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**J. S. Jones and Associates, Inc.**

## ***Critical Area Study***

*of the*

*7649 W. Mercer Way  
Mercer Island, Washington 98040*

*PRE24-058*

*Tax Parcel Number: 778600-0070  
SW Quarter of Section 25, Township 24 N, Range 4 E*

*Prepared for:  
David & Robin Shipper  
7649 W. Mercer Way  
Mercer Island, Washington 98040*

*Dated:  
February 12, 2025*

*Prepared by:  
Jeffery S. Jones, Wetland Scientist & Wildlife Biologist*

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**P. O. B O X 1 9 0 8  
I S S A Q U A H, W A S H I N G T O N 9 8 0 2 7  
2 5 3 - 9 0 5 - 5 7 3 6**

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## **1.0 Description of Proposal**

According to Pre-Application Meeting Summary (PRE24-058), this proposal is for an addition to an existing single-family residence, and to replace the concrete driveway in front of the garage. The house and garage will be connected by a covered walkway. The existing walkway is not covered. A 14" big-leaf maple and 72" redwood will be removed. A portion of the driveway is in a shared legal easement with multiple property owners. The existing swimming pool and concrete deck will be removed and replaced with a lap pool and new concrete deck.

## **2.0 Address, Parcel Identification Nos. & Abbreviated Legal Descriptions**

The King County tax parcel number is 778600-0070. The street address is 7649 W. Mercer Way, Mercer Island, WA 98040. The subject parcel is located in the Southwest Quarter of Section 25, Township 24 N, Range 4 E., of the Willamette Meridian.

The abbreviated legal description is as follows:  
SHUCK PARK ADD UND INT IN PRIVATE RD  
Plat Lot: 7

## **3.0 Site Condition and Surrounding Land Use Description**

The property has an existing single-family residence that was constructed in 1971. It is located on the shoreline of Lake Washington. The tax parcel is 0.40 acres/17,215 square feet. The finished interior floor space is 3,510 square feet over two floors. There are several decks on the water side of the house, two were the original decks from when the house was constructed. There is a detached garage that is 480 square feet. The garage and house are connected by a raised wood walkway that is not covered. There is a swimming pool on the lake side of the house, with a concrete deck and a walkway to the shoreline. The surrounding land uses are residential.

## **4.0 Wetland Scientist Qualifications**

The wetland scientist, Jeffery S. Jones, has a B.S. degree in Biology. He has 37 years full-time work as a wetland scientist and wildlife biologist in Western Washington, 8 years with the USDA Soil Conservation Service, 2 years as a BLM cadastral land surveyor.

## **5.0 Methodology**

The wetland assessment and delineation were performed using the 1997 Washington State Wetlands Identification and Delineation Manual (DOE, 1997); and U.S. Army Corps of Engineers, Technical Report Y-87-1 (on-line edition), Corps of Engineers Wetlands Delineation Manual by Environmental Laboratory January 1987 - Final Report (COE, 1987); and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), Environmental Laboratory U.S. Army Corps of Engineers May 2010 (COE, 2010). Wetlands are rated with the Washington State Wetland Rating System for Western Washington: 2014 Update. (Publication #14-06-029). Olympia, WA: Washington Department of Ecology (Hruby, T., 2014).

The assessment included a review of the National Wetland Inventory, the Department of Natural Resources Forest (DNR) FPARS stream mapping, the City of Mercer Island GIS Critical Area Mapping, and the USDA National Resource Conservation Service's online soil survey.

The field investigation was performed on February 10, 2025. The weather was cold and overcast. There are three sample locations identified as SL-1 and SL-2.

**6.0 Wetland Determination, Classification, Rating, and Buffer**

There is one wetland onsite identified as Wetland A. The wetland boundary extends between the rock bulkhead and the walkway, see on the attached Critical Area Sketch. The source of hydrology is 6-inch pipeline that originates at the end of a rock lined swale above the driveway, crosses the driveway, extends along the south side of the garage, under the walkway between garage and house, then under the gravel walkway. There is a white PVC pipe cleanout in the gravel walkway below the pool deck, then the pipe turns and discharges at a small plastic junction box in the wetland.

The wetland has a black one chroma “A” horizon, more than 12 inches thick, and sand. The soil is saturated through the profile to the soil surface. The plant community includes small-fruited bulrush (*Scirpus microcarpus*), which is an obligate wetland indicator species. The wetland boundary is defined by the extent of saturated soils, topography, gravel walkway, and rock bulkhead. It extends offsite a few feet onto the adjacent parcel to the south.

The wetland is rated a Category IV, with a total score of 14 points and a habitat score of 5 points, see the attached Wetland Rating Summary. The wetland buffer requirement is 40 feet, according to Section 19.07.070.C of the MICC. The wetland buffer may be reduced to not less than 25 feet with vegetative enhancement. However, a buffer reduction may not be possible because a walkway through the buffer is necessary to access the dock. The wetland boundary must be surveyed and placed on the site plan with the buffer. A 15-foot structure setback will apply between the outside limit of the buffer to any structure, unless a variance is obtained to reduce it.

MICC 19.07.190 – Wetlands

C. Development standards—Buffers

1. The following minimum buffers shall be established from the wetland boundary:

Wetland Category	Standard Buffer	
	With 3—5 habitat points	With 6—7 habitat points
Category I	75 feet	110 feet
Category II	75 feet	110 feet
Category III	60 feet	110 feet
Category IV	40 feet	

Buffer averaging is allowed in the code, see code section below. A 75% reduction of the full buffer width is 30 feet. A wetland buffer averaging plan will need to be prepared that meets the requirements of the code.

MICC 19.07.190 – Wetlands

C. Development standards—Buffers

5. Buffer averaging. Buffer width averaging shall be allowed provided the following requirements are met:

- a. The applicant has demonstrated how impacts have been avoided consistent with section 19.07.100, mitigation sequencing;
- b. The applicant has demonstrated how all proposed impacts have been mitigated consistent with subsection E of this section and will not result in a loss of ecological function;
- c. The proposed buffer width is not less than 75 percent of the standard buffer width at any point; and
- d. The total area of the buffer is equal to the area required without averaging.

**7.0 Functions and Values of the Wetland**

Wetland A is a Palustrine Emergent (PEM) wetland (Federal Geographic Data Committee. 2013). Wetland A provides very little flood retention and mediation ability, because of its small size and rapid flood through. Wetland habitat functions are similarly low because of its small size and lack of habitat vertical structure. Water quality is poor because driveway runoff is a contributing source of hydrology. Wetland A is separated from Lake Washington by the rock bulkhead.

**8.0 Stream Determination, Classification, and Regulatory Requirements**

The rock lined swale, above the driveway and on the neighbor’s property, is a Type Ns stream. A Type Ns stream is seasonal non-fish bearing. Surface water was observed in the swale. It is not possible for fish to access this stream because the piped outlet is above the lake and the slope is too steep.

The stream buffer requirement is 60 feet according to Mercer Island City Code, see table below.

MICC 19.07.180 - Watercourses.

C. Development standards—Buffers.

1. The following minimum buffers shall be established from the ordinary high water mark or from the top of the bank if the ordinary high water mark cannot be identified:

Watercourse Type	Standard Buffer
F	120 feet
Np	60 feet
Ns	60 feet
Piped	No buffer

**9.0 Pipeline and Regulatory Requirements**

A pipeline company attempted to locate the pipeline that was supposed to be present along the south side of the garage, and discharges into the lake. They were unable to locate this pipeline, including the inlet and outlet. They confirmed that hydrology from the neighbor’s rock lined swale, is diverted to a wood lid box structure next to the driveway, crosses under the driveway in front of the garage, runs along the side of the garage, under the walkway between the garage and house, then is located under the gravel walkway, until it discharges into the wetland. The pipeline does not discharge directly into the lake but ends in the wetland. The pipe size is 6 inches in diameter. It does not appear to be a piped watercourse, but rather part of a residential drainage system for runoff from impervious surfaces.

The Mercer Island City Code, Section 19.07.070.B.4.a, does not allow piped conveying watercourses to be removed that may result in an increased threat of erosion. A piped watercourse does not have a buffer requirement. It is required to have a setback of 45 feet from the centerline of the pipe. However, when the pipeline cannot be daylighted due to risk of environmental damage, the buffer may be reduced to 10 feet on lots with a width of 50 feet or more. The slope is too steep for an open channel without significant risk of erosion. In this case we recommend that the pipeline be replaced and sized to carry peak flows from the rock lined swale. The pipe location could be adjusted slightly to provide a 10-foot setback for all structures, which it currently does not have for the existing structures. If it is not replaced, there is a risk that the pipe capacity will be exceeded and cause erosion.

#### MICC 19.07.180 - Watercourses.

##### C. 6. Piped watercourse setbacks.

- a. The intent of applying setbacks to piped watercourses is to preserve the opportunity to daylight watercourses that were previously piped, to provide incentives to property owners to daylight and enhance previously piped watercourses, and to allow flexibility for development where daylighting piped watercourses is demonstrated to be infeasible.
- b. Setbacks shall be established 45 feet from the centerline of piped watercourses.
- c. Piped watercourses setback widths shall be reduced to a 15-foot buffer when the portion of the piped watercourse on the applicant's property is daylighted and where the watercourse has been restored to an open channel, provided a restoration plan demonstrates:
  - i. The watercourse channel will be stable and is not expected to cause safety risks or environmental damage; and
  - ii. No additional impact nor encumbrance by watercourse buffer or critical area setback is added to properties neighboring the applicant(s) property.
- d. Piped watercourse setback widths shall be reduced to: (i) ten feet on lots with a lot width of 50 feet or more, and (ii) five feet on lots with a width of less than 50 feet, when daylighting is determined by qualified professional(s) to result in one or more of the following outcomes:
  - i. Increased risk of landslide or other potential hazard that cannot be mitigated;
  - ii. Increased risk of environmental damage (e.g., erosion, diminished water quality) that cannot be mitigated;
  - iii. The inability of a legally established existing lot to meet the vehicular access requirements of this title; or
  - iv. The inability of a legally established existing lot to meet the building pad standards in section 19.09.090.

## 10.0 Shorelines of the State

Lake Washington is a shoreline of the state. The shoreline jurisdiction extends 50 feet from the ordinary high water mark of Lake Washington. New alterations and activities within the shoreline jurisdiction require a shoreline application and shoreline review process.

### **11.0 Proximity to Wildlife Habitat Conservation Areas and Priority Species**

Lake Washington is an aquatic area and a priority habitat. The PHS online report does not identify any priority species, see attached PHS report. According to MICC, Section 19.07.090, bald eagles are the only protected non-aquatic wildlife species to inhabit Mercer Island. The city defines “wildlife habitat conservation areas” as “those areas used by these species for nesting, breeding, feeding, and survival”. “The provisions of this section do not apply to any habitat areas which come under the jurisdiction of the city’s shoreline master program.” The city’s wetlands, watercourses and shorelines are protected under other sections of the code.

