

# **RED BARNACLE, LLC IMPACT ANALYSIS AND MITIGATION PLAN**

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## **Shoreline Permit – Bulkhead Repair and Maintenance**

**25820 & 25832 120th Lane SW, Vashon, WA 98070**

Prepared by

**LEON**   
Environmental, LLC

**November 2025**

# **RED BARNACLE, LLC IMPACT ANALYSIS AND MITIGATION PLAN**

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## **Shoreline Permit – Bulkhead Repair and Maintenance 25820 & 25832 120th Lane SW, Vashon, WA 98070**

**November 2025**

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## Abbreviations and Acronyms

CY	cubic yards
Ecology	Washington Department of Ecology
FEMA	Federal Emergency Management Agency
FT	feet/foot
GIS	Geographic Information System
HTL	high tide line
KCC	<i>King County Code</i>
L-E	Leon Environmental, LLC
LF	linear feet
OHW	ordinary high water
PHS	Priority Habitat and Species
SF	square feet/foot
USFWS	U.S. Fish and Wildlife Services
WDFW	Washington Department of Fish and Wildlife

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# Chapter 1. General Information/Background

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## 1.1 Project Summary

This impact analysis and mitigation plan was requested by King County to address potential impacts to the critical areas and buffers from the bulkhead repair and maintenance project. The property owners are proposing to repair the existing concrete bulkhead that has been damaged by age and storms. The proposed work includes removing and replacing the existing community walkway, excavating behind existing concrete bulkhead to remove hydrostatic pressure from wet soils, repairing existing tiebacks and drains, and installing free draining soils to reduce future issues. An aluminum structure will be installed landward to reenforce the concrete bulkhead and to help relieve soil pressure and soil movement. Disturbed vegetation will be replaced with similar vegetation. All equipment and materials will be brought in from the upland, and all work will be completed from the upland and landward of ordinary high water (OHW)/high tide line (HTL)

The proposed work was designed to avoid and minimize new impacts to critical areas and buffers to the greatest extent practicable. To meet this goal, Leon Environmental, LLC (L-E) was hired to perform a critical area review to identify potential critical areas and buffers on and adjacent to the project site. Based off L-E's background data review and site visits, the following critical areas and/or buffers are potentially present on the project site: critical aquifer recharge area; estuarine wetlands; flood hazard area; and aquatic area.

Project activities avoid new permanent impacts to critical areas by occurring in the existing footprint of the bulkhead. Potential impacts to aquatic buffers will be minimized by conducting project related actions in areas of previous land use impacts or areas of lawn. The proposed project will result in a cumulative impact of up to 2,000 square feet (SF) of marine riparian buffer. Compensatory mitigation to offset potential project action impacts includes placing topsoil and replanting similar vegetation to compensate for aquatic buffer impacts landward of the existing bulkhead.

King County requires a critical area restoration and enhancement plan following the guidelines of King County's *Critical Areas: Restoration & Enhancement* (2012). The purpose of the critical area restoration and enhancement plan is to fulfill the requirements of KCC 21A.2.

## 1.2 Statement of Accuracy

A critical areas reconnaissance level review was performed. No wetland delineation, rating, and functional analyses, or stream delineation were conducted or prepared, because these critical areas were not present on the Muqtadir Project Site. The maps included in this report were generated from field measurements, not a professional survey. The findings were based on the conditions at the time of the site visit and information provided by the property owners and their architect. This report is provided for the use of the named recipient only and is not intended for use by other parties for any other purposes. The conclusions in this report are based on the results of analyses performed by L-E and represent our best professional judgment. To that extent, and within the limitations of project scope and budget, we believe the information provided herein is accurate and true to the best of our knowledge. We do not warrant any assumptions or conclusions not expressly made in this report, or based on information or analyses other than what is included herein.

## 1.3 Proposed Project

### 1.3.1 Location

The proposed project is located in Vashon, King County, Washington. The subject properties street addresses are 25820 and 25832 120th Lane SW, Vashon, WA 98070 (Figure 1). The project is proposed on Parcel Numbers 2522029058, 2522029055, 2522029057, and 2522029010, which is situated in Township 22 North, Range 2 East, Section 25, W.M.

To access the site, take Fauntleroy-Vashon Island Ferry to Vashon Island. Head south from the Ferry Dock onto Vashon Hwy SW. Turn left onto Pillsbury Rd SW. Turn left onto Terrace Way. 25820 120th Lane SW will be on the right.

### 1.3.2 Purpose and Description

The proposed project will repair and maintain the existing, deteriorating shoreline protection on the applicant's properties in order to protect residential structures from damage caused by tidal- and wind-driven erosion. Elements of the proposed project include:

- Removing and replacing the existing community walkway;
- Excavating behind existing concrete bulkhead to remove hydrostatic pressure from wet soils;
- Repairing existing tiebacks and drains;
- Installing free draining soils;
- Installation of soldier pile and aluminum structure on the landward side to reinforce the concrete bulkhead and to help relieve soil pressure and soil movement; and
- Replacement of disturbed vegetation with similar vegetation.

## 1.4 Background Data Reviewed

The background review for this project included researching existing information pertaining to the project site, which included maps, drawings, and reports. This review focused on information related to soils, hydrology, vegetation, and previously identified wetlands and other critical areas. The following is a list of resources reviewed for this project:

- Aerial photograph and topographic map of the site;
- King County Geographic Information System (GIS);
- Washington Department of Fish and Wildlife (WDFW) Salmonscape and Priority Habitat and Species (PHS) data for the property and adjacent areas; and
- Washington Department of Ecology (Ecology) Coastal Atlas data for the property and adjacent areas.

## 1.5 Field Investigation

An L-E biologist performed an initial site visit on March 4, 2025. Conditions were cloudy with rain. The biologist evaluated site conditions for approximately 1 hour. The site visit consisted of examining overall site conditions, including characterizing general soil characteristics, vegetation, potential critical habitats, and the presence of species of concern.

Bill Rehe, L-E Senior Associate Biologist, led the initial site visit. Mr. Rehe is a professional fisheries and wetland biologist with over 30 years of experience in the Northwest. Mr. Rehe holds

4-year and advanced degrees in fisheries science. His areas of expertise include marine and nearshore ecology, salmon biology, wetland science, and forage fish ecology. In addition to formal training at accredited universities, he has received training by Ecology, WDFW, National Marine Fisheries Service, and U.S. Fish and Wildlife Service (USFWS).

