

Site Visit: 3:00 PM – 4905 Croatian Way. No public comments will be taken at the site visit. At the conclusion of the site visit, the Planning Commission will resume the continued public hearing on this matter at the scheduled September 25, 2019, evening meeting.

ANACORTES PLANNING COMMISSION



September 25, 2019

Municipal Building Council Chambers

6th Street and "Q" Avenue

AGENDA

6 P.M.

[VIEW PACKET MATERIALS HERE](#)

1. **Roll Call**
2. **Minutes of September 11, 2019**
3. **Correspondence**
4. **New Business**
Public Hearing: Shoreline Substantial Development Permit & Shoreline Conditional Use Permit to construct concrete bulkhead /sea-wall; 4905, 4907, and 4911 Croatian Way; SDP-2019-0004, SDP-2019-0005, SDP-2019-0006

The City of Anacortes encourages people with disabilities to participate in public meetings. For assistance with special needs, please contact the City Clerk at 360-299-1960 in advance of the meeting.



Planning Commission Public Hearing Minutes for September 11, 2019

This is not a verbatim transcript of the meeting and is written in an attempt to capture the general spirit of the discussion based upon notes and video observation by the author. To view the video recording of this meeting, click [here](https://www.anacorteswa.gov/700/Watch-Meetings), or go to <https://www.anacorteswa.gov/700/Watch-Meetings>.

Acting Chair Cleland-McGrath called the Public Hearing of September 11, 2019 to order at approximately 6 p.m.

Roll Call

Members Present: Commissioners, Cleland-McGrath, Graf, Moffitt, MacKenzie and Doll

Absent: Commissioners, McNett, and Mount

Minutes

Minutes from August 14 stand as presented.

Correspondence

None

New Business

Pre-Decision Open Record Public Hearing: Port of Anacortes Utility /Fiber Installation Project, Shoreline Substantial Development Permit, SDP-2019-0001

Kevin Cricchio, Senior Planner, provided a briefing on the Port's Utility/Fiber installation project and gave a summary of the site visit of 9/11/2019 concerning this project. No public comments were presented. With no further comment, Acting Chair Cleland-McGrath closed the public hearing for this project at 6:07 PM.

Commissioners discussed project. Commissioner Doll asked questions concerning boring. Commissioner Moffitt asked questions about conflicts of interest. Commissioner Moffitt made a motion to approve. MacKenzie seconded the motion. Motion Passed.

Pre-Decision Open Record Public Hearing: Parks & Recreation Department, Replacement of Washington Park Boat Launch /dock & pilings, Shoreline Substantial Development Permit, SDP-2019-0003

Kevin Cricchio, Senior Planner, provided a briefing on the City of Anacortes Parks & Recreation Departments' Washington Park boat launch/dock replacement project and discussed the site visit of 9/11/2019 as well. Public comments were received as stated below:

Steve Anderson, resident of 4710 Kingsway, Anacortes: Provided testimony expressing concerns the old dock was too short and the new one will be as well, and dock needs new bumpers.

Stan Shimkus, resident of 1307 Erie Ave, Anacortes: Provided testimony expressing concerns with boat launch paving and shape and using it during a minus tide.

Ryan Lavine, resident of 11297 Havekost Rd, Anacortes: Provided testimony expressing the plans do not show a longer dock, but recommends it.

Bob Vaux, Washington Park Manager, clarified the intent of the proposed project and the removal and replacement timeline. Don Measamer, Director, provided that making major changes to the dock would require a 2-year permitting timeline. Mr. Vaux added that a Master Plan update for Washington Park could include changes to the dock, parking, and boat launch.

With no further comment, Acting Chair Cleland-McGrath closed the public hearing for this project at 6:40 PM.

Commissioners discussed project. Commissioner MacKenzie offered a motion to approve. Commissioner Moffitt seconded the motion. Motion passed.

With no further discussion, Acting Chair Cleland-McGrath concluded the meeting at approximately 6:44 p.m.