Bald eagles have been delisted federally, but their nests are still provided protection by the state. No bald eagle stick nests were observed within 600 feet of the site. Therefore, state requirements for nest buffers and seasonal construction restrictions do not apply.

### **12.0 Impacts to the Wetland Buffer**

Construction activities may result in a temporary disturbance of the wetland buffer. These impacts will be temporary and unavoidable. Restoration of unavoidable buffer impacts will be required, according to an approved Restoration Plan.

The proposed project will not result in any loss of wetland area or functions. “No net loss” is a federal, state, and local jurisdiction goal that the further loss of wetlands and wetland functions will not occur. Governor Booth Gardner’s Executive Order 89-10 states, “Section 1. It is the interim goal of my administration to achieve no overall net loss in acreage and function of Washington’s remaining wetland base. It is further the long-term goal to increase the quantity and quality of Washington’s wetlands resource base.”

### **13.0 Wetland Buffer Reduction Criteria and Mitigation Measures**

A variance to the buffer requirement is necessary, it will require use of mitigation sequencing and mitigation for buffer impacts. Mitigation will comply with the applicable order sequence requirements for mitigation sequencing. In compliance with mitigation sequencing, the project will avoid all direct critical area impacts and provide mitigation for unavoidable buffer impacts. Onsite rehabilitation of buffers may provide mitigation for buffer impacts. The remaining critical areas and their buffers will be protected in permanent tracts that will be maintained and monitored according to the approved Restoration Plan.

### **14.0 Authority and Statement of Accuracy**

This wetland determination is in accordance with Section 404 of the Clean Water Act. The critical area determination, delineation, and ratings are accurate to the best of the wetland scientist’s ability and knowledge. No assumptions were made for the study.

## **15.0 Conclusions**

There is one small wetland located between the lower gravel walkway and the rock bulkhead. The wetland is identified as Wetland A. Wetland A is a Category IV wetland with a 35-foot buffer required and a 15-foot structure setback from the outside of the buffer. Unavoidable temporary impacts to the wetland buffer will require restoration.

There is a pipeline onsite located between the neighbor's rock lined swale and Wetland A. The pipeline is undersized and should be replaced. The code allows for a 10-foot setback from the centerline of the pipe.

There are no streams onsite. However, the neighbor's rock lined swale, located above the driveway is a Type Ns stream. The buffer requirement for a Type Ns stream is 60 feet.

## **16.0 Limitations**

Critical area determinations and delineations are not final until approved by regulatory agencies and/or local jurisdictions. *J. S. Jones and Associates, Inc.* does not guarantee acceptance or approval by regulatory agencies, or that any intended use can be achieved.

## 17.0 References

COE. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Corps of Engineers Waterways Experiment Station, Environmental Laboratory, Vicksburg, MS.

COE, 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), Environmental Laboratory U.S. Army Corps of Engineers May 2010.

DOE 1997. Washington State Wetlands Identification and Delineation Manual. Publication # 96-94.

Hruby, T., 2014. Washington State Wetland Rating System for Western Washington: 2014 Update. (Publication #14-06-029). Olympia, WA: Washington Department of Ecology.

DNR. FPARS Water Typing Map. <https://fpamt.dnr.wa.gov/default.aspx>

Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.  
<https://efaidnbmnnnibpcajpcglclefindmkaj/https://www.fws.gov/sites/default/files/documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States-2013.pdf>

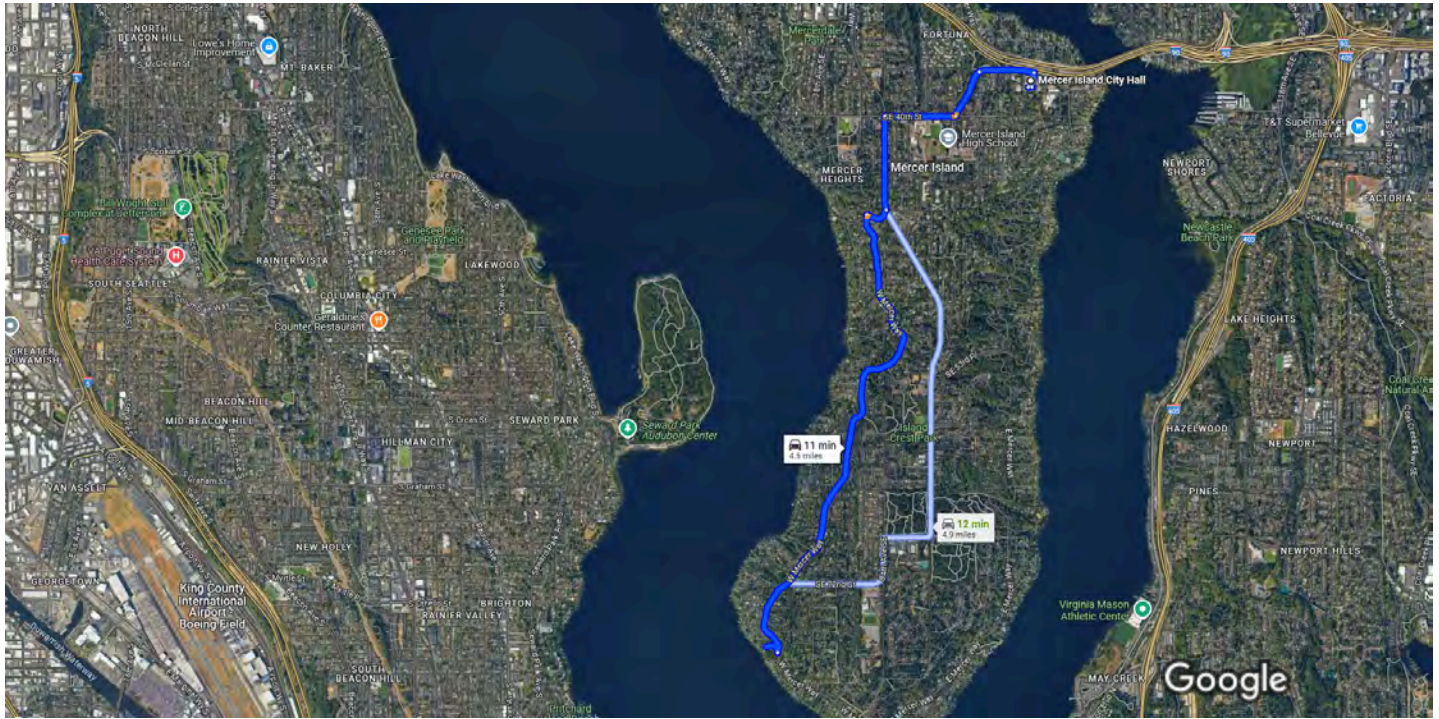
NRCS, 2018. Web Soil Survey  
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

USFWS. National Wetland Inventory  
<https://www.fws.gov/wetlands/>

## **Attachments**



Mercer Island City Hall, 9611 SE 36th St, Drive 4.5 miles, 11 min  
Mercer Island, WA 98040 to 7649 W Mercer Way, Mercer Island, WA 98040



Imagery ©2025 Airbus, CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2025 Google 2000 ft


**Mercer Island City Hall**  
9611 SE 36th St, Mercer Island, WA 98040

**Continue to SE 36th St**

- \_\_\_\_\_ 40 sec (0.1 mi)
- ↑ 1. Head east toward SE 36th St
- \_\_\_\_\_ 92 ft
- ↶ 2. Turn left toward SE 36th St
- \_\_\_\_\_ 417 ft



**Take W Mercer Way to W Shuck Park Dr**

- \_\_\_\_\_ 10 min (4.3 mi)
- ↶ 3. Turn left onto SE 36th St
- \_\_\_\_\_ 0.3 mi
- ↑ 4. Continue onto Gallagher Hill Rd
- \_\_\_\_\_ 0.3 mi
- ↷ 5. Turn right onto SE 40th St
- \_\_\_\_\_ 0.4 mi
- ↶ 6. Use the left 2 lanes to turn left onto Island Crest Way
- \_\_\_\_\_ 0.5 mi
- ↷ 7. Turn right onto Merrimount Dr

 8. Sharp left onto W Mercer Way 0.1 mi  

---

 2.7 mi

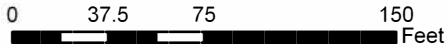
 9. Sharp right onto W Shuck Park Dr  
 Destination will be on the left  

---

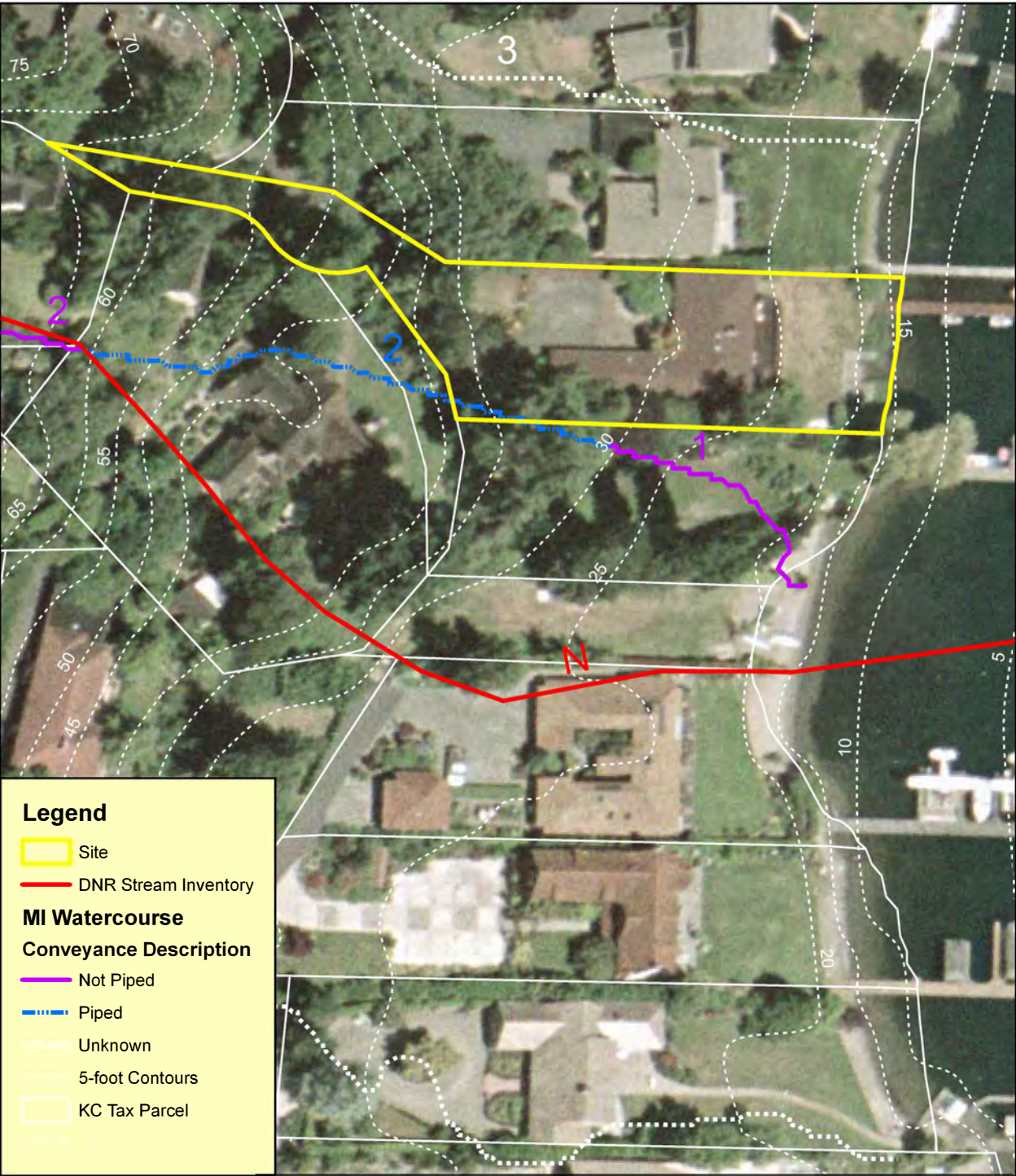
 34 sec (482 ft)

**7649 W Mercer Way**  
Mercer Island, WA 98040

# City of Mercer Island Stream Inventory



1 inch equals 75 feet



## Legend



— DNR Stream Inventory

### MI Watercourse

#### Conveyance Description

— Not Piped

- - - Piped

- - - Unknown

- - - 5-foot Contours

— KC Tax Parcel

# Critical Area Sketch



King County, EagleView Technologies, Inc.