## Chapter 2. Summary of Existing Conditions

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*King County Code* (KCC) 21A.24.045 allows alterations within the following seven critical areas and their buffers if the alteration complies with: the development standards; impact avoidance and mitigation requirements; and other applicable requirements. Those seven critical areas include: Critical aquifer recharge areas; Coal mine hazard areas; Erosion hazard areas; Flood hazard areas; Landslide hazard areas; Seismic hazard areas; and Volcanic hazard areas. Within these seven critical areas and their buffers, alterations are further limited in: Severe channel migration hazard areas; Landslide hazard areas over forty percent slope; Steep slope hazard areas; Wetlands; Aquatic areas; Wildlife habitat conservation areas; and Wildlife habitat networks. The purpose of this chapter is to identify potential critical areas, and their buffers present on the subject property through the review of existing information and by site review.

### 2.1 Background Review of Existing Information

This section describes the results of office review and field investigations. For the purpose of this report, the term “vicinity” describes an area approximately ¼ mile around the Project Site.

#### 2.1.1 GIS Database

King County GIS iMap identifies the following potential critical areas: aquatic areas (Puget Sound); critical aquifer recharge areas (category 3); estuarine wetlands; and Federal Emergency Management Agency (FEMA) floodplains (VE coastal flood zone); steep slopes hazard areas; erosion hazard areas; and landslide hazards. There are no known streams, seismic hazards, or coal mine hazards (Appendix A).

#### 2.1.2 Previous Land Use

Previous land use at these parcels includes the development of the four project lots for the existing two single-family residences and related residential infrastructure. According to King County records, 25820 120th LN SW has a 1,350 SF home built in 1919 while 25832 120th LN SW has a 1,337 SF home built in 1915. The years the bulkheads were built are unknown, but it appears in the 1977 Ecology shoreline photos (Appendix B).

### 2.2 Analysis of Existing Site Conditions

There are no freshwater wetlands on or directly adjacent to the project site. There are also no streams, ponds, or lakes. King County GIS database, iMap, cites the following features present on or adjacent to the project site: aquatic areas (Puget Sound); critical aquifer recharge areas (Category 3); estuarine wetlands; and Federal Emergency Management Agency (FEMA) floodplains (VE coastal flood zone); steep slopes hazard areas; erosion hazard areas; and landslide hazards. There are no intertidal estuarine wetlands present, but aerial photos appear to indicate the possible presence of subtidal estuarine wetlands adjacent to the existing bulkhead.

King County identifies a 165-foot aquatic buffer on the project property. The aquatic buffer begins at OHW of the Puget Sound and extends towards 120th Lane SW (Figure 2). The majority of the aquatic buffer is modified due to previous development, leaving primarily landscaping species and lawn. According to Ecology aerial photos, most of these impacts appear to have occurred on or before the 1970s.

## Chapter 3. Critical Areas and Buffer Impact Analysis

### 3.1 Potential Project Impacts

The repair of the existing shoreline protection will occur landward the existing disturbed concrete bulkhead footprint. Once complete, the shoreline protection will be of a similar size, shape, configuration, location, and general external appearance. Project activities will result in cumulative impacts of up to 2,000 SF of marine riparian buffer across the four parcels (Table 1). These impacts will be as a result of the excavation behind the existing bulkhead and the operation of the equipment.

### 3.2 Assessment of Development Impacts

#### 3.2.1 Critical Area Impacts

The following King County critical areas are present on the project site: aquatic areas (Puget Sound); critical aquifer recharge areas (category 3); estuarine wetlands; and Federal Emergency Management Agency (FEMA) floodplains (VE coastal flood zone); steep slopes hazard areas; erosion hazard areas; and landslide hazards. The proposed project will have no direct impacts to these critical areas.

#### 3.2.2 Buffer Impacts

The proposed project site is adjacent to Puget Sound; an aquatic area with a 165-foot marine riparian buffer. The buffer starts at the line of OHW and extends towards 120th Lane SW (Figure 2). Impacts in the aquatic buffer will be minimized to the greatest extent possible but cannot be fully avoided because of the location of the repairs to the existing bulkhead. The area directly behind the existing bulkhead was originally filled with upland soils to create buildable land and planted with grass.

The proposed project will repair approximately 200 LF of existing concrete bulkhead. Maintenance and repair of the existing bulkhead will include removing and replacing the existing community walkway, excavating behind existing concrete bulkhead to remove hydrostatic pressure from wet soils, repairing existing tiebacks and drains, and installing free draining soils to reduce future issues. An aluminum structure will be installed landward to reinforce the concrete bulkhead and to help relieve soil pressure and movement. Disturbed vegetation will be replaced with similar vegetation.

**Table 1. Overall Proposed Project Action Impacts to Known Critical Areas and Aquatic Buffers**

Project Action	Location of Impact	Area (SF)
Excavation behind the existing bulkhead	Marine Riparian Buffer	2,000
<b>TOTAL</b>		<b>2,000</b>

At two feet deep, this is approx. 150 cubic yards

## Chapter 4. Proposed Mitigation

### 4.1 Proposed Mitigation

The proposed mitigation for the project includes avoidance and minimization techniques that follow KCC 21A.24.125. Additional impacts to critical areas were avoided and minimized by not expanding the footprint of the bulkhead into aquatic areas or undisturbed critical areas. Unavoidable impacts to the marine riparian buffer will result in approximately 2,000 SF of impacts to the area between the existing bulkhead and yard. This area is currently covered in lawn and fruit trees. Compensatory mitigation to offset potential project action impacts include replanting the strip of disturbed marine riparian buffer with similar vegetation (Appendix C).

### 4.2 Mitigation Design Elements

Mitigation design elements consist of two primary elements: placement of topsoil and replanting lawn and fruit trees. These elements are described below.

#### 4.2.1 Mitigation for Marine Riparian Buffer Impacts

The property owners propose to replant the 2,000 SF directly landward of the existing bulkhead (Table 2).

**Table 2. Mitigation for Project Impacts to Marine Riparian Buffer**

Impacted Area	Area (SF)	Mitigation	Area (SF)
Marine Riparian Buffer	2,000	Place topsoil and plant American dunegrass	2,000
<b>TOTAL</b>	<b>2,000</b>	<b>TOTAL</b>	<b>2,000</b>

## Chapter 5. Mitigation Goals, Objectives, and Performance Standards

### 5.1 Mitigation Summary for Bulkhead Repair Project

The mitigation goals of this project are to avoid and minimize new impacts to the aquatic buffer to the greatest extent possible. Repairing the existing bulkhead avoids both short- and long-term impacts below OHW while minimizing impacts to the area between the bulkhead and yard that have previously been impacted by land use activities. While the work area has been limited to the smallest area possible, there will be unavoidable impacts from the proposed project actions that require compensatory mitigation. Specifically, the applicant proposes to mitigate for the approximately 2,000 SF of potential impacts within the aquatic buffer by adding topsoil and replanting.

The success of these mitigation goals will be evaluated through specific objectives and measurable performance standards. These objectives and performance standards are defined in Chapter 5.2.