Planning Commission Agenda Bill

Meeting Date: 9/25/2019 **Agenda Item:** [Click here to enter text.](#)

Subject: Construct Bulkhead; SDP-2019-0004, SDP-2019-0005, & SDP-2019-006

Staff Contact: Kevin Cricchio, AICP, ISA, WPIT, Senior Planner

Approved for Submittal to Commission by	
X	Don Measamer, Director

Action Type	
X	Pre-Decision Open-Record Public Hearing
X	Discussion
X	Possible Action

Summary & Background: The applicant have applied for a shoreline substantial development permit, shoreline conditional use permit, and SEPA environmental review to permit the construction of a reinforced concrete bulkhead in front of the existing rock (riprap) sea-wall along the bay side of each of the subject properties located along Burrows Bay in Skyline. Work will be conducted during low tide cycles and will take approximately 1 month to complete once started. The proposed project lies in the R2 Zoning District and in both the Shoreline Residential & Aquatic Shoreline Environments /Designations. A pre-decision open-record public hearing before the Planning Commission has been scheduled for **6:00 PM on September 25, 2019** to make a decision on the matter. Please bring your packets with you to the hearing. Please note, that there is a **site visit prior** to the hearing scheduled for **3:00 PM onsite**.

Recommended Motion:

I move that the Planning Commission make a motion to approve the subject Shoreline Substantial Development Permit (SSDP) and Shoreline Conditional Use Permit (SCUP) subject to staff's suggested conditions of approval.

Attachments:

[Planning Commission's Draft Findings of Fact, Conclusions of Law, & Decision \(Click Here\)](#)

[Exhibit #01, Master Permit Application, JARPA, Narrative, SEPA Checklist, Alternative Analysis, Engineer Letter Report, Compensatory Mitigation Plan, SCUP Criteria of Approval, Survey, & Site Plan \(Click Here\)](#)

[Exhibit #02, GIS Map & Assessor's Information \(Click Here\)](#)

[Exhibit #03, Neighborhood Meeting Notice, Notice of Application & Hearing \(Click Here\)](#)

[Exhibit #04, Public Comments Received \(Click Here\)](#)

[Exhibit #05, Agency & Department Comments Received \(Click Here\)](#)

[Exhibit #06, Issued SEPA MDNS \(Click Here\)](#)



PLANNING COMMISSION'S DRAFT FINDINGS OF FACT, CONCLUSIONS OF LAW, & DECISION:

PRE-DECISION OPEN-RECORD

PUBLIC HEARING DATE: Wednesday, September 25, 2019, @ 6:00 PM; with a 3:00 PM site visit onsite prior to the hearing

FILE NUMBERS: SDP-2019-0004
SDP-2019-0005
SDP-2019-0006

PROJECT LOCATION: The subject proposal involves three (3) properties that are addressed as 4905 Croatian Way, 4907 Croatian Way, and 4911 Croatian Way, Anacortes, WA. The subject properties are located in a portion of Section 27; Township 35 North; Range 01 East, Willamette Meridian

SUBJECT PARCELS #: P83311, P83310, P83308

APPLICANTS & LANDOWNERS:

Jerome & Janice Schutzler
4905 Croatian Way
Anacortes, Washington 98221

Robert & Mary Dowell
4907 Croatian Way
Anacortes, Washington 98221

Thomas & Sally Foster
4911 Croatian Way
Anacortes, Washington 98221

CONSULTANT: Marine Surveys & Assessments
380 Jefferson Street
Port Townsend, WA 98368

STAFF REPORT PREPARED BY:

Kevin Cricchio, Senior Planner
City of Anacortes
904 6th Street
Anacortes, WA 98221

SUBJECT

PROPOSAL: The applicants have applied for a shoreline substantial development permit, shoreline conditional use permit, and SEPA environmental review to permit the construction of a reinforced concrete bulkhead in front of the existing rock (riprap) sea-wall along the bay side of each of the subject properties located along Burrows Bay in Skyline. Work will be conducted during low tide cycles and will take approximately 1 month to complete once started.

ZONING DISTRICT: Residential Low Density 2 (R2) Zoning District

SURROUNDING ZONING & LAND USES:

Direction:	Zoning:	Present Land-Use:
North:	Residential Low Density 2 (R2) Zoning District	Single-Family Residences
South:	Residential Low Density 2 (R2) Zoning District	Burrows Bay
East:	Residential Low Density 2 (R2) Zoning District	Single-Family Residences
West:	Residential Low Density 2 (R2) Zoning District	Single-Family Residences

SHORELINE

ENVIRONMENT(S): Proposed development lies in both the Shoreline Residential & Aquatic Shoreline Environments /Designations.

DRAFT FINDINGS OF FACT:**I. GENERAL BACKGROUND /PROJECT CHRONOLOGY:**

1. According to AMC Table 19.20.030, Shoreline Substantial Development Permits and Shoreline Conditional Use Permits require that the applicant conduct a pre-application. Accordingly, a pre-application was conducted internally with city staff.
2. According to AMC Table 19.20.030, Shoreline Substantial Development Permits also require that the applicant conduct a neighborhood meeting regarding what is proposed. Accordingly, a neighborhood meeting was held in the Senior Center on Wednesday, July 25, 2019. A neighborhood meeting notice was published in the Anacortes American newspaper; posted onsite in two different locations; and posted at city hall, the library, the local USPS office, and on the city's website.
3. On July 31, 2019, the subject applications were submitted to the City of Anacortes's Department of Planning, Community, and Economic Development. Following a review of the application, PCED deemed the subject applications complete on August 07, 2019.