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Date: 2/12/2025

Notes:

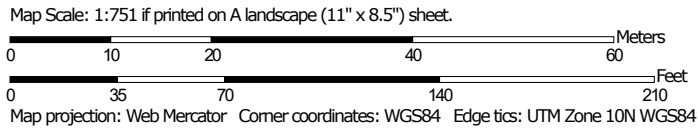


King County

Soil Map—King County Area, Washington




Soil Map may not be valid at this scale.



## 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 1:24,000.

**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: King County Area, Washington

Survey Area Data: Version 20, Aug 27, 2024

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

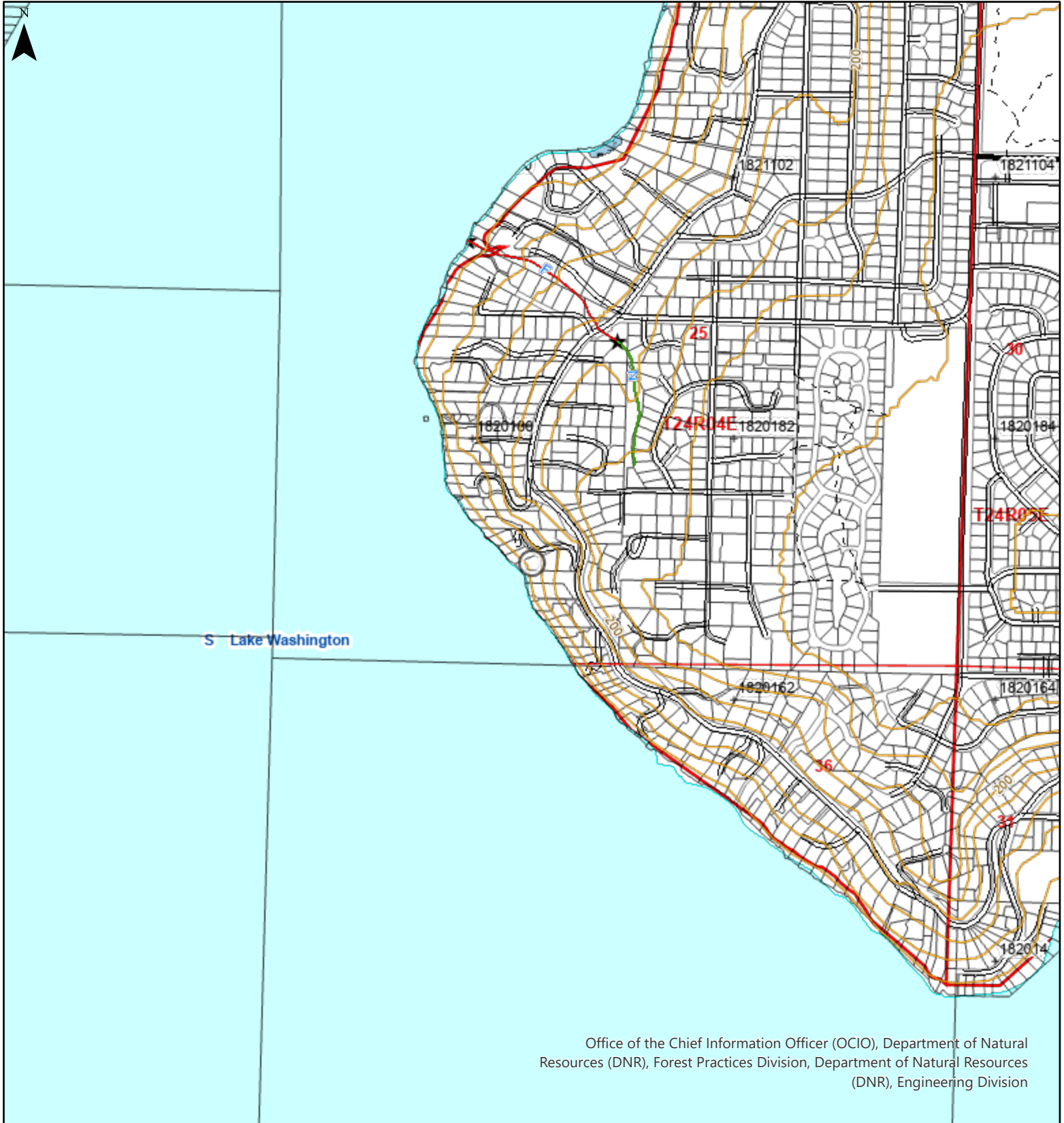
Date(s) aerial images were photographed: Jul 31, 2022—Aug 8, 2022

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
KpD	Kitsap silt loam, 15 to 30 percent slopes	2.3	94.4%
<b>Totals for Area of Interest</b>		<b>2.4</b>	<b>100.0%</b>

# Forest Practices Water Type Map



Office of the Chief Information Officer (OCIO), Department of Natural Resources (DNR), Forest Practices Division, Department of Natural Resources (DNR), Engineering Division

Map Symbols	
	New Stream
	Proposed Water Type
	Stream Removal
	Break between water types
	Start and End Point of Surveyed Reach
	Natural Fish Barrier
	Manmade Barrier
	End of Fish or Last Fish

**Additional Information**

**Legal Description**  
**S25 T24.0N R04.0E, S30 T24.0N R05.0E, S31 T24.0N R05.0E, S36 T24.0N R04.0E**










Extreme care was used during the compilation of this map to ensure its accuracy. However, due to changes in data and the need to rely on outside information, the Department of Natural Resources cannot accept responsibility for errors or omissions, and therefore, there are no warranties that accompany this material.

Approximate Scale : 1:12,000  
 0 500 1,000 2,000 Feet  
 Date: 11/27/2024 Time: 7:04 PM



February 13, 2025

### Wetlands

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

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

Project/Site: 7649 W Mercer Way City/County: Mercer Island Sampling Date: 2/10/2025  
 Applicant/Owner: David & Robin Shipper State: WA Sampling Point: SL-1  
 Investigator(s): Jeffery Jones Section, Township, Range: Sec 25, T 24 N, R 4 E  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 10  
 Subregion (LRR): NW Forests & Coasts Lat: 47.5332 Long: -122.2406 Datum: NACD 83  
 Soil Map Unit Name: Kitsap silt loam NWI classification: PEM

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

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Remarks: Pipe outlet is source of hydrology. Area landscaped. Upper limit of wetland the walkway & lower limit is the rock bulkhead.					

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10 m</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum (Plot size: <u>5 m</u>)</b>				
1. <u>Laurel ornamental</u>	<u>20</u>	<u>Yes</u>	<u>None</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
<u>20</u> = Total Cover				
<b>Herb Stratum (Plot size: <u>3 m</u>)</b>				
1. <u>Scripus microcarpus</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Unidentified Grasses</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>70</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: <u>1 m</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>30</u>				
Remarks: Assume grasses are FAC				

**SOIL**

Sampling Point: SL-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 3/1	100					GrSL	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>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<sup>3</sup>:**

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

<sup>3</sup>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

Remarks:

All anerobic soils are hydric regardless of color characteristics

**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  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): 0

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: 7649 W Mercer Way City/County: Mercer Island Sampling Date: 2/10/2025  
 Applicant/Owner: David & Robin Shipper State: WA Sampling Point: SL-2  
 Investigator(s): Jeffery Jones Section, Township, Range: Sec 25, T 24 N, R 4 E  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 30  
 Subregion (LRR): NW Forests & Coasts Lat: 47.5332 Long: -122.2406 Datum: NACD 83  
 Soil Map Unit Name: Kitsap silt loam NWI classification: None

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

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks: SL-2 is next to walkway and was impacted when the house was constructed.					

### VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>10 m</u> )					
1.	<u>Pseudotsuga menziesii</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>Thuja plicata</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
3.					
4.					
		<u>30</u>	= Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5 m</u> )					
1.				<u>None</u>	
2.					
3.					
4.					
5.					
		<u>0</u>	= Total Cover		
<b>Herb Stratum</b> (Plot size: <u>3 m</u> )					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		<u>0</u>	= Total Cover		
<b>Woody Vine Stratum</b> (Plot size: <u>1 m</u> )					
1.	<u>Hedera helix</u>	<u>100</u>	<u>Yes</u>	<u>FACU</u>	
2.					
		<u>100</u>	= Total Cover		
<b>% Bare Ground in Herb Stratum</b> <u>30</u>					
Remarks:					

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

**SOIL**

Sampling Point: SL-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/2	100					GrSL	
6-16	10YR 4/3	100					GrSL	

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

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

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- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
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- Depleted Dark Surface (F7)
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**Indicators for Problematic Hydric Soils<sup>3</sup>:**

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

<sup>3</sup>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

Remarks:

All anerobic soils are hydric regardless of color characteristics

**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  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No

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

Remarks:

Dry profile

Wetland name or number: Lk Sam Seep 2

# RATING SUMMARY - Western Washington

Name of wetland (or ID#): Lk Sam Seep 2 Date of site visit: 12/03/2024

Rated By: Jeffery Jones Trained by Ecology? Yes  No  Date of Training: 12/12/2014

HGM Class used for rating: Slope

Wetland has multiple HGM classes? Yes  No

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map: WATOR

OVERALL WETLAND CATEGORY: [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
- Category IV - Total score = 9 - 15

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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
Site Potential	M	L	L	
Landscape Potential	M	M	M	
Value	L	L	M	Total
Score Based on Ratings	5	4	5	14

## 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

**Wetland name or number:** Lk Sam Seep 2

**Maps and figures required to answer questions correctly for Western Washington**

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants ( <i>can be added to figure above</i> )	S 4.1	
Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )	S 2.1, S 5.1	
1km Polygon: Area that extends 1km 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)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number: Lk Sam Seep 2

## 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** What are the characteristics of the average slope of the wetland?