### 5.2 Mitigation Goal and Objectives

The goal of the proposed mitigation is to offset temporary impacts to the marine riparian buffer from project actions. To achieve this goal, we are proposing the following:

- The project will place approximately 37 cubic yards (CY) of topsoil directly landward of the existing bulkhead. This equates 200 feet (FT) x 10 FT x 6 inches.
- Plant approximately 2,000 SF of lawn and fruit trees directly behind the existing bulkhead.

Objectives, performance standards, and final success criteria for proposed mitigation for potential project impacts are identified in Table 3.

**Table 3. Summary of Objectives, Performance Standards and Final Success Criteria for Mitigation for Repairing Existing Bulkhead**

Mitigation Goal	Functional Objective	Performance Standard	Parameter Measured	Year Inspected	Sampling Method
Mitigate for minor impacts to marine riparian buffer area	Place beneficial topsoil to encourage growth of native vegetation	37 CY of topsoil placed behind existing bulkhead	Photograph and topsoil receipt	0 (as-built)	Visual assessment
Mitigate for minor impacts to marine riparian buffer area	Replant 2,000 SF of lawn and fruit trees within marine riparian buffer	Photograph and document native vegetation planted	Photograph and document after plantings installed	0 (as-built)	Visual assessment
		No more than 10% aerial coverage by invasive species	Aerial coverage	1,2, and 3	Canopy coverage

Mitigation Goal	Functional Objective	Performance Standard	Parameter Measured	Year Inspected	Sampling Method
		Minimum of 10% aerial coverage at year 1, 20% at year 2, 30% at year 3, 40% at	Aerial coverage	1,2, and 3	Canopy coverage
		Approximately 5 fruit trees	Species composition	1,2, and 3	Visual assessment
		100% survival in Years 1, 2, & 80% in Year 3	Direct count of living and dead species	1,2, and 3	Visual assessment

## Chapter 6. Mitigation Monitoring Approach

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Confirmation that the mitigation goal, objectives, and performance standards were met will be accomplished by photograph and direct measurement. As required in the *Critical Areas: Restoration and Enhancement in King County* (2012), these measurements will be recorded and transmitted to King County by submission of an as-built report. The as-built report will reflect the actual impacts and placement of soil and native plants. The as-built report will also include the approximate locations and species of native plantings within the mitigation area. Results of annual monitoring of the native planting mitigation areas (Table 3) will be supplied to King County to verify the performance standards are being met or exceeded.

### 6.1 Monitoring and Reports

#### 6.1.1 As-Built Report

Within 90 days of completing native vegetation planting activities, the Lawson's or their representative will prepare and submit an as-built report to the King County. This report will document the as-built conditions and describe any deviations from Table 3. The as-built report will describe any potential problems identified during construction activities and any recommended remedies to be proposed to King County. The as-built report will also include an as-built drawing (not a survey prepared by a licensed land surveyor) documenting the physical conditions of the site after construction, before and after photos of the soil placement and native vegetation planting within the mitigation area.

#### 6.1.2 Monitoring Reports

For each monitoring year, a simple monitoring report will be submitted annually to King County to verify survival of the replanted vegetation.

#### 6.1.3 Monitoring Schedule

A post-construction (as-built) inspection will be conducted within 30 days of completing native vegetation installation (year 0). Monitoring of the site will be conducted in years 1, 2, and 3, as required. Vegetation monitoring activities will be conducted during the summer growing season (July or August).

#### 6.1.4 Mitigation Site Closeout

When the site has reached the end of its specified monitoring period and/or achieved final performance standards, the applicant will request that it be closed out (i.e., the site be accepted by King County as a success and further monitoring work ceased). The applicant or their qualified representative will prepare and submit a final monitoring report or closeout report to King County to establish that this milestone has been reached. The submittal will explain the rationale for closing out the site.

## **6.2 Adaptive Management and Contingency Plan**

### **6.2.1 Adaptive Management Plan**

The adaptive management plan outlines maintenance activities that will be undertaken by the applicant to ensure the long-term success of the site. These maintenance activities may include (but not be limited to) invasive vegetation removal, or additional vegetation planting. In the event that additional planting is necessary, plants will be installed during the dormant period from October through March. Maintenance and adaptive management activities conducted by the applicants, or their qualified representative will be summarized in the monitoring reports submitted to King County.

### **6.2.2 Contingency Plan**

This contingency plan provides a framework for taking more aggressive action if the site fails to meet a performance standard for more than two consecutive monitoring events for a specific objective or fails to meet the final success criteria for a specific objective. The contingency actions will vary depending on whether physical or biological processes are responsible for not attaining performance standards, and the degree of shortfall. If the failure of achieving a performance standard is minor, and King County agrees, the issue may continue to be addressed within the scope of the adaptive management plan.

The contingency plan identifies a planning process for selecting appropriate actions to address large-scale failure or anticipated failure of final success criteria for a specific objective. In order to maintain the flexibility needed to respond effectively and appropriately to biological and/or physical conditions, this plan does not present a complete list of actions that will be taken to remedy all types of failures at the site. Rather, sample options are outlined below. The list of sample corrective actions is not exclusive, nor is it a commitment to undertake a specific action.

Large-scale failure of biological components of the site is more difficult to predict; therefore, specific responses are impractical to detail. The following general approaches are anticipated:

- If planted vegetation fails to meet the canopy cover standards, additional planting may occur.
- If vegetation planted within the aquatic buffer fails to meet the canopy cover standards due to incompatible hydrologic regime (i.e., too much, or not enough water), additional planting of different species more appropriate to the actual hydrologic regime may occur.
- If non-native invasive weed species exceed canopy cover standards despite adaptive management actions, large-scale planting with taller canopy species or addition of mulch may occur to shade out invasives.

## Chapter 7. Financial Guarantees

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Per *Permitting Customer Information Bulletin #40, Financial Guarantees*, financial guarantees, if necessary, may be required to ensure that the mitigation plan is fully implemented. Please see attached Landscape Bond Quantity Worksheet Form (Appendix D).

## **Chapter 8. References**

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King County. 2012. *Critical Areas: Restoration and Enhancement*.