4. The thirty-(30)-day comment period (taken from the date of newspaper publication) ended on September 06, 2019, but comments were accepted up until the close of the pre-decision open-record public hearing.

II. NOTICE OF APPLICATION & HEARING:

1. Per AMC 18.16.050 and Table 19.20.030-1, Shoreline Substantial Development Permits (SSDP) and Shoreline Conditional Use Permits (SCUP) require that public notice be mailed to property landowners that are within 300 feet of the subject proposal, be posted onsite, and published in the newspaper of record.
2. Accordingly, a “**Notice of Application & Hearing**” (See Exhibit # 3) was published in the Anacortes American Newspaper on August 07, 2019. This notice was also mailed to neighboring landowners located within 300’ on August 1, 2019. Notice was posted at city hall, the library, and the local USPS office on August 1, 2019. The subject property was posted with this notice on August 2, 2019, in two (2) locations.
3. The notice of application /hearing was also posted on the city’s website on August 1, 2019.
4. Agencies and departments of jurisdiction were solicited for comment on August 5, 2019.

III. CRITICAL AREA REVIEW:

The marine shoreline is a fish and wildlife habitat conservation area and regulated by the City of Anacortes’ 2010 Shoreline Master Program (SMP) & shoreline specific critical area regulations. The applicant submitted a “Biological Evaluation” (BE) prepared by their consultant, Marine Surveys & Assessments dated July 23, 2019. The BE evaluated direct and indirect impacts and effects that the project may have on endangered and threatened aquatic species and critical habitat. According to the biological evaluation, a determination of effect on endangered and threatened species listed therein was made resulting in either “no effect” or “may affect, not likely to adversely affect.”

The biological evaluation also evaluated “no net loss” to the ecological functions of the shoreline. Avoiding the impact to the shoreline by not taking the action [construction of a bulkhead] was not feasible in this case as the existing rock seawall protecting the residences upland from erosion, dissipation of wave energy, and ground subsidence is in disrepair. The existing rock seawall and a few feet of land above it is the only thing that separates itself from the three (3) single-family residences and the waters of Burrows Bay. The proposed bulkhead would help shore-up the land upland behind the existing rock seawall while stabilizing the subject properties that abut Burrows Bay while protecting the three (3) single-family residences that are part of the subject application(s). Recommendations of the biological evaluation have been made as recommended conditions of approval /mitigation measures. Project compliance with

WDFW HPA and USACE authorizations are expected to further mitigate project impacts to critical areas /shoreline functions.

IV. PUBLIC COMMENTS RECEIVED:

Please see **Exhibit 4** for any public comments received. At the time of writing this staff report /findings of fact, one public comment has been received.

V. AGENCY & DEPARTMENT COMMENTS RECEIVED:

Please see **Exhibit 5** for agency & department comments received.

VI. STATE ENVIRONMENTAL POLICY ACT (RCW 43.21C):

A SEPA Mitigated Determination of Non-Significance (MDNS) was issued on September 19, 2019. The mitigation measures therein have been incorporated as conditions of approval below –**See Exhibit #6**.

VII. SHORELINE MANAGEMENT ACT (RCW 90.58):

1. Proposed development lies within two hundred (200) feet of a shoreline of statewide significance (RCW 90.58.030(2)(f)) and is therefore subject to conformance with the City of Anacortes' Shoreline Master Program (SMP).
2. The subject proposal is located in both the Shoreline Residential and Aquatic Shoreline Environments /Designations.
3. According to Table 5.1 of the SMP, "hard structural stabilization" is permitted via a Shoreline Conditional Use Permit (SCUP) in the Shoreline Residential Shoreline Environment /Designation while being permitted outright in the Aquatic Shoreline Environment/ Designation provided it meets the respective development regulations of the City of Anacortes 2010 Shoreline Master Program (SMP) as found in Section 9.11 regulating Shoreline Stabilization Measures & Flood Protection Works.
4. The subject proposal is not exempt from obtaining an approved Shoreline Substantial Development Permit (SSDP) per WAC 173.27.040.
5. According to AMC 19.20.030 and 18.16.100(B) shoreline substantial development permit applications for projects valued less than \$1 million on sites less than 3-acres are considered a Type 3 type of review. For type 3 reviews, the Planning Commission makes a decision on the matter regarding the subject shoreline substantial development permit. According to the applicant's JARPA, the fair market value of the project is \$150,000.00 total (\$50,000.00 per 3 properties involved).
6. Additionally, according to AMC 19.20.030, Shoreline Conditional Use Permit applications are considered a Type 3 type of review. For type 3 reviews, the Planning Commission makes a decision on the matter regarding the subject shoreline conditional use permit.