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	<b>Score: 0</b>

**S 1.2** What is the soil 2in below the surface or duff layer?

Mapped as true clay or organic (muck or peat)	points = 3	
Soil texture identified as clay or organic in field	points = 3	
Soil texture identified as clay or organic by laboratory test	points = 3	
None of the above	points = 0	<b>Score: 0</b>

**S 1.3** Characteristics of the plants in the wetland that trap sediments and pollutants

Dense, uncut, herbaceous plants cover >90% of the wetland area	points = 6	
Dense, uncut, herbaceous plants cover >50% of the wetland area	points = 3	
Dense, woody, plants cover >50% of the wetland area	points = 2	
Dense, uncut, herbaceous plants cover >25% of the wetland area	points = 1	
Does not meet any of the criteria above for plants	points = 0	<b>Score: 6</b>

**Total for S 1: 6**

**Rating of Site Potential**

12-16 = H  6-11 = M  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 150ft on the uphill side of the wetland in land uses that generate pollutants?

Yes	points = 1	
No	points = 0	<b>Score: 1</b>

**S 2.2** Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1?

Yes	points = 1	
No	points = 0	<b>Score: 0</b>

**S 2.3** What are the other sources of pollutants coming into the wetland?

**Total for S 2: 1**

**Rating of Landscape Potential**

3-4 = H  1-2 = M  0 = L

*Record the rating on the first page*

**Wetland name or number:** Lk Sam Seep 2

S 3.0 Is the water quality improvement provided by the site valuable to society?		
S 3.1 <u>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?</u>		
Yes	points = 1	
No	points = 0	<b>Score: 0</b>
S 3.2 <u>Is the wetland in a basin or sub-basin where water quality is an issue?</u>		
Yes	points = 1	
No	points = 0	<b>Score: 0</b>
S 3.3 <u>Has the site been identified in a watershed or local plan as important for maintaining water quality?</u>		
Yes	points = 2	
No	points = 0	<b>Score: 0</b>
<b>Total for S 3:</b>		<b>0</b>

**Rating of Value**

2-4 = H  1 = M  0 = L

*Record the rating on the first page*

## SLOPE WETLANDS

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

S 4.0 Does the site have the potential to reduce flooding and erosion?		
S 4.1 <u>What are the characteristics of the plants that reduce the velocity of surface flows during storms?</u>		
Dense, uncut, rigid plants cover >90% of the wetland area	points = 1	
All other conditions	points = 0	<b>Score: 0</b>
<b>Total for S 4:</b>		<b>0</b>

**Rating of Site Potential**

1 = M  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 <u>Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?</u>		
Yes	points = 1	
No	points = 0	<b>Score: 1</b>
<b>Total for S 5:</b>		<b>1</b>

**Rating of Landscape Potential**

1 = M  0 = L

*Record the rating on the first page*

**Wetland name or number:** Lk Sam Seep 2

S 6.0 Are the hydrologic functions provided by the site valuable to society?		
<b>S 6.1</b> <u>Is the wetland in a landscape that has flooding problems?</u>		
Flooding occurs in a sub-basin that is immediately down-gradient of wetland.	points = 2	
Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
There are no problems with flooding downstream of the wetland	points = 0	<b>Score: 0</b>
<b>S 6.2</b> <u>Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?</u>		
Yes	points = 2	
No	points = 0	<b>Score: 0</b>
<b>Total for S 6:</b>		<b>0</b>

**Rating of Value**

2-4 = H  1 = M  0 = L

*Record the rating on the first page*

**Wetland name or number:** Lk Sam Seep 2

## HABITAT FUNCTIONS

**These questions apply to wetlands of all HGM classes - Indicators that the site functions to provide important habitat**

### **H 1.0 Does the wetland have the potential to provide habitat for many species?**

**H 1.1** What is the structure of the plant community?

- Aquatic Bed
- Emergent
- Scrub-shrub
- Forested
- Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous, moss/ground cover)

4 structures or more	points = 4	
3 structures	points = 2	
2 structures	points = 1	
1 structure	points = 0	
No structures present	points = 0	<b>Score: 0</b>

**H 1.2** What are the hydroperiods that meet the size thresholds in the wetland?

- Permanently flooded or inundated
- Seasonally flooded or inundated
- Occasionally flooded or inundated
- Saturated only
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland
- Freshwater Tidal wetland

4 or more types present	points = 3	
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2	
2 types present	points = 1	
1 type present	points = 0	
None present	points = 0	<b>Score: 0</b>

**H 1.3** What is the richness of the plant species in the wetland?

> 19 species	points = 2	
5-19 species	points = 1	
< 5 species	points = 0	<b>Score: 0</b>

**Wetland name or number:** Lk Sam Seep 2

<b>H 1.4</b> <u>What is the interspersions of habitats?</u>	
High	points = 3
Moderate	points = 2
Low	points = 1
None	points = 0
<b>Score: 0</b>	
<b>H 1.5</b> <u>What are the special habitat features in the wetland?</u>	
<input type="checkbox"/> Large, downed, woody debris within the wetland (>4in diameter and 6ft long).	
<input type="checkbox"/> Standing snags (dbh >4in) within the wetland	
<input type="checkbox"/> Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with the wetland, for at least 33ft (10m)	
<input type="checkbox"/> 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)	
<input type="checkbox"/> At least 0.25ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)	
<input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)	
6 habitats selected	points = 6
5 habitats selected	points = 5
4 habitats selected	points = 4
3 habitats selected	points = 3
2 habitats selected	points = 2
1 habitat selected	points = 1
No habitats selected	points = 0
<b>Score: 1</b>	
<b>Total for H 1: 1</b>	

**Rating of Site Potential**

[ ] 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 habitat functions of the site?**

<b>H 2.1</b> <u>What is the percentage of accessible habitat within 1km of the wetland?</u>	
>33% of 1km Polygon	points = 3
20-33% of 1km Polygon	points = 2
10-19% of 1km Polygon	points = 1
<10% of 1km Polygon	points = 0
<b>Score: 0</b>	
<b>H 2.2</b> <u>What is the percentage of total habitat in a 1km polygon around the wetland?</u>	
Total habitat is >50% of the Polygon	points = 3
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1
Total habitat is <10% of the Polygon	points = 0
<b>Score: 1</b>	

**Wetland name or number:** Lk Sam Seep 2

<b>H 2.3</b> <u>What is the land use intensity in the 1km polygon?</u>		
50% of the Polygon is high intensity land use	points = -2	
<50% of the Polygon is high intensity land use	points = 0	<b>Score: 0</b>
<b>Total for H 2:</b>		<b>1</b>

**Rating of Landscape Potential**

[ ] 4-6 = H [X] 1-3 = M [ ] 0 = L

*Record the rating on the first page*

**H 3.0 Is the habitat provided by the site valuable to society?**

<b>H 3.1</b> <u>Does the site provide habitat for species valued in laws, regulations, or policies?</u>		
<input type="checkbox"/> Aspen Stands		
<input type="checkbox"/> Biodiversity Areas and Corridors		
<input type="checkbox"/> Herbaceous Balds		
<input type="checkbox"/> Old-growth/Mature Forests		
<input type="checkbox"/> Oregon White Oak		
<input type="checkbox"/> Riparian		
<input type="checkbox"/> Westside Prairie		
<input checked="" type="checkbox"/> Fresh Deepwater		
<input type="checkbox"/> Instream		
<input type="checkbox"/> Nearshore (Coastal, Open Coast, Puget Sound)		
<input type="checkbox"/> Caves		
<input type="checkbox"/> Cliffs		
<input type="checkbox"/> Snags and Logs		
<input type="checkbox"/> Talus		
<b>The following criteria automatically score 2 points:</b>		
<input type="checkbox"/> The wetland provides habitat for Threatened or Endangered species		
<input type="checkbox"/> The wetland is mapped as a location for an individual WDFW priority species		
<input type="checkbox"/> The wetland is a Wetland of High Conservation Value		
<input type="checkbox"/> The wetland has been categorized as an important habitat site in a local plan		
The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria for societal value	points = 2	
The site has 1 or 2 WDFW priority habitats within 100m	points = 1	
The site does not meet any of the criteria for societal value	points = 0	<b>Score: 1</b>
<b>Total for H 3:</b>		<b>1</b>

**Rating of Value**

[ ] 2 = H [X] 1 = M [ ] 0 = L

*Record the rating on the first page*

Wetland name or number: Lk Sam Seep 2

## CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

### SC 1.0 Estuarine Wetlands

**SC 1.1** Does the wetland meet all of the following criteria for Estuarine wetlands?

- The dominant water regime is tidal
- The wetland is vegetated
- The water salinity is greater than 0.5 ppt

Yes - Go to SC 1.2

No - Not an Estuarine Wetland

**Result: Not an  
Estuarine Wetland**

**SC 1.2** 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 Estuarine Wetland

No - Go to SC 1.3

**Result:**

**SC 1.3** Is the wetland unit at least 1ac 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.
- At least 75% of the landward edge of the wetland has a 100ft 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 Estuarine Wetland

No - Category II Estuarine Wetland

**Result:**

### SC 2.0 Wetlands of High Conservation Value

**SC 2.1** Does the wetland overlap with any known or historical rare plant or rare & high-quality ecosystem polygons on the WNHP Data Explorer?

Yes - Category I Wetland of High Conservation Value

No - Go to SC 2.2

**Result: Go to SC 2.2**

**SC 2.2** Does the wetland have a rare plant species, rare plant community, or high-quality common plant community that may qualify the site as a WHCV?

Yes - Category I Wetland of High Conservation Value

No - Not a Wetland of High Conservation Value

**Result: Not a Wetland  
of High Conservation  
Value**

**Wetland name or number:** Lk Sam Seep 2

**SC 3.0 Bogs**

**SC 3.1** Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16in or more of the first 32in of the soil profile?

Yes - Go to SC 3.3

No - Go to SC 3.2

**Result: 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 - Not a Bog Wetland

**Result: Not a Bog Wetland**

**SC 3.3** Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least 30% cover of plant species listed in the table provided in the instructions?

Yes - Category I Bog Wetland

No - Go to SC 3.4

**Result:**

**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 combinations of species) listed in the table found in the instructions provide more than 30% of the cover under the canopy?