# Figures

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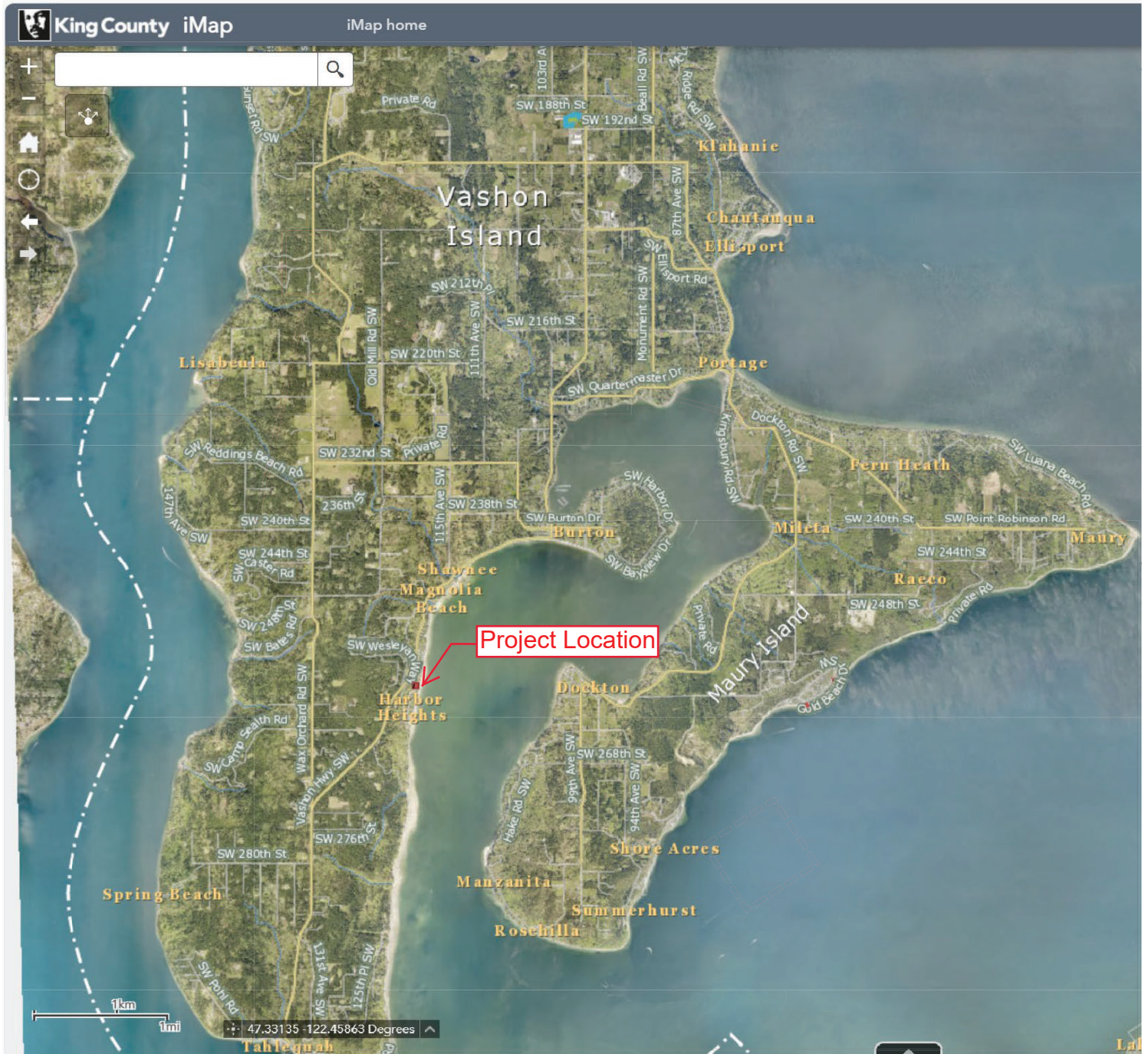
# Red Barnacle, LLC

Bulkhead Repair

Figure 1. Vicinity Map

November 2025

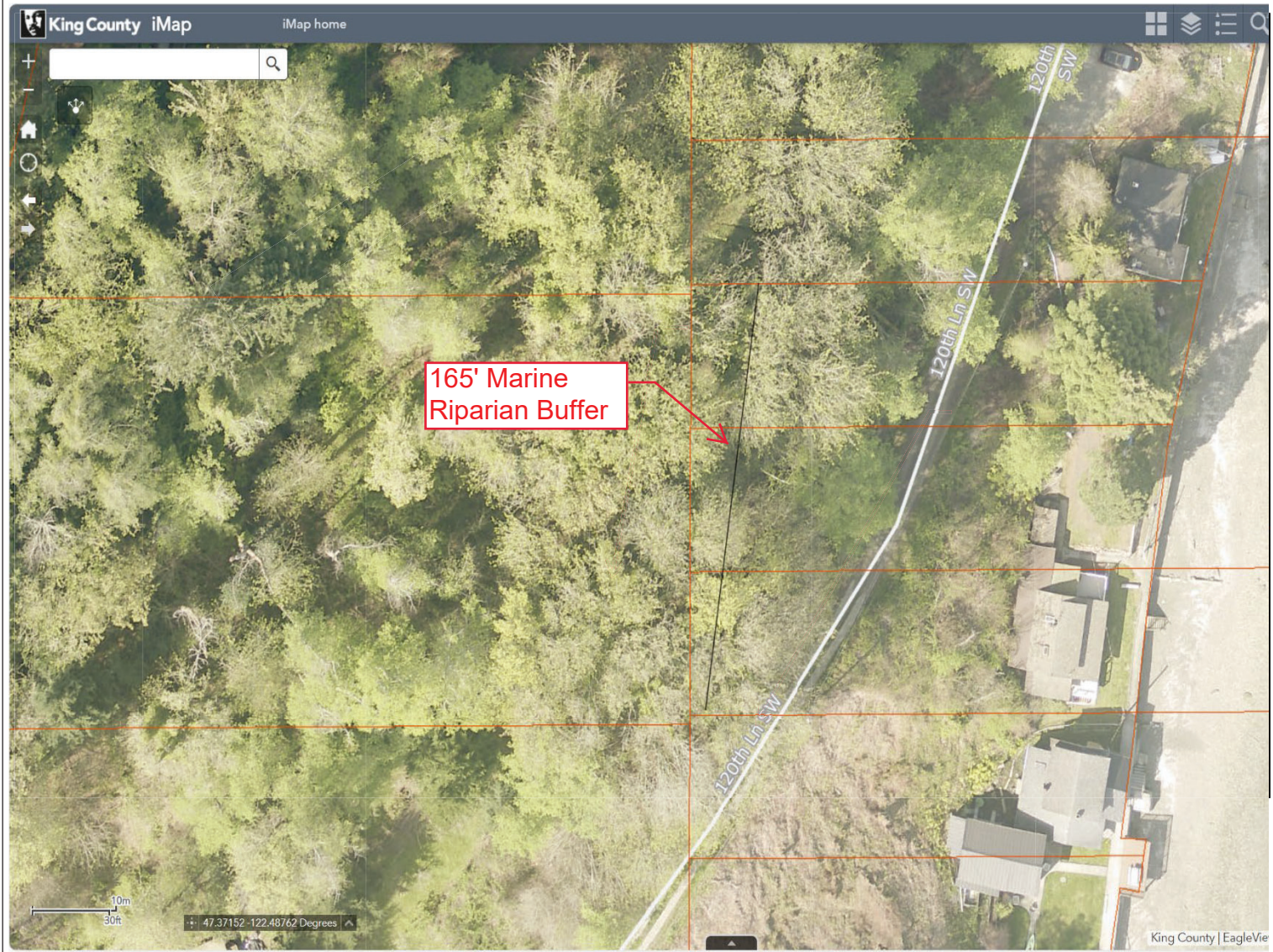
Data Sources: Google Earth Pro (2025)