7. The subject shoreline substantial development permit, shoreline conditional use permit, and associated SEPA environmental review was reviewed and processed concurrently per AMC 19.20.040.
8. The purpose of the “Aquatic” shoreline environment/ designation “is to protect, restore, and manage the unique characteristics and resources of marine waters, including habitat, ecology, navigation and public enjoyment.”
9. The purpose of the “Shoreline Residential” shoreline environment / designation “is to accommodate residential development and associated structures that are consistent with the Shoreline Management Act, this Master Program, and the protection and restoration of ecological functions. An additional purpose is to provide appropriate public access and recreational uses.”
10. Water Dependent uses within both the “Shoreline Residential” and “Aquatic” Shoreline Environments /Designations have a zero (0) foot setback as measured from the ordinary high water mark (OHWM) pursuant to SMP Table 5.2.
11. Due to the proximity of the subject single-family residences, the concrete capped rock (riprap) seawall, and the waters of Burrows Bay, “soft” shoreline stabilization measures were deemed infeasible while “hard” stabilization measures such as the proposed bulkhead were the preferred choice. Furthermore, the applicant’s consultant and project engineer evaluated alternative “soft” and “hard” shoreline stabilization measures and concluded that a bulkhead is the best choice for shoring up and stabilizing the existing rock (riprap) seawall, concrete cap/ sidewalk above it, and the single-family residences located above it within feet of the ordinary high water mark of Burrows Bay. The existing single-family residences were legally permitted land uses. Today as they sit, the residences are in imminent danger of loss or substantial damage unless the proposed shoring up and stabilization measures are constructed.
12. The subject shoreline permit was also reviewed for conformance with the Criteria for granting a Shoreline Conditional Use Permit per Section 3.1(D) –of the Shoreline Master Program as follows:

A. That the proposed use will be consistent with the policies of RCW 90.58.020 and the policies of the Master Program.

STAFF ANALYSIS:

The proposed construction of a bulkhead in front of a existing rock (riprap) seawall will be consistent with RCW 90.58.020. The rock seawall and concrete cap /sidewalk above it is in disrepair and need of shoring up and stabilization due to the erosion caused by Burrows Bay. This shoring up and stabilization measures will help protect the 3 single-family residences that are legally permitted uses upward of said rock seawall.

B. That the proposed use will not interfere with the normal public use of public shorelines.

STAFF ANALYSIS:

The proposed bulkhead will be constructed on private property and will not interfere with the public's use of the shoreline.

- C. *That the proposed use of the site and design of the project will be compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and this master program.*

STAFF ANALYSIS:

The subject property is located in the Residential Low Density 2 (R2) Zoning District. Upland from the ordinary high water mark, the subject properties are also located in the Shoreline Residential shoreline environment /designation. The properties in question are located within a subdivision that was platted some time ago. Single-family residences are legally permitted uses within the R2 Zoning District. The proposed bulkhead will be compatible with adjacent and authorized uses for the area.

- D. *That the proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located; and*

STAFF ANALYSIS:

Today, in front of the existing rock (riprap) seawall sits a concrete toe in the sand. This concrete toe will be removed as part of this shoreline permit. The proposed concrete bulkhead's width and footprint will be substantially less than the existing concrete toe's width and footprint. The proposed bulkhead however will be taller than the existing concrete toe as it will be roughly the same height as the existing rock (riprap) seawall is that will sit behind (upland) from it.

- E. *That the public interest will suffer no substantial detrimental effect.*

STAFF ANALYSIS:

The proposed project will not cause substantial detrimental effect to the public interest. As stated above, the existing concrete toe that sits on the beach/ sand (on private property) today will be removed. The proposed bulkhead will reduce the beach footprint.

13. The subject proposal **is/is not** consistent with the Washington State's Shoreline Management Act, City of Anacortes' 2010 Shoreline Master Program and development regulations listed therein for developments within the "Shoreline Residential" and "Aquatic" shoreline environments/ designations.