Yes - Category I Bog Wetland

No - Not a Bog Wetland

**Result:**

**SC 4.0 Forested Wetlands**

**SC 4.1** Does the wetland have at least 1 contiguous acre of forest that meets one of the following criteria?

Old-growth forests

Mature forests

Yes - Category I Forested Wetland

No - Not a Forested Wetland

**Result: Not a Forested Wetland**

**Wetland name or number:** Lk Sam Seep 2

### SC 5.0 Wetlands in Coastal Lagoons

**SC 5.1** 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 rocks
- The depression 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 open water area (measured near the bottom)
- The lagoon retains some of its surface water at low tide during spring tides

Yes - Go to SC 5.2

No - Not a Coastal Lagoon Wetland

**Result: Not a Coastal Lagoon Wetland**

**SC 5.2** 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).
- At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-grazed or un-mowed grassland.
- the wetland is larger than 0.10ac (4350 sqft)

Yes - Category I Coastal Lagoon

No - Category II Coastal Lagoon

**Result:**

### SC 6.0 Interdunal Wetlands

**SC 6.1** Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership WBUO)?

Yes - Go to SC 6.2

No - Not an Interdunal Wetland

**Result: Not an Interdunal Wetland**

**SC 6.2** Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?

Wetland is larger than 1ac in size - Go to SC 6.3

Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland

No - Go to SC 6.4

**Result:**

**SC 6.3** Does the wetland score 8 or 9 points for the habitat functions?

Yes - Category I Interdunal Wetland

No - Category II Interdunal Wetland

**Result:**

**SC 6.4** Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac and 1ac in size?

Yes - Category III Interdunal Wetland

No - Category IV Interdunal Wetland

**Result:**

**Wetland name or number:** Lk Sam Seep 2

**Category of wetland based on Special Characteristics**

If you answered No for all types, enter "Not Applicable" on Summary Form

**Final Category: Not  
Applicable**

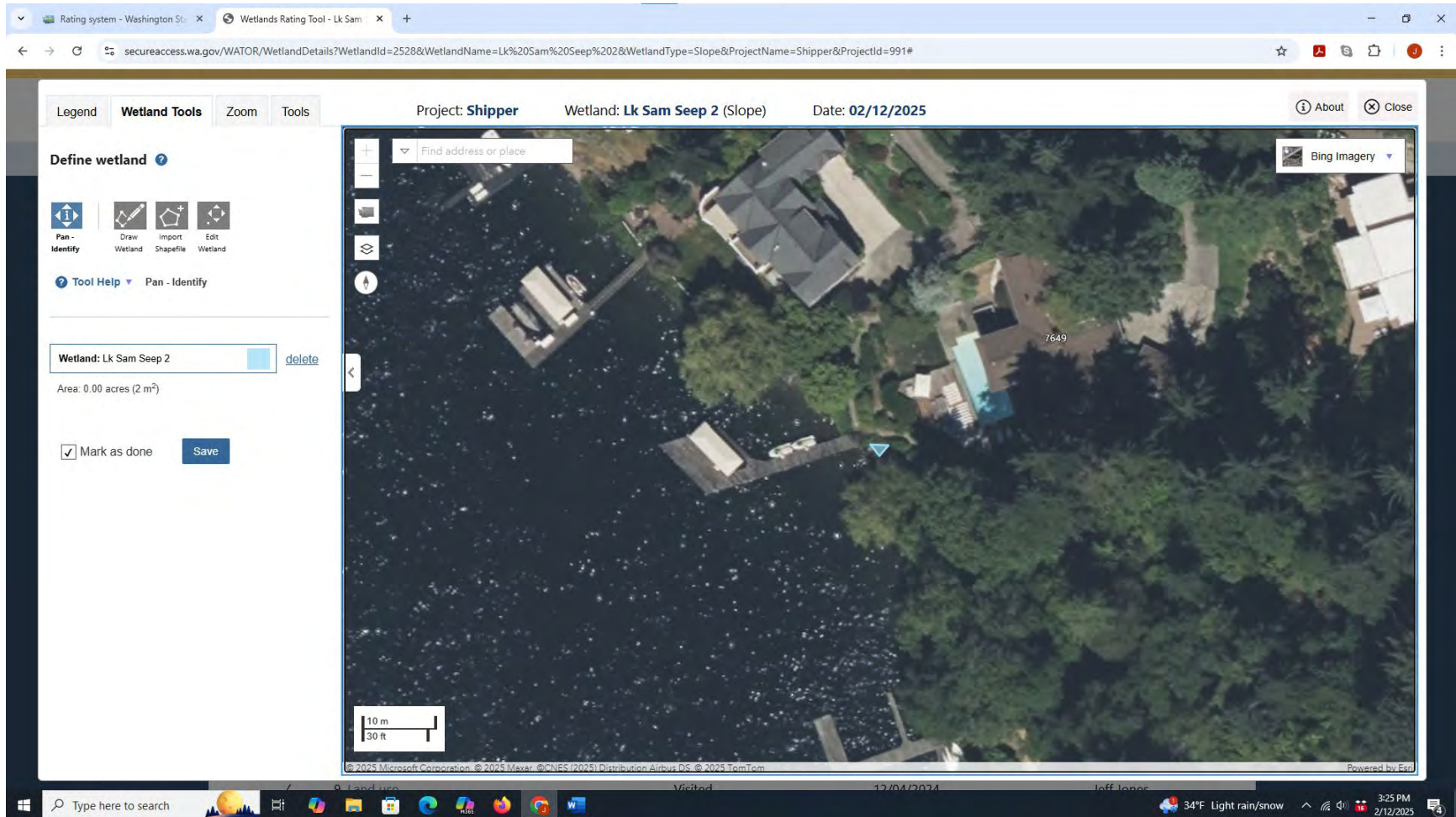


Figure 1 – Define Wetland

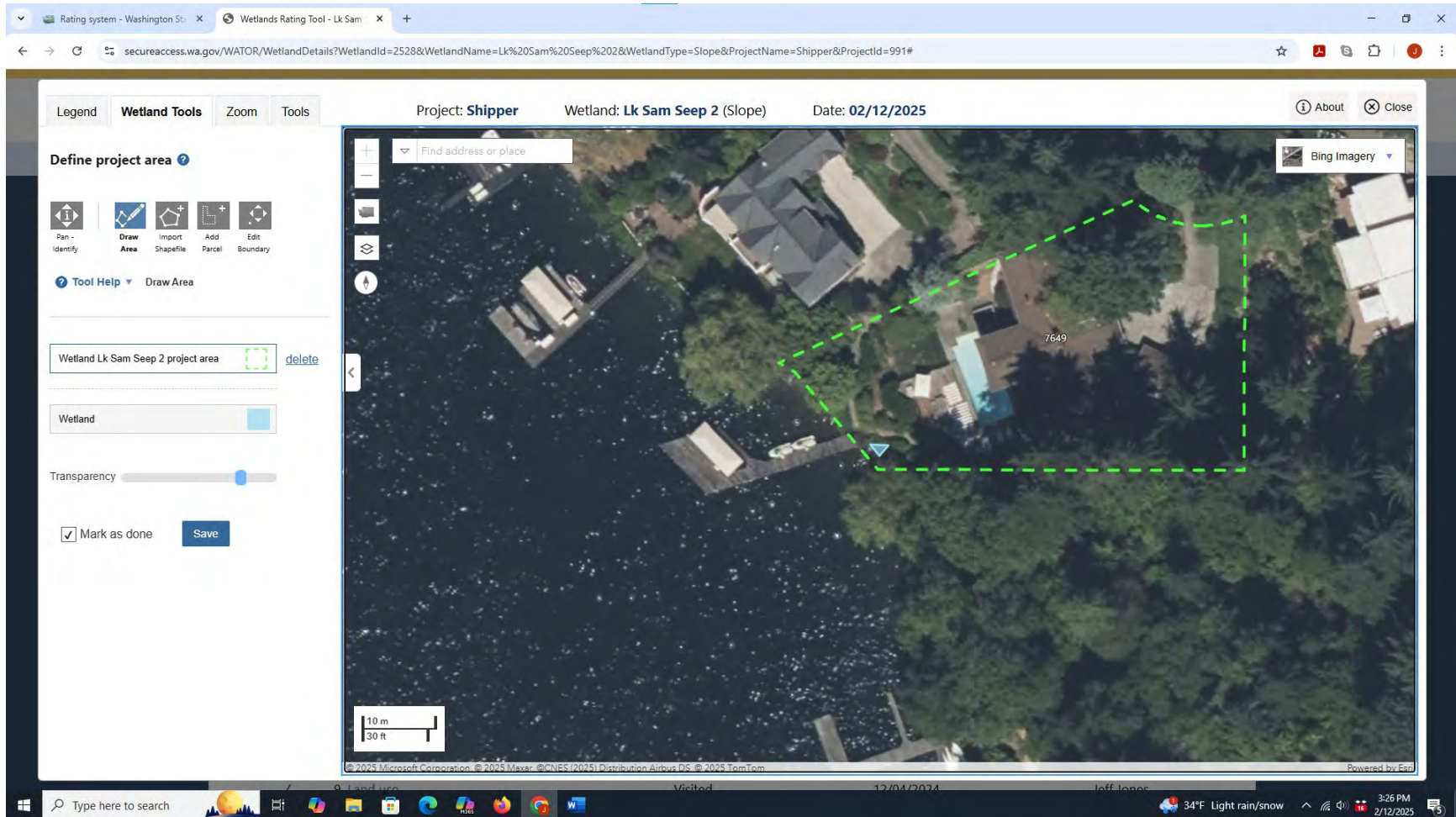


Figure 2 – Project Area

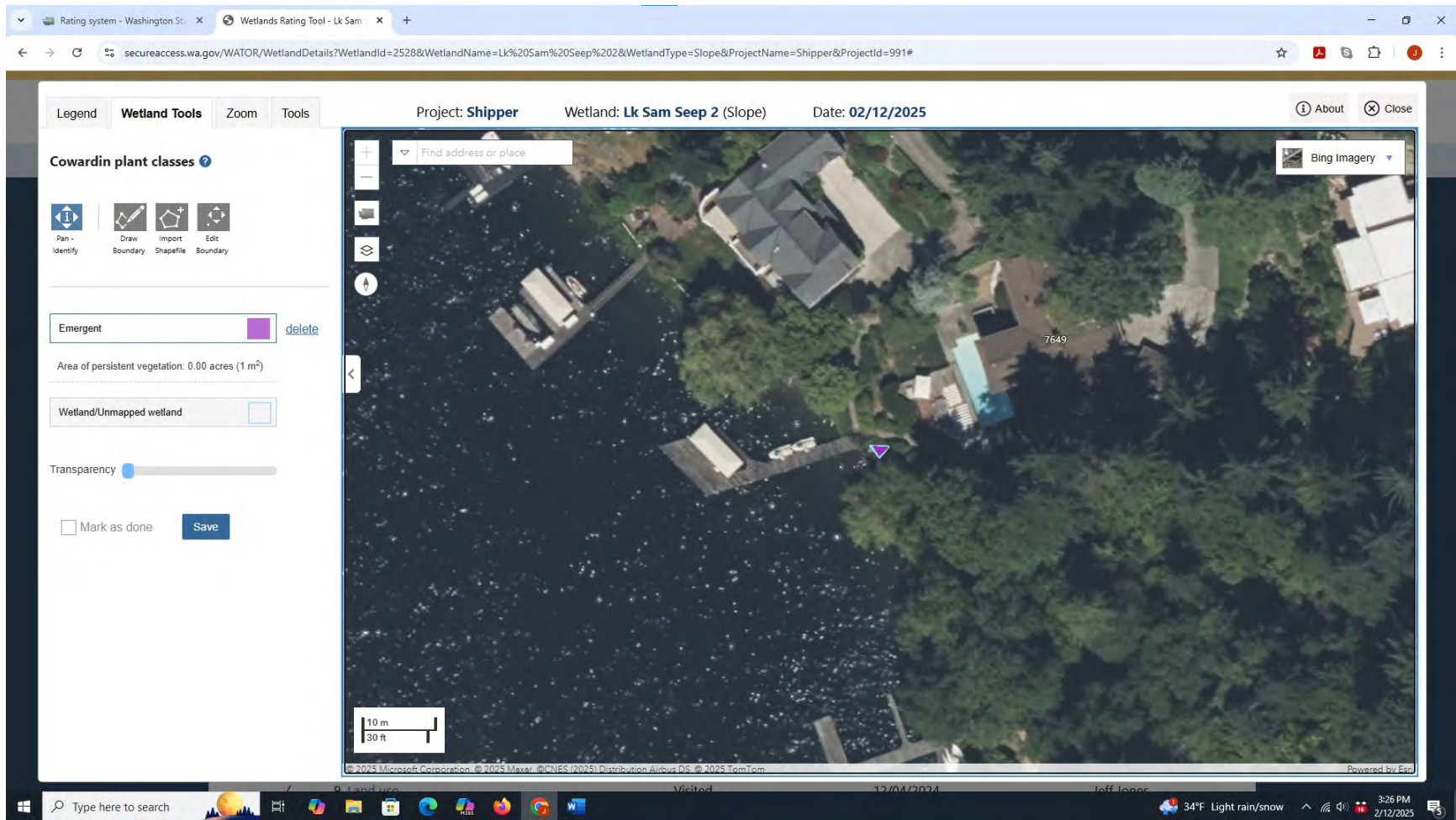


Figure 3 – Cowardin Plant Classes

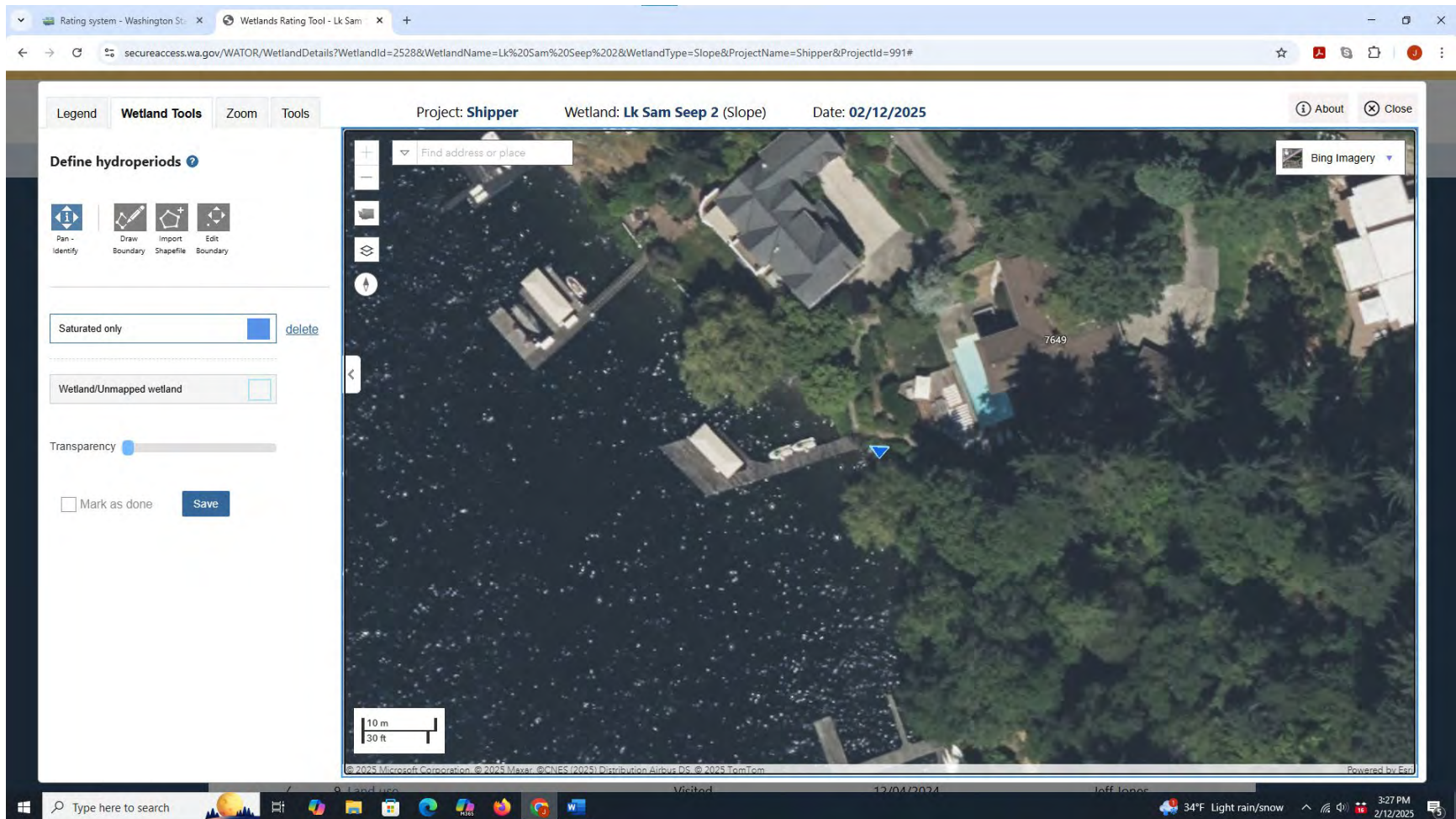


Figure 4 – Hydroperiods

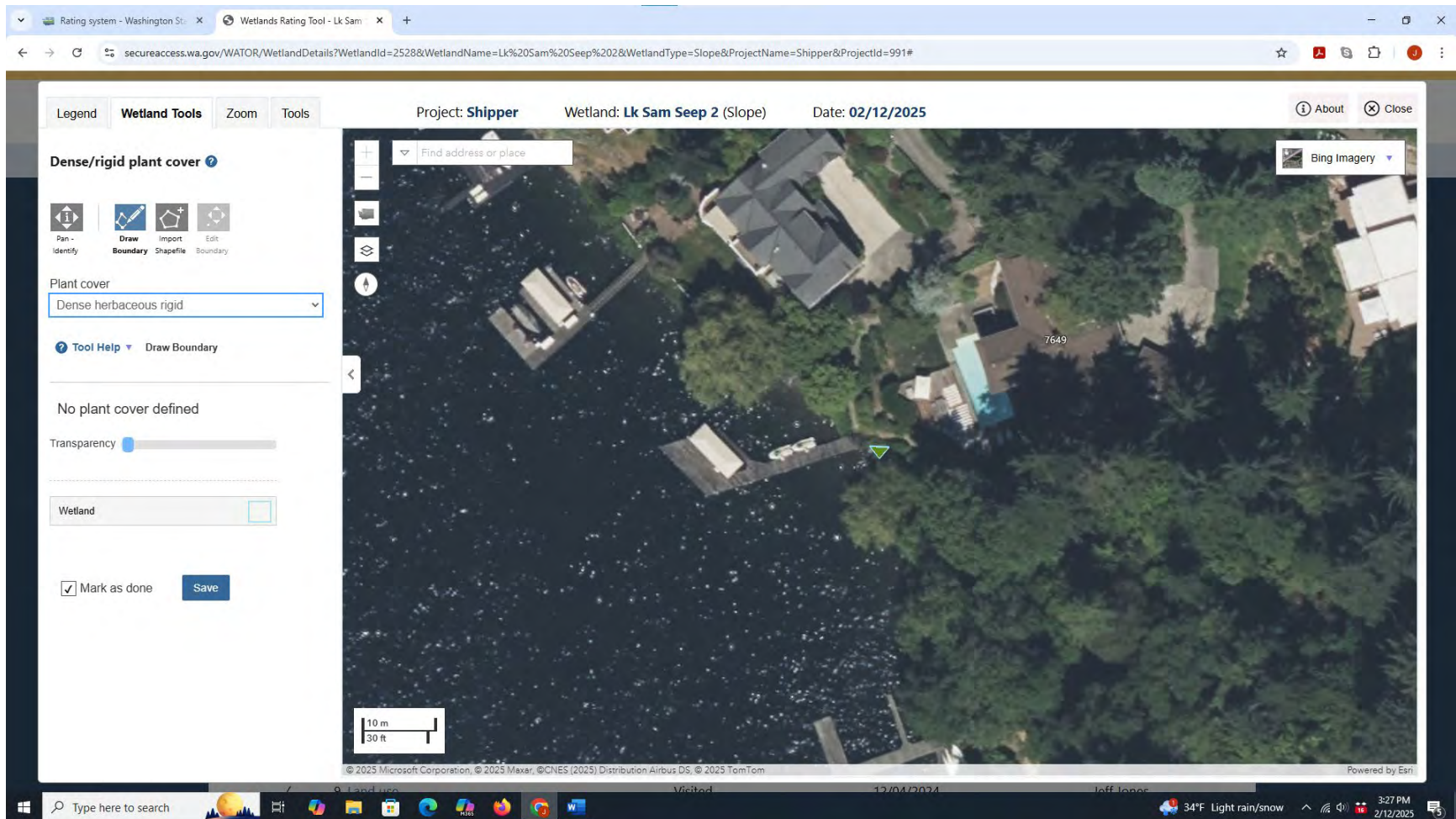


Figure 5 – Plant Cover

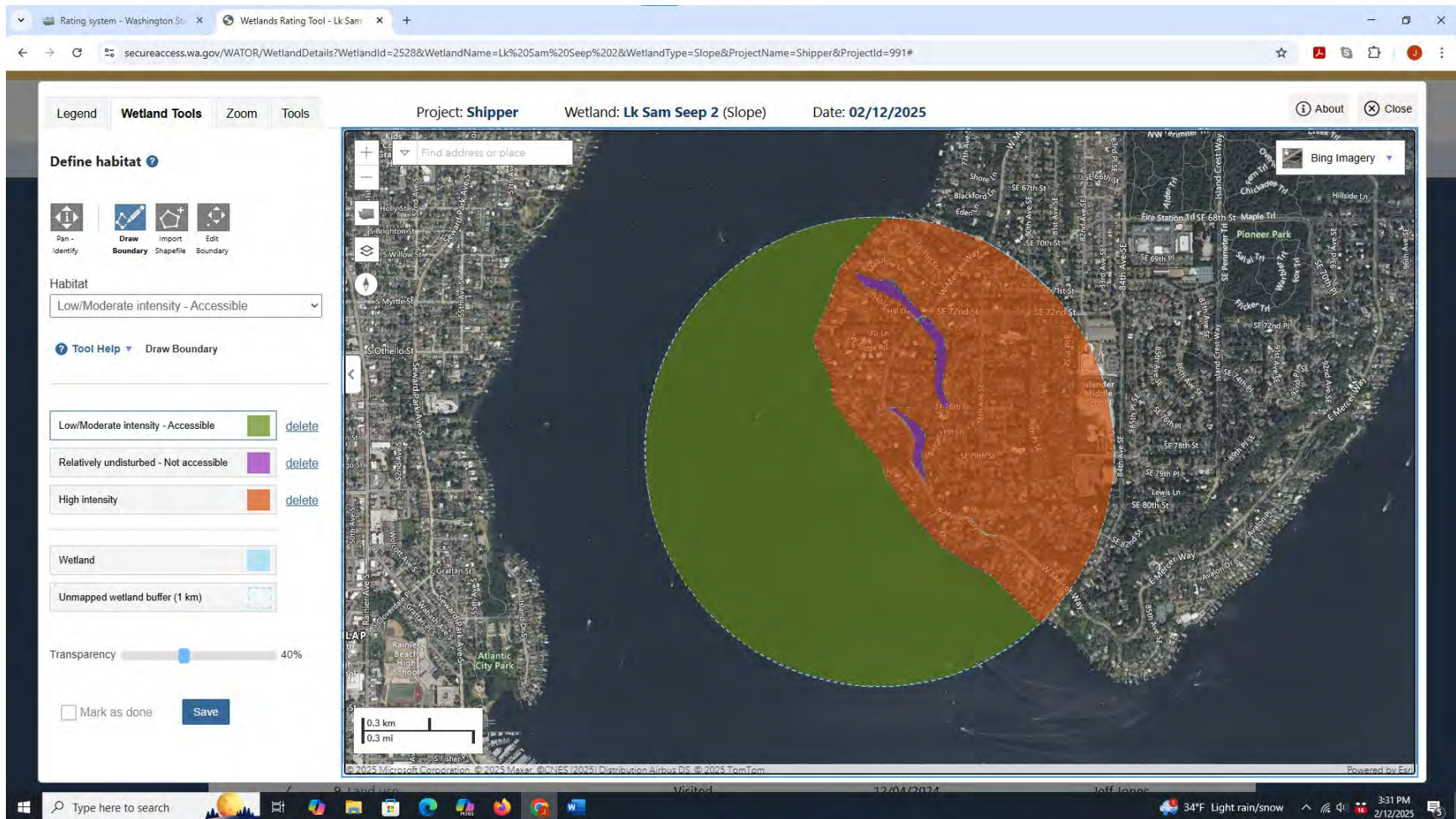


Figure 6 – Habitat

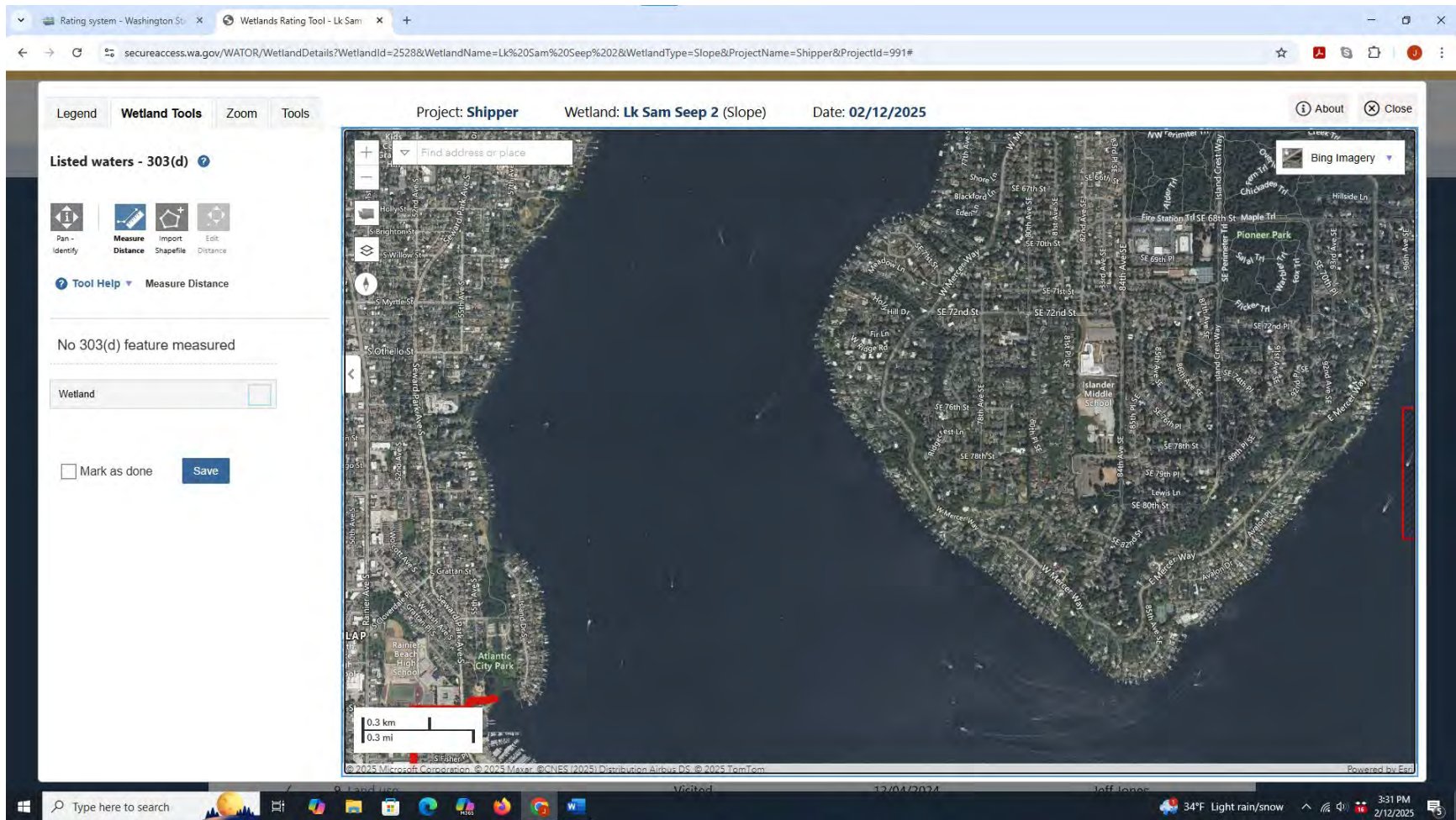


Figure 7 – 303(d) Waters

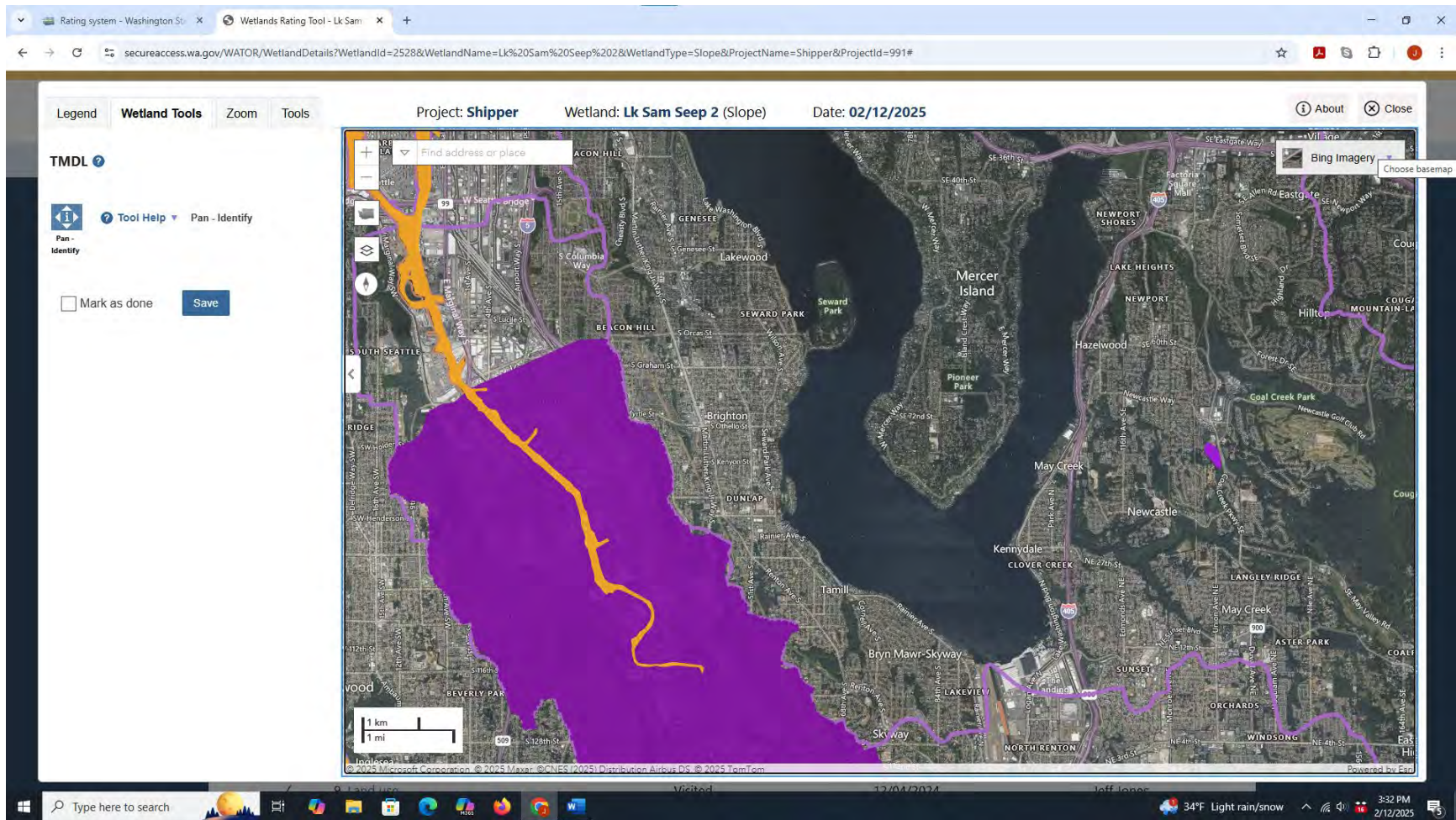


Figure 8 – TMDL

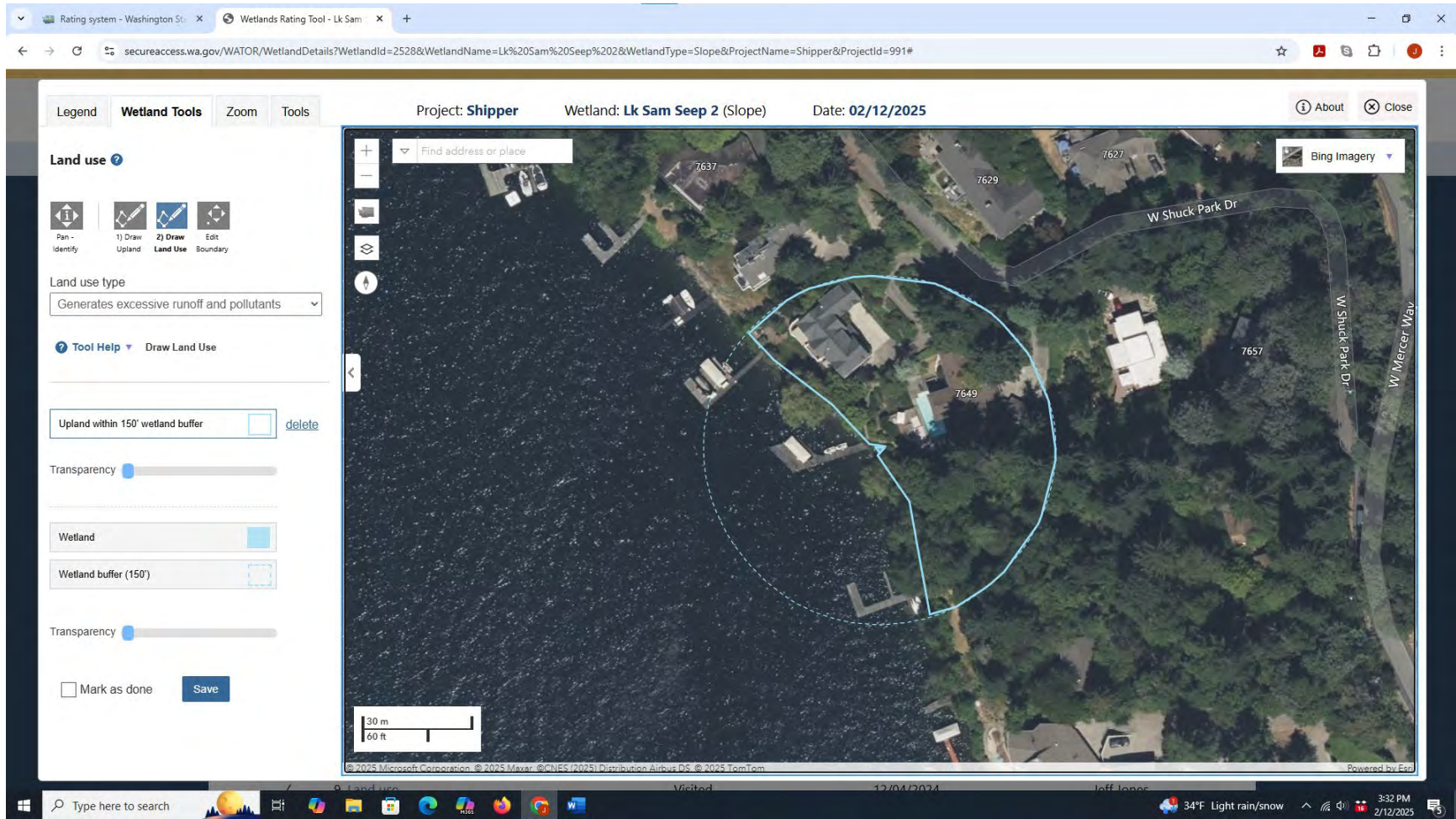