# Red Barnacle

Bulkhead Repair  
Figure 2. Marine  
Riparian Buffer  
November 2025

Data Sources: iMap (2025)



# **Appendix A —Background Information**

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Legend

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Theme: Coastal Atlas

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About

Eelgrass

Fringe (continuous)

Fringe (patchy)

Bed (continuous)

Bed (patchy)

Dunegrass

Fringe (continuous)

Fringe (patchy)

Bed (continuous)

Bed (patchy)

Surfgrass

Fringe (continuous)

Fringe (patchy)

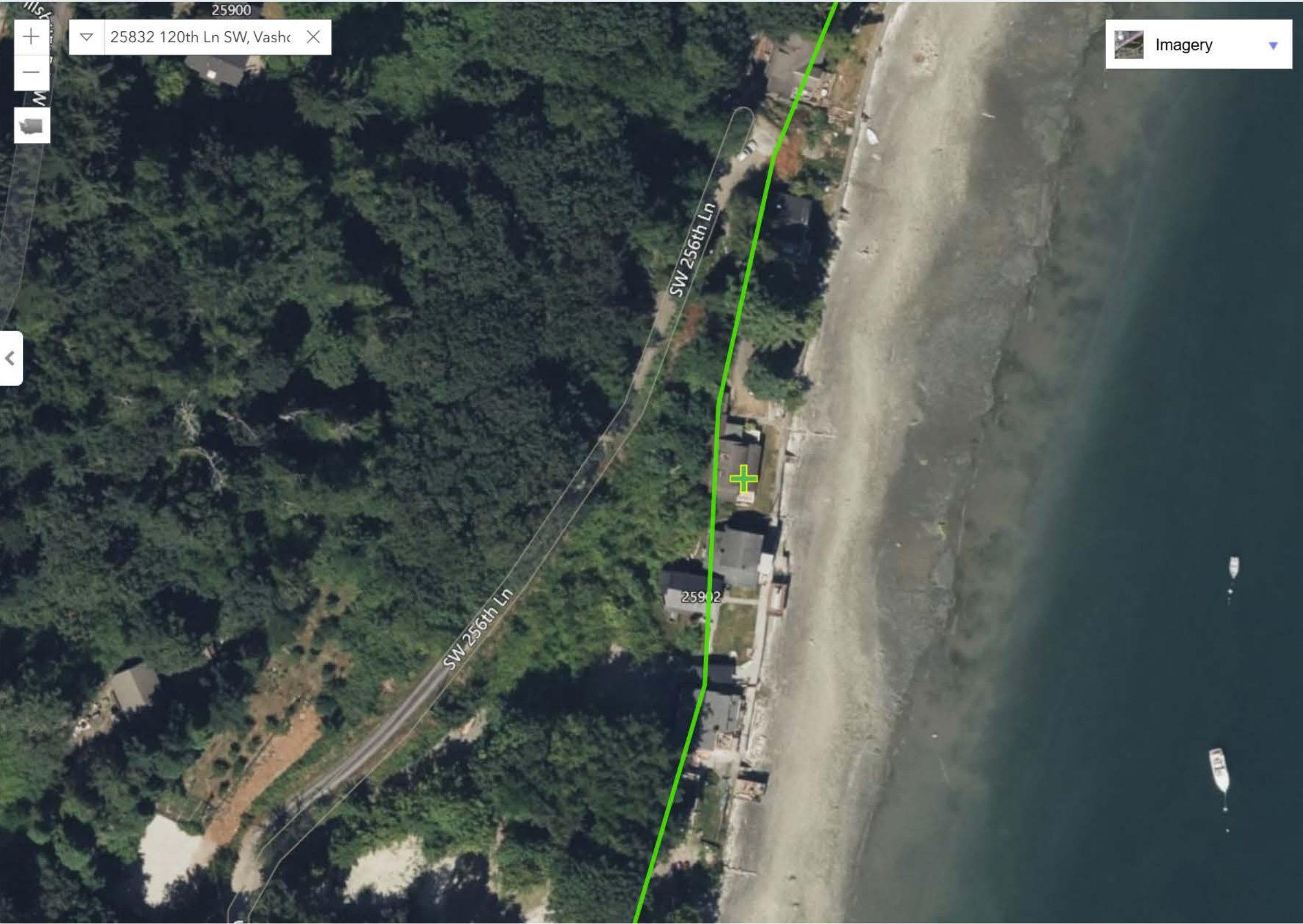
Kelp

Fringe (continuous)

Fringe (patchy)