VIII. ZONING ORDINANCE/CODE:

1. The City's Zoning Map establishes zoning district boundaries and the City Zoning Ordinance establishes (1) the permitted use of land in the various zones, and (2) development standards.
2. According to AMC 19.40.030, the Residential Low Density 2 (R2) "designation provides for low density residential development in mostly established neighborhoods generally west of Anacopper Mine Road and the area generally between the Airport and Little Cranberry ACFL, and the south of West 6th Street,

Minnesota Avenue, and West 8th Place. These areas are inappropriate for more intensive urban development due to the established character of the area and/or due to the areas' separation from commercial services."

3. Single-family residences are uses that are permitted outright in the R2 Zoning District per AMC Table 19.41.040. Shoreline stabilization measures however such as the proposed bulkhead are not listed within this table and thus can be considered appurtenances to a single-family residences provided it is permitted in the respective shoreline environment /designation of the Shoreline Master Program and meets the sections, development regulations, and policies therein.
4. The subject proposal **is/is not** permitted in the underlying zoning district.

IX. CONCLUSIONS OF LAW:

1. The requirements of the State Environmental Policy Act **have, have not** been complied with.
2. The public notice requirements of the Shoreline Management Act **have, have not** been complied with.
3. The project **is/is not** consistent with the shoreline designation and general goals, policies and development regulations of the Anacortes Shoreline Master Program, the Shoreline Management Act, the general purposes of the city comprehensive plan, the city's planning standards and specifications of the zoning ordinance, and other ordinances applicable to the proposal.
4. The Planning Commission bases its Findings of Fact, Conclusions of Law & Decision on the entire record, including all testimony and exhibits. Any finding, which would be deemed a Conclusion of Law, and any Conclusion of Law which should be deemed a finding is hereby adopted as such.

X. STAFF RECOMMENDATION:

The Department of Planning, Community, and Economic Development (PCED) recommends that the Planning Commission approve the subject shoreline substantial development permit (SSDP) and shoreline conditional use permit (SCUP) subject to the staff's suggested conditions of approval as listed below.

XI. DECISION:

Based on the foregoing information and analysis, the environmental documents submitted by the applicant, and the City regulatory authority to implement the policies, standards, and the regulations of the Shoreline Master Plan, Comprehensive Plan, and the Anacortes Municipal Code (AMC), the Planning Commission hereby **approves /denies** the subject shoreline substantial development permit and shoreline conditional use permit subject to staff's conditions of approval listed as listed below.

XII. CONDITIONS OF APPROVAL:

1. The scope of the project shall not exceed that as setout in the shoreline permit application (including attachments), and in accordance with the determinations made and conditions imposed.
2. A building permit(s) with the City of Anacortes' shall be secured prior to work.
3. The applicant(s) shall be responsible for reimbursement to the City for the full cost of mailing(s) and newspaper publication associated with the neighborhood meeting, notice of application and hearing, and notice of decision. Payment shall be made prior to building permit application issuance.
4. Hours of construction /work are limited to 7:00 AM to 10:00 PM seven (7) days a week unless a noise variance is obtained.
5. Noise levels shall not to exceed those standards as established by the state pursuant to Chapter 70.107 RCW and contained in Chapter 173.60 WAC.
6. The applicant /landowner shall comply with federal statutes including but not limited to: Endangered Species Act, Clean Water Act, Marine Mammal Protection Act, and other federal statutes.
7. The project shall comply with all applicable Shoreline Master Program regulations, including but not limited to, Section 5.6 Aquatic Environment; Section 5.9 Shoreline Residential, Chapter 6 Environmental Protection General Regulations; and Section 9.11 Shoreline Stabilization Measures & Flood Protection Works.
8. Development shall comply with AMC § 18.16.130 regulating the time limit for shoreline permits as follows:
 - A. Construction, or substantial progress toward completion, must begin within two (2) years after approval of the permit. Substantial progress toward construction shall include, but not limited to, the letting of bids, making of contracts, purchasing of materials involved in development, but shall not include development or uses which are inconsistent with the Shoreline Management Act or the city's master program. In determining the running two-year period hereof, there shall not be included the time during which development was not actually pursued by construction and the pendency of litigation reasonably related thereto made it reasonable not to so pursue; provided, that the city may, in its discretion, extend the two-year time period for a reasonable time based on factors, including the inability to expeditiously obtain other governmental permits which are required prior to the commencement of construction.
 - B. Five-Year Permit Authorization: If construction has not been completed within five years of approval by the City of Anacortes, the city will review the permit, with prior notice to parties of record, and, upon showing of good cause, either extend the permit for one additional year, or terminate the permit. Prior to the city authorizing any permit extensions, it shall notify any parties of record and the Department of Ecology. Note: Only one single extension is permitted.