Figure 9 – Land Use



Wetland A – Sample Location 1 (SL-1)



Wetland Pipe Box Outlet



Walkway Below Pool and Above Wetland A



Sample Location 2 (SL-2)



Walkway



Pool and Deck



Walkway



Ground Walkway Under Wood Bridge Between House and Garage



Surface Inlet to Pipeline at Corner of Garage, Pipeline Runs Downhill Under Wood Bridge



Wood Bridge Between House and Garage



Wood Lid Pipeline Box



Rock Lined Swale on Neighbors Property Above Driveway

**PROJECT NOTES**

PROPOSED REMODEL AND ADDITION TO EXISTING RESIDENCE

**OWNERS**

DAVID AND ROBIN SHIPPER  
 7649 WEST MERCER WAY  
 MERCER ISLAND, WA 98040

**ZONING**

R-15

**PROPERTY TAX ACCT#**

PROPERTY TAX ACCOUNT NUMBER: 778600-0070

**LEGAL DESCRIPTION**

LOT 7 SHUCK PARK ADD UND INT IN PRIVATE RD

**SIDEYARD SETBACKS**

LARGEST CIRCLE DIAMETER ..... 109'-6 3/4"  
 SETBACKS = 17% OF 109'-6 3/4" ..... 18'-7 1/2"

**LOT COVERAGE**

LOT SLOPE (72'-21")/155'=.329 33% LOT SLOPE  
 LOT COVERAGE ALLOWED ..... 30%  
 TOTAL LOT AREA: 16,605  
 LOT COVERAGE ALLOWED ..... 4,981.5 SQ FT

EXISTING LOT COVERAGE ..... EXISTING LOT AREA 16,505 SQ FT  
 HOUSE AND GARAGE .... 3249 + 853 = 4,071 SQ FT  
 DRIVEWAY AND GRAVEL: 1,474 + 300 = 1,774 SQ FT  
 TOTAL ..... 5,845 SQ FT

PROPOSED LOT COVERAGE  
