____**Category III** – Total score = 16 - 19

X_____**Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	H M **L**	H M **L**	H M **L**	
Landscape Potential	H **M** L	H **M** L	H M **L**	
Value	H M **L**	H M **L**	H M **L**	**TOTAL**
Score Based on Ratings	4	4	3	11

Score for each function based on three ratings *(order of ratings is not important)*

9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	**I** **II**
Wetland of High Conservation Value	**I**
Bog	**I**
Mature Forest	**I**
Old Growth Forest	**I**
Coastal Lagoon	**I** **II**
Interdunal	**I** **II** **III** **IV**
None of the above	X

Wetland name or number A

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	B1
Hydroperiods	H 1.2	B3
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	B2
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	B2
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	B1
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	B4
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	B5
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	B6

Wetland name or number A

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

   NO – go to 2 **YES** – the wetland class is **Tidal Fringe** – go to 1.1

   1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

   NO – Saltwater Tidal Fringe (Estuarine) **YES – Freshwater Tidal Fringe**
   *If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

   NO – go to 3 **YES** – The wetland class is **Flats**
   *If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?
   ___The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
   ___At least 30% of the open water area is deeper than 6.6 ft (2 m).

   NO – go to 4 **YES –** The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?
   ✓ The wetland is on a slope (*slope can be very gradual*),
   ✓ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
   ✓ The water leaves the wetland **without being impounded**.

   NO – go to 5 **YES –** The wetland class is **Slope**

   NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?
   ___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
   ___The overbank flooding occurs at least once every 2 years.

Wetland name or number A

NO – go to 6 **YES** – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7 **YES** – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8 **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number A

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

S 1.0. Does the site have the potential to improve water quality?	
S 1.1. Characteristics of the average slope of the wetland: *(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)* Slope is 1% or less — points = 3 Slope is > 1%-2% — points = 2 Slope is > 2%-5% — points = 1 Slope is greater than 5% — points = 0	0
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions)*: Yes = 3 No = 0	0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. *Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.* Dense, uncut, herbaceous plants > 90% of the wetland area — points = 6 Dense, uncut, herbaceous plants > ½ of area — points = 3 Dense, woody, plants > ½ of area — points = 2 Dense, uncut, herbaceous plants > ¼ of area — points = 1 Does not meet any of the criteria above for plants — points = 0	0
Total for S 1 — Add the points in the boxes above	0

Rating of Site Potential If score is: ___ **12 = H** ___ **6-11 = M** X **0-5 = L** *Record the rating on the first page*

S 2.0. Does the landscape have the potential to support the water quality function of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Heavy metals and oil from road — Yes = 1 No = 0	1
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources fertilizers and herbicides from yards — Yes = 1 No = 0	1
Total for S 2 — Add the points in the boxes above	2

Rating of Landscape Potential If score is: X **1-2 = M** ___ **0 = L** *Record the rating on the first page*

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? *At least one aquatic resource in the basin is on the 303(d) list*. Yes = 1 No = 0	0
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? *Answer YES if there is a TMDL for the basin in which unit is found.* Yes = 2 No = 0	0
Total for S 3 — Add the points in the boxes above	0

Rating of Value If score is: ___ **2-4 = H** ___ **1 = M** X **0 = L** *Record the rating on the first page*

Wetland name or number A

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. *Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.* Dense, uncut, **rigid** plants cover > 90% of the area of the wetland points = 1 All other conditions points = 0	0

Rating of Site Potential If score is: ___ **1 = M** _X_ **0 = L** *Record the rating on the first page*

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? Yes = 1 No = 0	1

Rating of Landscape Potential If score is: _X_ **1 = M** ___ **0 = L** *Record the rating on the first page*

S 6.0. Are the hydrologic functions provided by the site valuable to society?	
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) points = 2 Surface flooding problems are in a sub-basin farther down-gradient points = 1 No flooding problems anywhere downstream points = 0	0
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0
Total for S 6 Add the points in the boxes above	0

Rating of Value If score is: ___ **2-4 = H** ___ **1 = M** _X_ **0 = L** *Record the rating on the first page*

NOTES and FIELD OBSERVATIONS:

Wetland name or number A

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

____	Aquatic bed	4 structures or more: points = 4
_X_	Emergent	3 structures: points = 2
_X_	Scrub-shrub (areas where shrubs have > 30% cover)	2 structures: points = 1
____	Forested (areas where trees have > 30% cover)	1 structure: points = 0