9. Per the Biological Evaluation prepared by Marine Surveys & Assessments dated July 23, 2019, beach nourishment (3/4" river pebbles) shall be placed seaward for the full length of the proposed bulkhead, 12 inches deep and taper 10 feet outward toward the marine shore.
10. Per the Biological Evaluation prepared by Marine Surveys & Assessments dated July 23, 2019, "Conservation Measures" shall be used during the construction of the proposed bulkhead.
11. Development shall comply with the SEPA Mitigated Determination of Non-Significance (MDNS) that was issued on **September 03, 2019**, as follows:
 - A. Prior to work beginning, the applicant/landowner shall obtain all required local, state, and federal permits (Mitigation Measure #1).
 - B. If any artifacts or human remains are found upon excavation, the Samish Indian Nation; the Swinomish Indian Tribal Community; the City of Anacortes' Department of Planning, Community, & Economic Development; the City of Anacortes' Police Department; and the State of Washington's Department of Archaeology and Historic Preservation (DAHP) shall be immediately notified and all work in the immediate area cease. Pursuant to RCW § 27.53.060 it is unlawful to destroy any historic or prehistoric archaeological resources. RCW 27.44 and § 27.53.060 require that a person obtain a permit from the Washington State Department of Archaeology and Historic Preservations before excavating, removing, or altering Native American human remains or archaeological resources in Washington (Mitigation Measure #2).
 - C. Best Management Practices (BMPs) shall be implemented at all times during construction activities. (Mitigation Measure #3).
 - D. All applicable local, state and federal permits and authorizations shall be secured prior to work beginning on the site. Copies shall be provided to the city (Mitigation Measure #4).

These Findings of Fact, Conclusions of Law, and Decision were adopted by the City of Anacortes' Planning Commission on _____.

**CITY OF ANACORTES, WASHINGTON
PLANNING COMMISSION**

By: _____
Jeremy McNett, Planning Commission Chair

EXHIBITS:

EXHIBIT NUMBER:	NAME OF EXHIBIT:
Exhibit #01	Master Permit Application, JARPA, Narrative, SEPA Checklist, Alternative Analysis, Engineer Letter Report, Compensatory Mitigation Plan, Biological Evaluation, SCUP Criteria of Approval, Survey, & Site Plan
Exhibit #02	GIS Map & Assessor's Information
Exhibit #03	Neighborhood Meeting Notice, Notice of Application & Hearing
Exhibit #04	Public Comments Received
Exhibit #05	Agency & Department Comments Received
Exhibit #06	Issued SEPA MDNS

EXHIBIT #01:

**MASTER PERMIT APPLICATION, JARPA, NARRATIVE,
SEPA CHECKLIST, ALTERNATIVE ANALYSIS,
ENGINEER LETTER REPORT, COMPENSATORY
MITIGATION PLAN, SCUP CRITERIA OF APPROVAL,
SURVEY, AND SITE PLAN**



PLANNING, COMMUNITY, & ECONOMIC DEVELOPMENT DEPARTMENT

MASTER PERMIT APPLICATION

Mailing Address: P.O. Box 547, Anacortes, WA 98221

Office Location: 904 6th Street, Anacortes WA 98821

Phone: (360) 299-1984

PERMITS REQUESTED FROM THE CITY OF ANACORTES:

☐ Accessory Dwelling Unit (ADU)	☐ Annexation Request	☐ Administrative Interpretation
☐ Administrative Conditional Use Permit	☐ Binding Site Plan (Preliminary)	☐ Binding Site Plan (Final)
☐ Boundary Line Adjustment (BLA)	☐ Clearing Permit	☐ Comprehensive Plan/ Map Amendment Request
☐ Conditional Use Permit (CUP)	☐ Cottage Housing	☐ Essential Public Facility
☐ Extension of Time for Approval	☐ Floodplain Development Permit	☐ Grade and Fill Permit
☐ Home Occupation Permit	☐ Lot Certification	☐ Major Permit Revision
☐ Manufactured Home Subdivision	☐ Minor Permit Revision	☐ Plat (Preliminary)
☐ Plat (Final)	☐ Plat Amendment /Modification	☐ Reasonable Use Exception
☐ SEPA Environmental Review	☐ Shoreline Exemption	☒ Shoreline Substantial Development Permit
☒ Shoreline Conditional Use Permit	☐ Shoreline Variance	☐ Short Plat /Subdivision (Preliminary)
☐ Short Plat /Subdivision (Final)	☐ Stormwater Management Manual Adjustments & Exceptions	☐ Variance (Level 1)
☐ Variance (Level 2)	☐ Wireless Conditional Use Permit (WCUP)	☐ Wireless Service Facility (WSF) Permit
☐ Zoning Code/ Map Amendment Request (Rezone)		