Salt Marsh

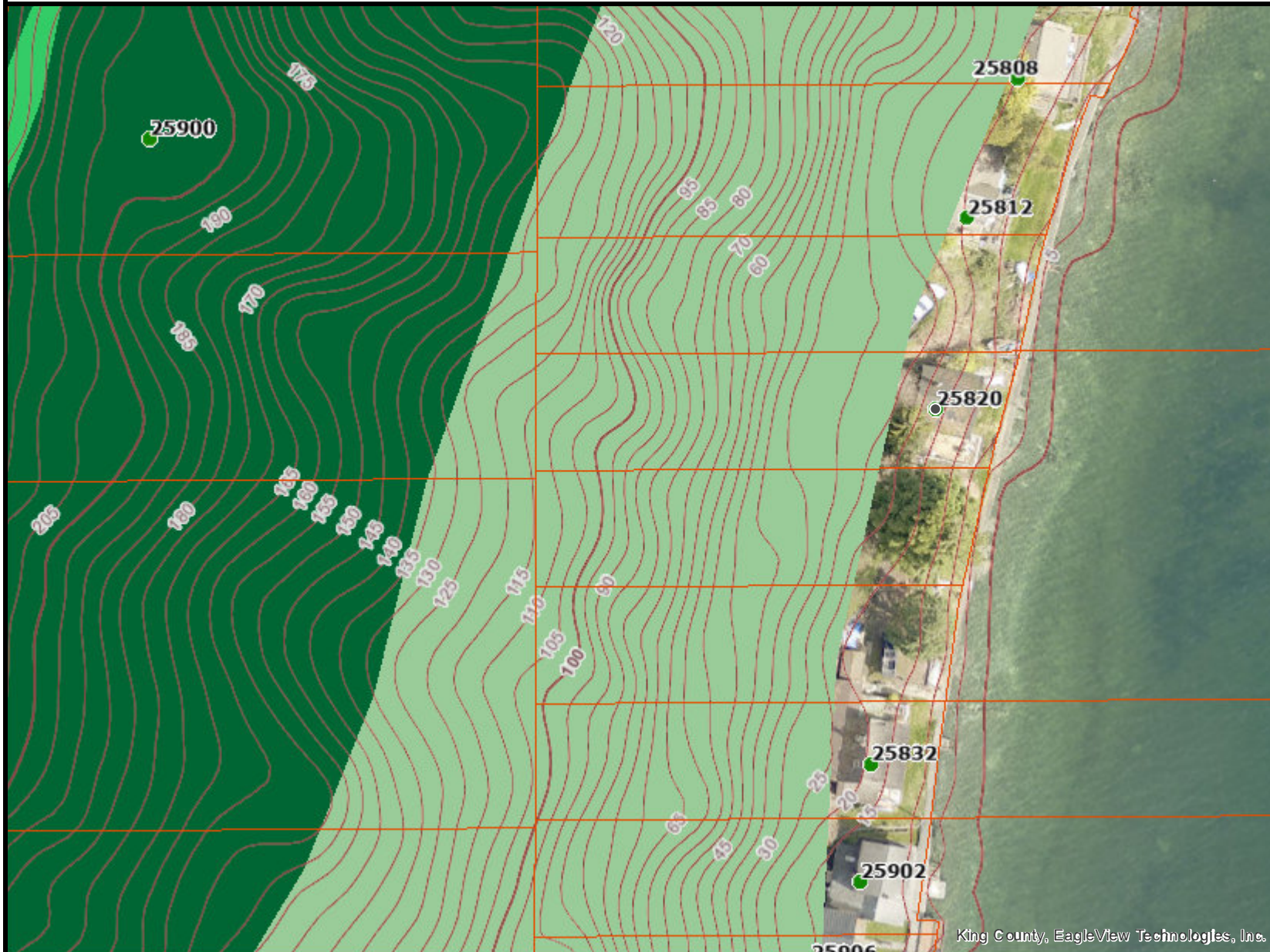
Fringe (continuous)



Imagery

Data transparency 10%

# Red Barnacle\_CARA



## Legend

- Address points
- Address labels
- Parcels
- index contours - 100 foot
- contours - 5 foot (below 1000 feet) and 10 foot

## Critical aquifer recharge areas

- category 1
- category 2
- category 3

King County, EagleView Technologies, Inc.

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King County



October 12, 2023

**Wetlands**

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

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

# Red Barnacle\_County Mapped 100-yr and sea-level rise



## Legend

- Address points
- Address labels
- Parcels
- FEMA 100 year floodplain
- King County sea level rise risk area

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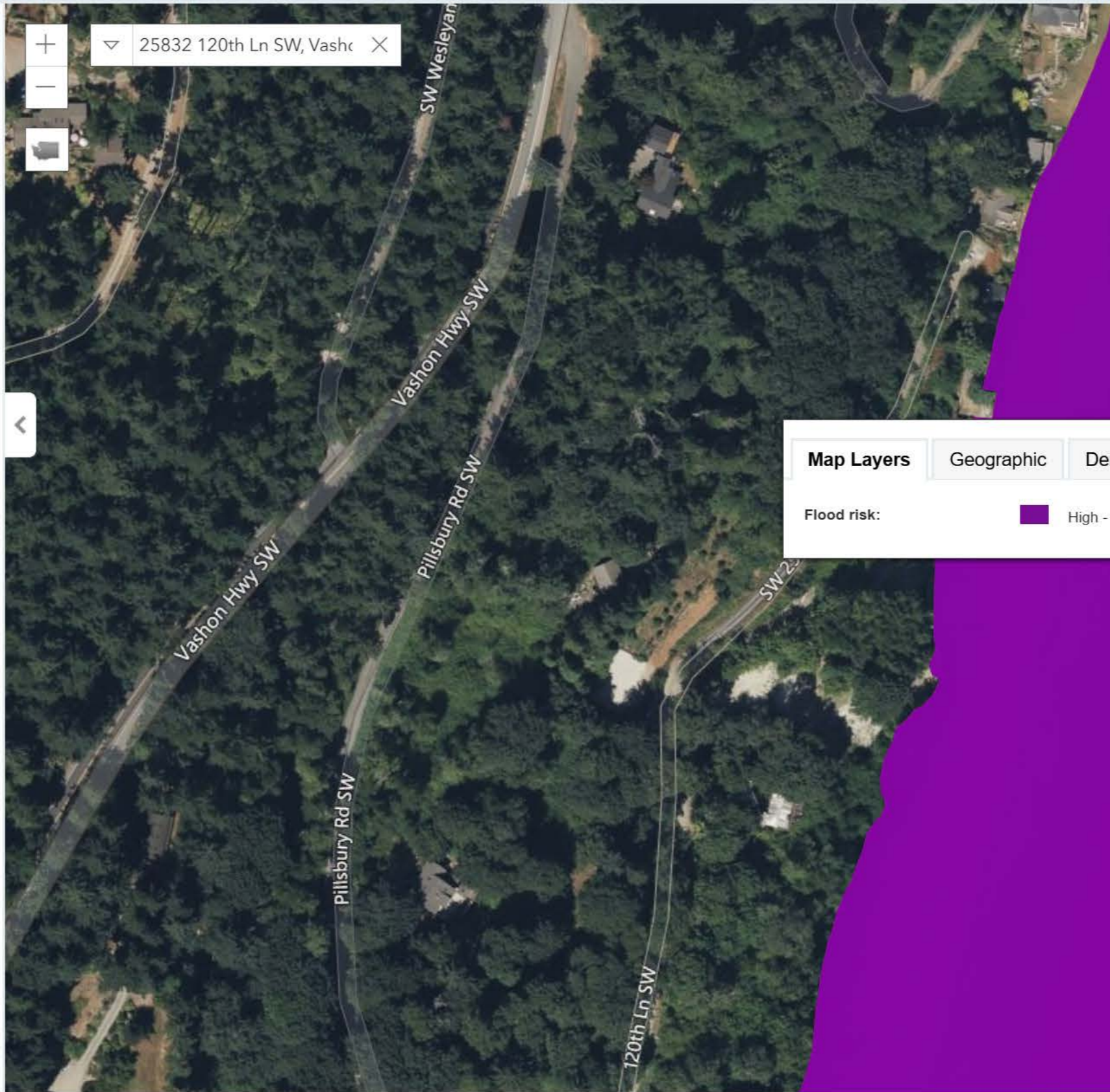
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About

## Flood Hazard

- Floodway
- 1% annual chance (Floodplain)
- 1% annual chance (Velocity Zone)
- Base flood elevation
- No data available