If the unit has a Forested class, check if:

____The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

1

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

____	Permanently flooded or inundated	4 or more types present: points = 3
_X_	Seasonally flooded or inundated	3 types present: points = 2
_X_	Occasionally flooded or inundated	2 types present: points = 1
_X_	Saturated only	1 type present: points = 0
____	Permanently flowing stream or river in, or adjacent to, the wetland	
____	Seasonally flowing stream in, or adjacent to, the wetland	
____	**Lake Fringe wetland**	**2 points**
____	**Freshwater tidal wetland**	**2 points**

2

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

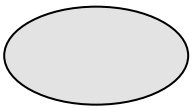
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

If you counted: > 19 species	points = 2
5 - 19 species	points = 1
< 5 species	points = 0

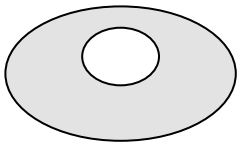
1

H 1.4. Interspersion of habitats

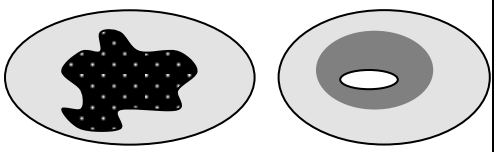
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

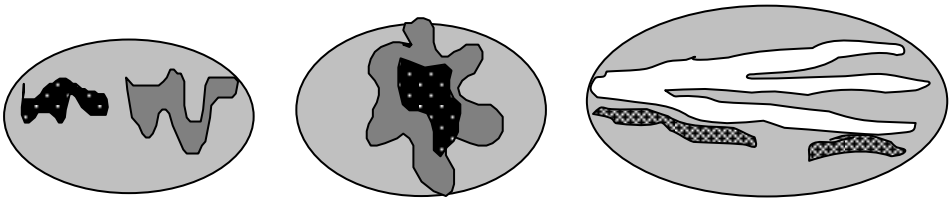


Low = 1 point



Moderate = 2 points

All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number A

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. *The number of checks is the number of points.* ____Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ____Standing snags (dbh > 4 in) within the wetland ____Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ____Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet weathered where wood is exposed)* ____At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)* ____Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)	0
Total for H 1 Add the points in the boxes above	5

Rating of Site Potential If score is:___**15-18 = H** ___**7-14 = M** X **0-6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat 0 **+** [(% moderate and low intensity land uses)/2] 0.5 **=** 0.5 % If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0	0
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 21 **+** [(% moderate and low intensity land uses)/2] 6 **=** 27 % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (- 2) ≤ 50% of 1 km Polygon is high intensity points = 0	-2
Total for H 2 Add the points in the boxes above	-1

Rating of Landscape Potential If score is:___**4-6 = H** ___**1-3 = M** X **< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.* Site meets ANY of the following criteria: points = 2 — It has 3 or more priority habitats within 100 m (see next page) — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) — It is mapped as a location for an individual WDFW priority species — It is a Wetland of High Conservation Value as determined by the Department of Natural Resources — It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 Site does not meet any of the criteria above points = 0	0

Rating of Value If score is:___**2 = H** ___**1 = M** X **0 = L** *Record the rating on the first page*

Wetland name or number A

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE:*** *This question is independent of the land use between the wetland unit and the priority habitat.*

— **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

— **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).

— **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.

— **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

— **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).

— **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

— **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).

— **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

— **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).*

— **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.

— **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.

— **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

— **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number A

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt Yes –Go to **SC 1.1** No= **Not an estuarine wetland**	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = **Category I** No - Go to **SC 1.2**	**Cat. I**
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are *Spartina*, see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = **Category I** No = **Category II**	**Cat. I** **Cat. II**
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? Yes – Go to **SC 2.2** No – Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes = **Category I** No = **Not a WHCV** SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf Yes – **Contact WNHP/WDNR and go to SC 2.4** No = **Not a WHCV** SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? Yes = **Category I** No = **Not a WHCV**	**Cat. I**
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? Yes – Go to **SC 3.3** No – Go to **SC 3.2** SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? Yes – Go to **SC 3.3** No = **Is not a bog** SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? Yes = **Is a Category I bog** No – Go to **SC 3.4** **NOTE:** If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = **Is a Category I bog** No = **Is not a bog**	**Cat. I**