PROJECT & SITE INFORMATION:

SITE ADDRESS: 4905, 4907, 4911 CROATIAN WAY	PROJECT NAME: BULKHEAD REPAIR
PARCEL NUMBER(S): P83311, P83310, P83308	SECTION, TOWNSHIP, & RANGE
LOT SQUARE FOOTAGE & ACREAGE:	PROJECT VALUATION: 8150,110
LEGAL DESCRIPTION:	PRESENT ZONING:
PRESENT USE OF PROPERTY: SINGLE FAMILY RESIDENCES	CUT & FILL (CY) PROPOSED:
PRE-APPLICATION CONFERENCE REQUIRED: ☒ Yes ☐ No	WATER SOURCE: ☒ City of Anacortes ☐ Private Well ☐ Community Well
SEWAGE DISPOSAL: ☐ City of Anacortes ☐ Septic Tank	ROAD ACCESS: ☐ City Road ☐ State Highway ☒ Private Road
CRITICAL AREAS WITHIN 300 FEET: ☒ Yes ☐ No	WATER BODIES WITHIN 200 FEET: ☒ Yes ☐ No
FLOODPLAIN: Flood Zone: AE FIRM Panel # 530317 CITY OF ANACORTES Date of Panel: 9/17/2003	

LOT COVERAGE AREA CALCULATIONS:	
Existing Square Footage:	Proposed Square Footage:
IMPERVIOUS SURFACE AREA CALCULATIONS:	
Existing Impervious Square Footage:	New Impervious Surface:
PROPERTY OWNER INFORMATION: ☒ Multiple owners attached	
NAME: JANICE SCHUTZLER JEROME SCHUTZLER	MAILING ADDRESS: 4905 CROATIAN WAY
CITY, STATE, ZIP: ANACORTES, WA 98221	PHONE #: 360-293-9216
FAX #:	EMAIL ADDRESS: JCS4905@COMCAST.NET
APPLICANT INFORMATION: ☒ Same as property owner	
NAME:	MAILING ADDRESS:
CITY, STATE, ZIP:	PHONE #:
FAX #:	EMAIL ADDRESS:
CONTACT PERSON: ☒ Same as property owner ☐ Same as applicant	
NAME:	MAILING ADDRESS:
CITY, STATE, ZIP:	PHONE #:
FAX #:	EMAIL ADDRESS:
DESCRIPTION OF SUBJECT PROPOSAL: ☐ Additional pages attached	
PROPOSED WORK:	
CONSTRUCTION OF A CONCRETE BULKHEAD PLACED IN THE SAME FOOTPRINT AS THE CONCRETE TOE PROTECTION WHICH BE REMOVED. THE NEW PROTECTION AT THE BASE OF THE EXISTING RIP RAP SEAWALL WILL PREVENT FURTHER DEGRADATION OF THE WALL BY WAVE ACTION	

CHECK ONE:

- ☒ I am the property owner and I grant permission to city staff to enter the project site to verify presence or absence of critical areas and to perform inspections of the work proposed by this application; **or**
- ☐ Attached is a letter of authorization stating that I have the consent of the property owner to submit the subject application on their behalf. Additionally, the property owner has granted permission to city staff to enter the project site in order to verify the presence or absence of critical areas and to perform inspections of work proposed by this application.

SIGNATURE REQUIRED:

I certify that the information, statements, answers above regarding the subject application(s) are true and correct to the best of my knowledge and belief.

Signature: Jerome Schutzler Title: _____
 Print Name: JEROME SCHUTZLER Company: _____
 Date: 07/19/19 JANICE SCHUTZLER

REQUIRED: A notarized affidavit (see below) is required to be completed by all persons having an ownership interest in the subject property and the applicant, if different from the property owner(s). If the signatory is not listed as the owner in the title report, or if the signatory is signing on behalf of an entity, documentation authorizing the signatory to sign the affidavit on behalf of the individual or entity shall provided.

STATE OF WASHINGTON)

) ss

CITY OF ANACORTES

I (we) JANICE SCHUTZLER
JEROME SCHUTZLER, being duly sworn, depose and say that I am (we are) the **OWNER(s)** of the property involved in this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: _____

Owner

Subscribed and sworn to before me this 23 day of JULY, 2019.