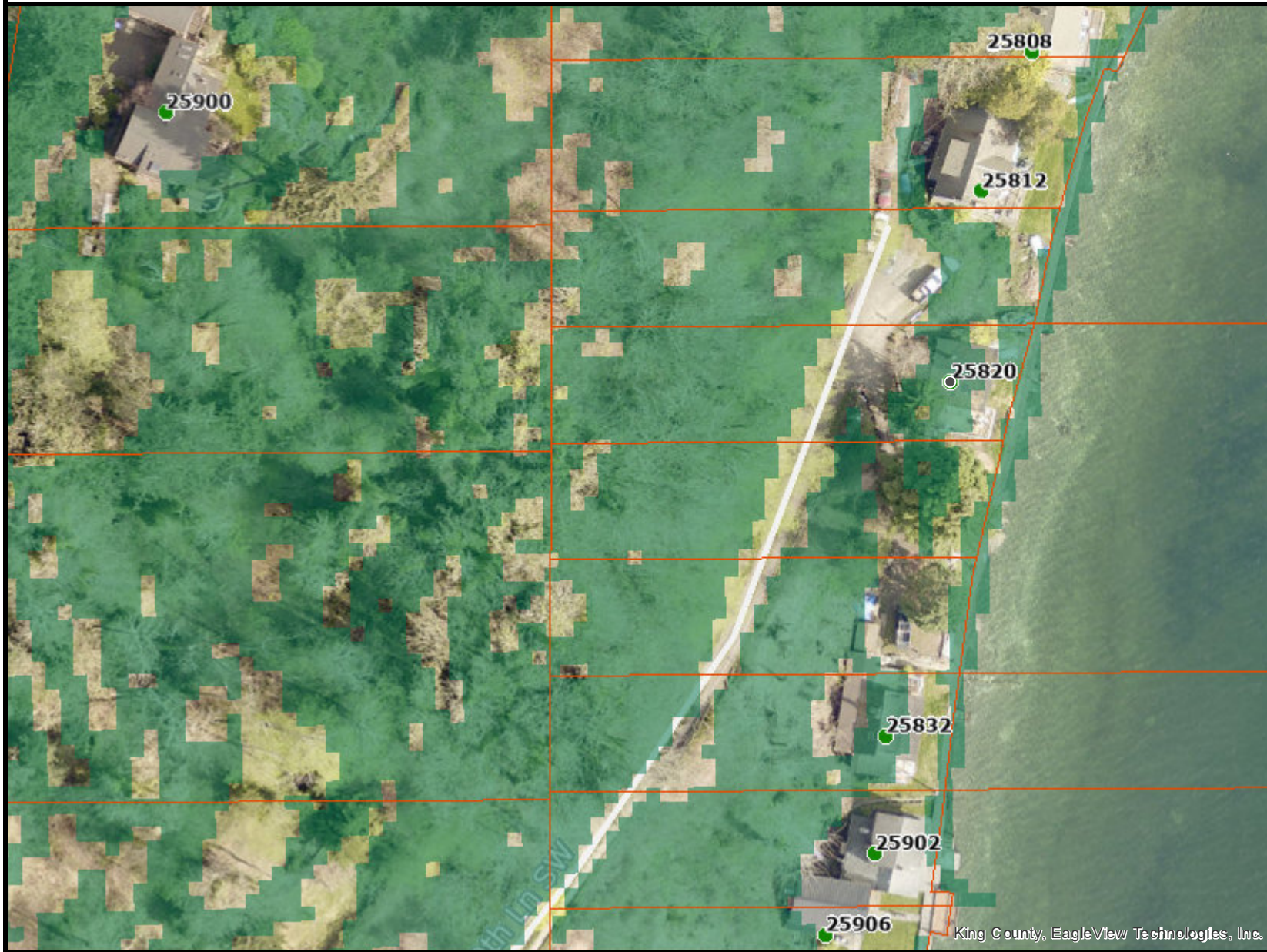
Imagery

**Map Layers** | Geographic | Demographic

Flood risk:  High - 1% annual chance (Velocity Zone)

Data transparency  10%

# Red Barnacle\_County Mapped steep slopes



## Legend

- Address points
- Address labels
- Parcels
- Potential steep slope hazard areas (2016, see explanation-->)

King County, EagleView Technologies, Inc.

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About

^ Slope Stability

- Stable
- Intermediate
- Modified
- Unstable
- Unstable (old slide)
- Unstable (recent slide)

^ Coastal Landforms

- Feeder bluff exceptional
- Feeder bluff
- Transport zone
- Feeder bluff - Talus
- Accretion shoreform
- Pocket beach
- Pocket beach - artificial

No appreciable drift:

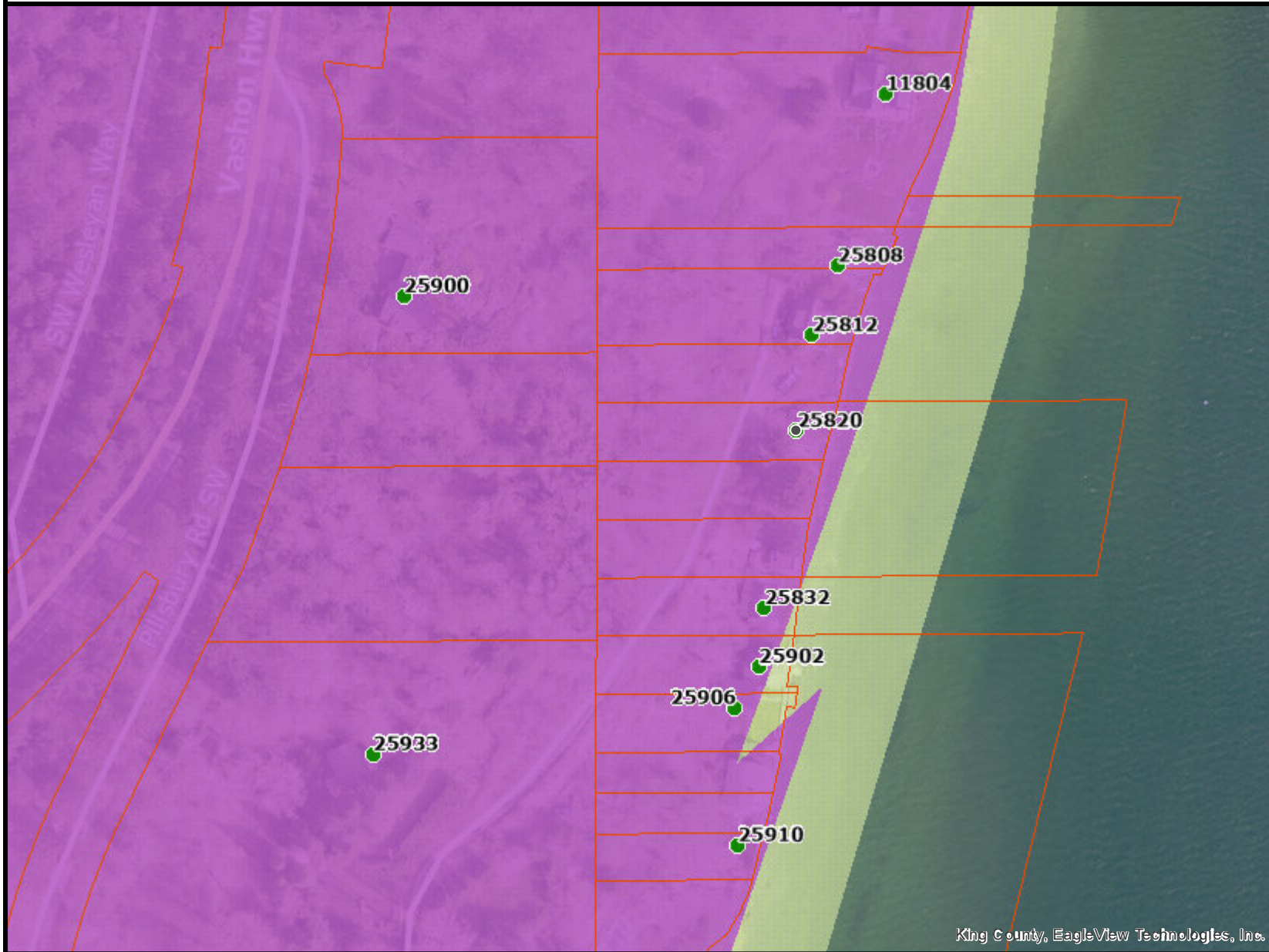
- Artificial
- Bedrock
- Delta
- Low energy