 HOUSE AND GARAGE ..... 4,069 SQ FT  
 REPLACED DRIVEWAY ..... 1,628 SQ FT  
 TOTAL ..... 5,697 SQ FT

NET REDUCTION IN LOT COVERAGE 148 SQ FT

HARDSCAPE MAX. ALLOWED 9% OF 16605 S.F. = 1,494 S.F.  
 EXISTING HARDSCAPE AREA ..... 3,492 SQ FT  
 HARDSCAPE REMOVED ..... 1,086 SQ FT

**GROSS FLOOR AREA**

ALLOWABLE GROSS FLOOR AREA 40% ..... 6,642 S.F.  
 BASEMENT ..... 497 S.F.  
 MAIN FLOOR, INCLUDING COVERED DECK ..... 2,237 S.F.  
 GARAGE ..... 528 S.F.

PROPOSED TOTAL ..... 3,262 S.F.

**FIRE SPRINKLERS**

PROVIDE A NFPA 13D FIRE SPRINKLER SYSTEM THROUGHOUT THE HOUSE. THIS SYSTEM WILL REQUIRE A SEPARATE FIRE PERMIT. SYSTEM IS TO BE FULL COVERAGE TO INCLUDE GARAGE, BATHROOMS, CLOSETS IN EXIT PATHWAYS AND STORAGE AREAS. PLANS MUST BE APPROVED BY THE FIRE MARSHAL AND CONFORM TO NFPA AND COMI STANDARDS.

NFPA 13D FIRE SPRINKLER SYSTEM TO BE INSTALLED AND MONITORED. NFPA 13DE SHALL COVER THE GARAGE AREAS.

NFPA 72 - CHAPTER 29 FIRE ALARM SYSTEM SHALL BE INSTALLED PER COMI AND NFPA STANDARDS.

BOTH SYSTEMS REQUIRE SEPARATE PERMITS.

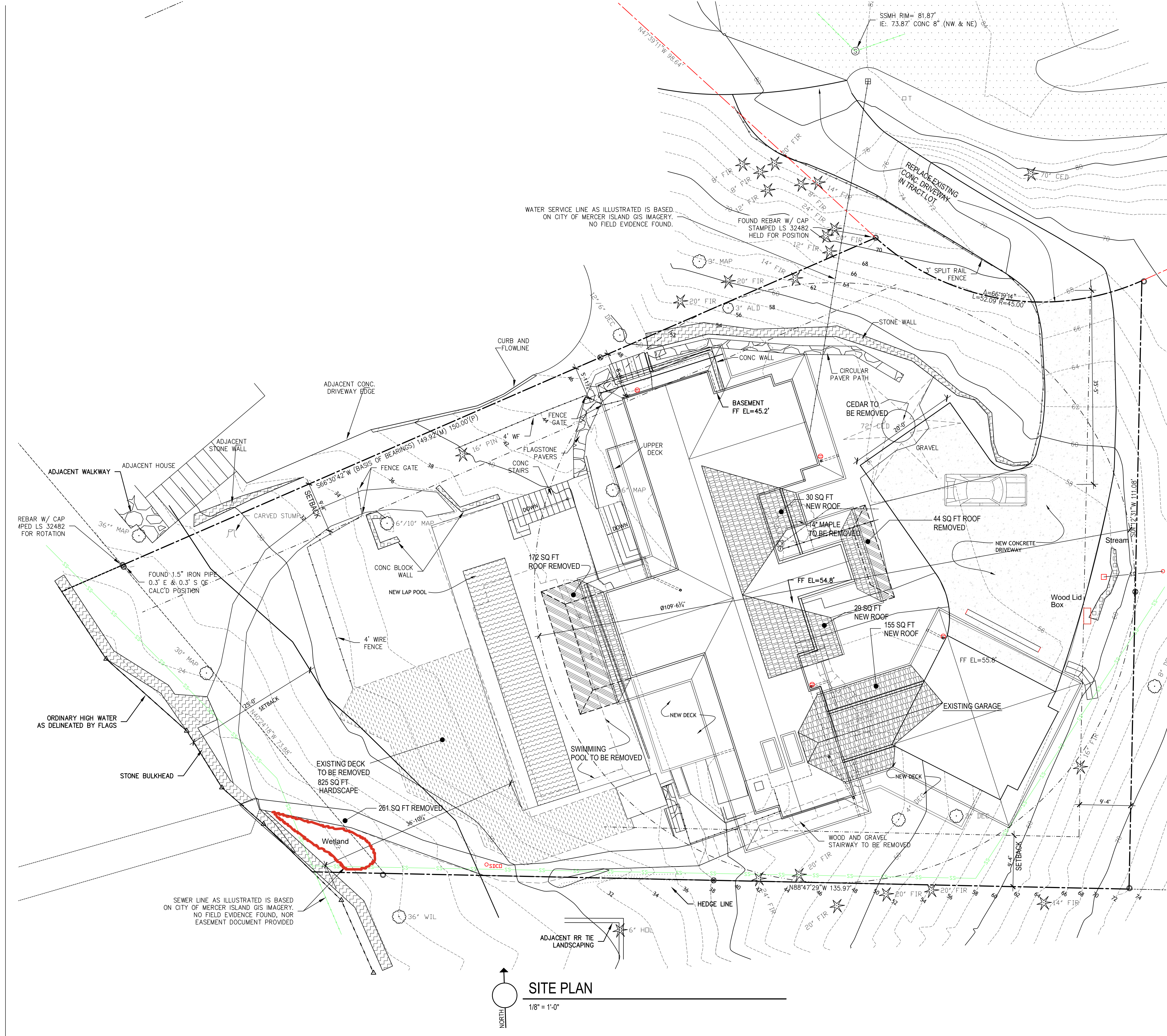


No.	Date	Revision

**SHIPPER RESIDENCE REMODEL**  
 7649 WEST MERCER WAY  
 MERCER ISLAND, WA 98040

**SITE PLAN**

Sheet No. **1.0**  
 Project No. 2413  
 Date: 11/5/2024



**SITE PLAN**  
 1/8" = 1'-0"  
 NORTH