Wetland name or number A

SC 4.0. Forested Wetlands Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.*** — **Old-growth forests** (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — **Mature forests** (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). Yes = **Category I** No = **Not a forested wetland for this section**	**Cat. I**
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)* Yes – Go to **SC 5.1** No = **Not a wetland in a coastal lagoon** SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than $^{1}/_{10}$ ac (4350 ft^2) Yes = **Category I** No = **Category II**	**Cat. I** **Cat. II**
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.*** In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to **SC 6.1** No = **not an interdunal wetland for rating** SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = **Category I** No – Go to **SC 6.2** SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = **Category II** No – Go to **SC 6.3** SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = **Category III** No = **Category IV**	**Cat I** **Cat. II** **Cat. III** **Cat. IV**
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	Not Applicable

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Rating Graphics

Cowardin Vegetation Types and 150' Buffer

1811 NW Hood Street
Camas, Washington

OLSON ENVIRONMENTAL LLC
222 E. Evergreen Blvd., Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Appendix B1

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Rating Graphics

Plant Cover
1811 NW Hood Street
Camas, Washington

OLSON ENVIRONMENTAL LLC
222 E. Evergreen Blvd., Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Appendix B2

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

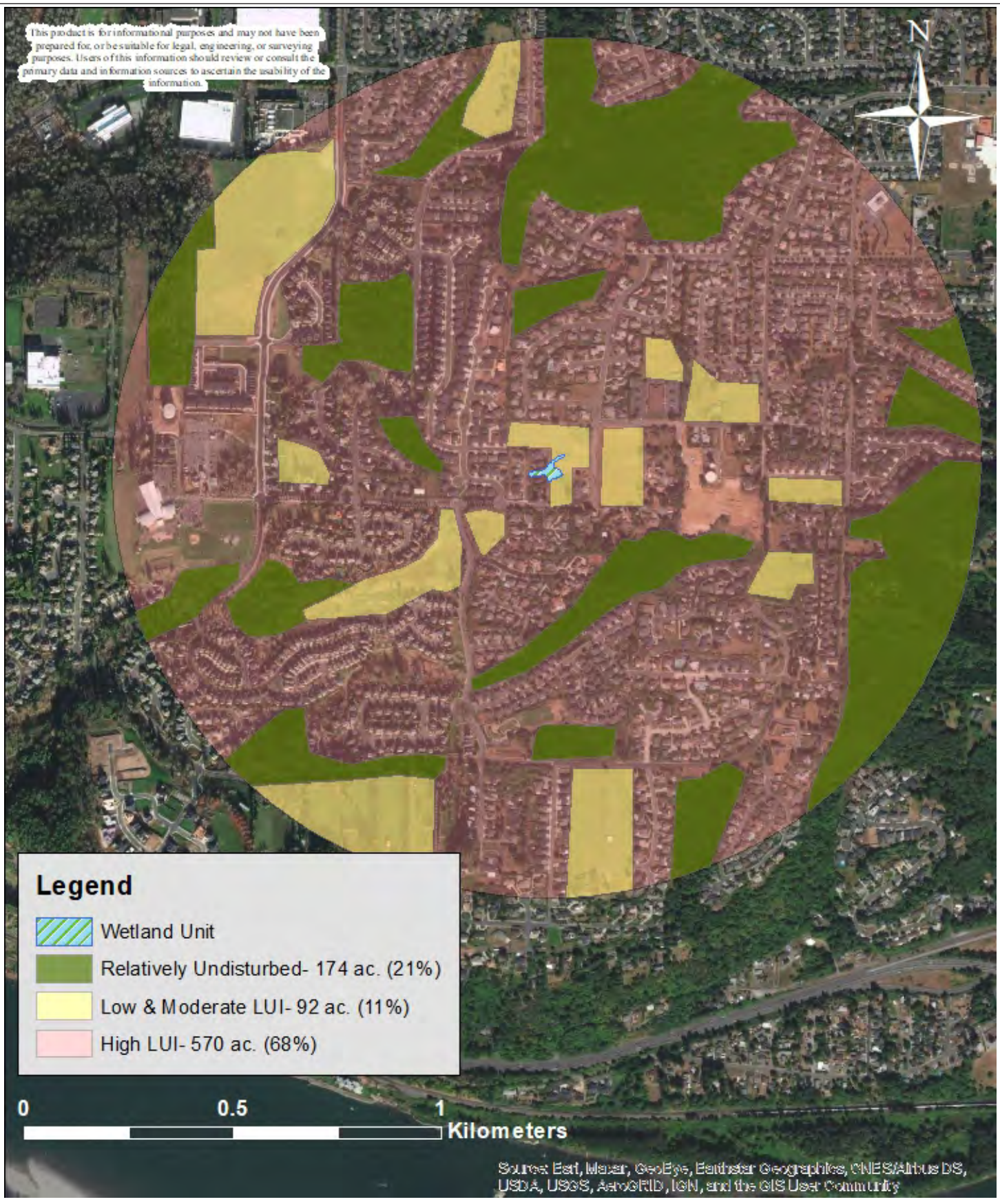
PURPOSE:
Wetland Rating Graphics

Hydroperiods
1811 NW Hood Street
Camas, Washington

OLSON ENVIRONMENTAL LLC
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION
222 E. Evergreen Blvd., Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Appendix B3



APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

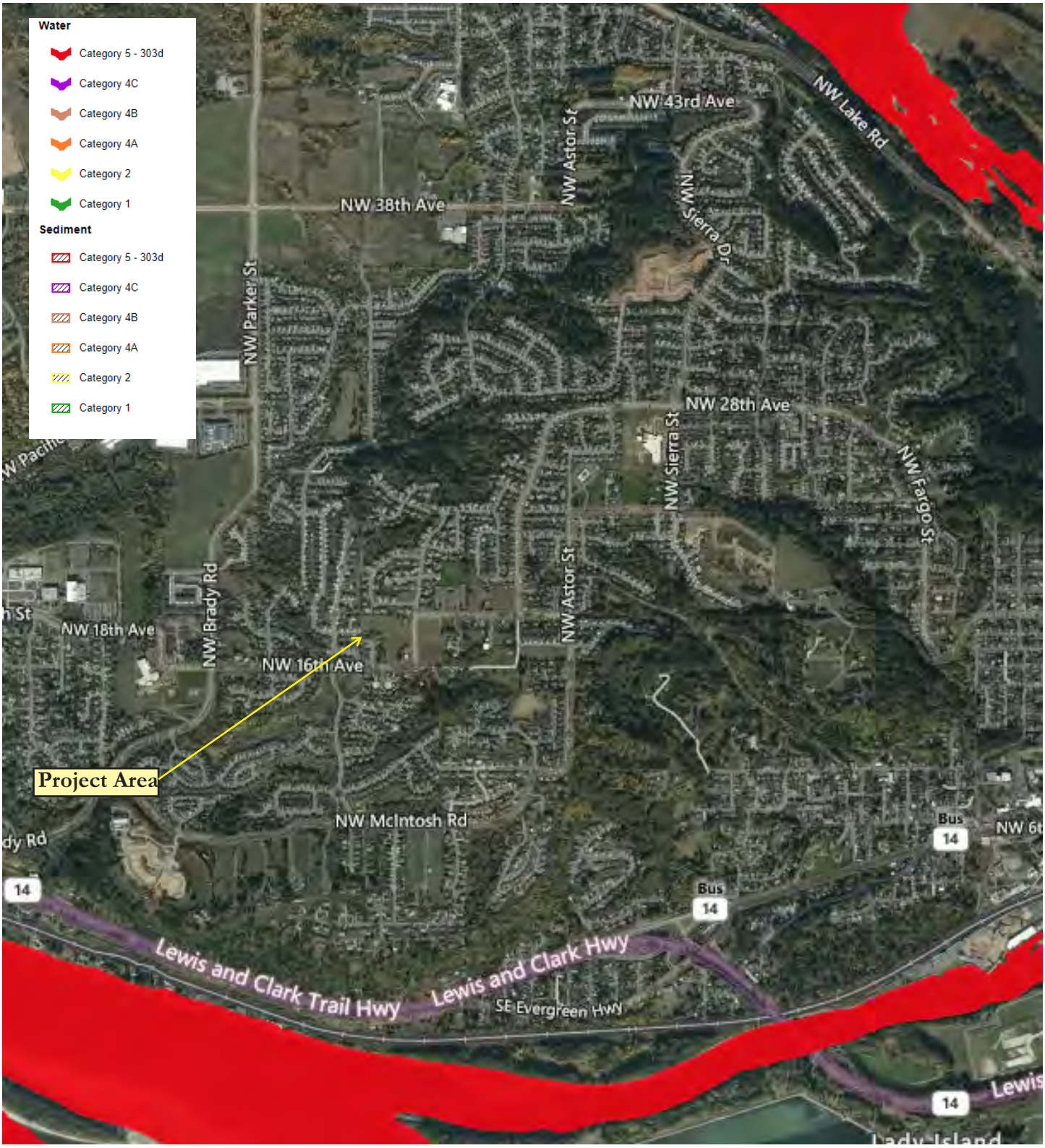
PURPOSE:
Wetland Rating Graphics

Land Use Intensity
1811 NW Hood Street
Camas, Washington

OLSON ENVIRONMENTAL LLC
222 E. Evergreen Blvd., Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Appendix B4



APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Rating Graphics

Water Quality Assessment Map (Ecology)

1811 NW Hood Street
Camas, Washington

OLSON ENVIRONMENTAL LLC
222 E. Evergreen Blvd., Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Appendix B5

DEPARTMENT OF ECOLOGY State of Washington

Washington State Water Quality Assessment
303(d)/305(b) List

Approved WQ Assessment | Contact Us | WQ Atlas

Category 3 listings contain data insufficient in determining water quality, therefore are removed from your results.
Include these 13 omitted listings.

New Search | Modify Search | Export

Search Results - 21 Matched Listings

ListingID	AU ID	Medium	Parameter	Category	Waterbody Name	WRIA	WQ Improvement Project	WQ Atlas Map Link
View	7893	1708000100182 1	Water	Temperature	2	DWYER CREEK	28 - Salmon-Washougal		7893
View	7894	1708000100182 1	Water	Dissolved Oxygen	5	DWYER CREEK	28 - Salmon-Washougal		7894
View	7895	1708000100182 1	Water	pH	2	DWYER CREEK	28 - Salmon-Washougal		7895
View	7910	1708000100030 1	Water	pH	2	LACAMAS CREEK	28 - Salmon-Washougal		7910
View	7912	1708000100030 1	Water	Dissolved Oxygen	5	LACAMAS CREEK	28 - Salmon-Washougal		7912
View	7913	1708000100030 1	Water	Bacteria	5	LACAMAS CREEK	28 - Salmon-Washougal		7913
View	7914	1708000100029 9	Water	Temperature	5	LACAMAS CREEK	28 - Salmon-Washougal		7914
View	7915	1708000100029 9	Water	Dissolved Oxygen	5	LACAMAS CREEK	28 - Salmon-Washougal		7915
View	7916	1708000100029 9	Water	pH	5	LACAMAS CREEK	28 - Salmon-Washougal		7916
View	7917	1708000100030 1	Water	Temperature	5	LACAMAS CREEK	28 - Salmon-Washougal		7917
View	7920	1708000100030 5	Water	Temperature	5	LACAMAS CREEK	28 - Salmon-Washougal		7920
View	7921	1708000100030 5	Water	Dissolved Oxygen	5	LACAMAS CREEK	28 - Salmon-Washougal		7921
View	7922	1708000100030 5	Water	pH	2	LACAMAS CREEK	28 - Salmon-Washougal		7922
View	7923	1708000100030 6	Water	Temperature	5	LACAMAS CREEK	28 - Salmon-Washougal		7923
View	7924	1708000100030 6	Water	Dissolved Oxygen	5	LACAMAS CREEK	28 - Salmon-Washougal		7924
View	7925	1708000100030 6	Water	pH	2	LACAMAS CREEK	28 - Salmon-Washougal		7925
View	7927	1708000100030 5	Water	Bacteria	2	LACAMAS CREEK	28 - Salmon-Washougal		7927
View	71669	1708000100030 1	Water	Ammonia-N	1	LACAMAS CREEK	28 - Salmon-Washougal		71669
View	71671	1708000100225 9	Water	Ammonia-N	1	LACAMAS CREEK	28 - Salmon-Washougal		71671
View	72473	1708000100225 9	Water	Bacteria	1	LACAMAS CREEK	28 - Salmon-Washougal		72473
View	73862	1708000100225 9	Water	Temperature	2	LACAMAS CREEK	28 - Salmon-Washougal		73862

New Search | Modify Search | Export

APPLICANT:
Modern NW
8101 NW Glisan
Portland, OR 97213

PURPOSE:
Wetland Rating Graphics

TMDLs for Project Watershed (Ecology)
1811 NW Hood Street
Camas, Washington

OLSON ENVIRONMENTAL LLC
222 E. Evergreen Blvd., Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: NE & NW 1/4 of S09, T1N, R3E W. M.
NEAR: Camas, Washington
COUNTY: Clark County
DATE: 06/16/2021

Appendix B6