25832 120th Ln SW, Vashc

Imagery

Data transparency 10%

# Red Barnacle\_County Mapped Erosion & Landslide Hazards



## Legend

- Address points
- Address labels
- Parcels
- Potential landslide hazard areas (2016, see explanation-->)
- Erosion hazard (1990 SAO)

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King County

## **Appendix B —Aerial Photographs**

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Approx. Project location



Approx. Project Location



Approx. Project Location



Approx. Project Location



Approx. Project Location

## **Appendix C — Mitigation Information**

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# King County iMap



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Date: 12/1/2025

Notes:



King County

## **Appendix D      Financial Guarantees**

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**King County**  
**Department of Local Services**  
**Permitting Division**  
**206-296-6600**  
www.kingcounty.gov

## Landscape Bond Quantity Worksheet Form

For alternate formats, call 206-296-6600

**Project Name:** Red Barnacle, LLC, Bulkhead Repair and Maintenance Project

**Permitting Project #:** TBD

**Address:** 25820 & 25832 120th Lane SW, Vashon, WA 98070

**Prepared By:** Bill Rehe, Leon Environmental, LLC    **Phone:** 253-389-0712

Bonds are based upon required landscaping and will be posted for performance and/or maintenance. Required landscaping includes perimeter landscaping, surface parking area landscaping, (KCC 21A.16) and any landscaping required by SEPA environmental review. **The maintenance period is for the life of the project**, however, after posting for maintenance, the performance bond will be reduced to 30% of the total performance bond price including contingency, or other amount as warranted by site specific or current market considerations at the discretion of the department (\$1,000.00 minimum). Bonds will be held for a minimum two year period. Upon re-inspection of the site at the end of the monitoring period, the bond will be released if the site has been properly maintained (KCC 21A.16.180). If the project has not been maintained and there are dead trees, shrubs, ground cover, or other deficiencies noted in the required landscaping, the bond will be held until the deficiencies are corrected.

	UNIT PRICE	UNIT TYPE	QUANTITY	PRICE
SOD LAWN AREAS	\$500.00	MSF (1000 SQ. FT)		
HYDROSEEDING	\$50.00	MSF (1000 SQ. FT)	2	\$100
<b>SOIL PREPARATION</b>				
A. TOPSOIL (6 INCHES DEEP)	\$25.00	CY (CUBIC YARD)	37	\$925
B. MULCH (2 INCHES DEEP)	\$4.00	SY (SQUARE YARD)		
C. PEAT MOSS (TWO INCHES DEEP)	\$2.30	SY (SQUARE YARD)		
D. COMPOST (3 INCHES DEEP & TILLING)	\$26.00	SY (SQUARE YARD)		
E. FERTILIZER	\$6.67	CY (CUBIC YARD)		
<b>PLANT MATERIALS</b>				
A. DECIDUOUS TREES				
1.75 - 2.00" CALIPER (minimum height 10') PERIMETER & PARKING AREAS	\$250.00 EACH	COST & LABOR		
1.5 - 1.75" CALIPER <small>INTERIOR LANDSCAPING OR OTHER REQUIRED LANDSCAPING</small>	\$225.00 EACH	COST & LABOR	4	\$900
B. EVERGREEN TREES				
FIVE (5) FEET OR ABOVE	\$150.00 EACH	COST & LABOR		
C. SHRUBS				
	\$35.00 EACH	COST & LABOR		
D. GROUND COVER				
	\$4.00 EACH	COST & LABOR		
<b>SUB TOTAL BOND AMOUNT</b>			<b>BOND AMOUNT SUB TOTAL:</b>	
			\$ <u>1,925</u>	

	UNIT PRICE	UNIT TYPE	QUANTITY	PRICE
<b>MISCELLANEOUS</b>				
TREE STAKES	\$2.65 EACH	PER STAKE & LABOR		
<b>FENCING:</b>				
SOLID WOOD CEDAR	\$28.50	LINEAR FOOT INCLUDES LABOR		
BERMING	\$17.50	LINEAR FOOT INCLUDES LABOR		
IRRIGATION	80¢	SQUARE FOOT		
RELOCATING TREES ON SITE				
36" BALL	\$260.00	EACH		
60" BALL	\$920.00	EACH		
RELOCATING SHRUBS ON SITE				
12" BALL	\$26.00	EACH		
24" BALL	\$33.00	EACH		
<b>ADDITIONAL ITEMS:</b>				
Onsite recreation facilities				
<b>SUB TOTAL BOND AMOUNT</b>				<b>BOND SUB TOTAL:</b>
<b>Add 30% of the Bond Sub-Total for Contingency in accordance with KCC 27A.30.020</b>				\$ 1,925
<b>TOTAL BOND PRICE *</b>				<b>30 % CONTINGENCY:</b>
				\$ 577.50
				<b>TOTAL BOND PRICE:</b>
				\$ 2,502.50

\* NOTE: Permit inspection fees, in addition to the bond price, are required for monitoring the performance and maintenance of required landscaping.