Alsyn Yount
Notary Public in and for the State of Washington
residing at Anacortes

STATE OF WASHINGTON)

) ss

CITY OF ANACORTES

I (we) JANICE SCHUTZLER
JEROME SCHUTZLER, being duly sworn, depose and say that I am (we are) the **APPLICANT(s)** for this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: _____

Applicant

Subscribed and sworn to before me this 23 day of JULY, 2019.



Alsyn Yount
Notary Public in and for the State of Washington
residing at Anacortes

LOT COVERAGE AREA CALCULATIONS:	
Existing Square Footage:	Proposed Square Footage:
IMPERVIOUS SURFACE AREA CALCULATIONS:	
Existing Impervious Square Footage:	New Impervious Surface:
PROPERTY OWNER INFORMATION: ☒ Multiple owners attached	
NAME: <u>Thomas N. & Sally A. Foster</u>	MAILING ADDRESS: <u>4911 CROATTIAN WAY</u>
CITY, STATE, ZIP: <u>ANACORTES, WA 98221</u>	PHONE #: <u>360-541-3278</u>
FAX #:	EMAIL ADDRESS: <u>SILVET SALLY@GMAIL.COM</u>
APPLICANT INFORMATION: ☒ Same as property owner	
NAME:	MAILING ADDRESS:
CITY, STATE, ZIP:	PHONE #:
FAX #:	EMAIL ADDRESS:
CONTACT PERSON: ☒ Same as property owner ☐ Same as applicant	
NAME:	MAILING ADDRESS:
CITY, STATE, ZIP:	PHONE #:
FAX #:	EMAIL ADDRESS:
DESCRIPTION OF SUBJECT PROPOSAL: ☐ Additional pages attached	
PROPOSED WORK: <u>SAME AS SCHUTZLER PROPERTY</u>	
<u>- ATTACHED</u>	

CHECK ONE:

- ☒ I am the property owner and I grant permission to city staff to enter the project site to verify presence or absence of critical areas and to perform inspections of the work proposed by this application; **or**
- ☐ Attached is a letter of authorization stating that I have the consent of the property owner to submit the subject application on their behalf. Additionally, the property owner has granted permission to city staff to enter the project site in order to verify the presence or absence of critical areas and to perform inspections of work proposed by this application.

SIGNATURE REQUIRED:

I certify that the information, statements, answers above regarding the subject application(s) are true and correct to the best of my knowledge and belief.

Signature: Sally A. Foster / TN Foster III Title: _____

Print Name: Sally A. Foster / TN Foster III Company: _____

Date: 7/20/2019

STATE OF WASHINGTON

)
) ss

CITY OF ANACORTES

I (we) Thomas N. & Sally A. Foster, being duly sworn, depose and say that I am (we are) the **OWNER(s)** of the property involved in this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed:

Sally A. Foster / T N Foster III
Owner

Subscribed and sworn to before me this 19 day of July, 20 19.

Notary Public
State of Washington
Anissa C Hall
Commission No. 122426
Commission Expires 09-06-2022

Anissa C Hall
Notary Public in and for the State of Washington
residing at Skasit

STATE OF WASHINGTON

)
) ss

CITY OF ANACORTES

I (we) Thomas N. & Sally A. Foster, being duly sworn, depose and say that I am (we are) the **APPLICANT(s)** for this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed:

Sally A. Foster / T N Foster III
Applicant

Subscribed and sworn to before me this 19 day of July, 20 19.

Notary Public
State of Washington
Anissa C Hall
Commission No. 122426
Commission Expires 09-06-2022

Anissa C Hall
Notary Public in and for the State of Washington
residing at Skasit

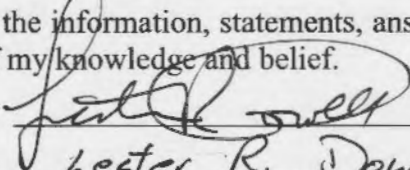
LOT COVERAGE AREA CALCULATIONS:	
Existing Square Footage:	Proposed Square Footage:
IMPERVIOUS SURFACE AREA CALCULATIONS:	
Existing Impervious Square Footage:	New Impervious Surface:
PROPERTY OWNER INFORMATION: ☐ Multiple owners attached	
NAME: <u>Lester & Elaine Dowell</u>	MAILING ADDRESS: <u>4907 Crookston Way</u>
CITY, STATE, ZIP: <u>Anacortes</u>	PHONE #: <u>360-333-8044</u>
FAX #:	EMAIL ADDRESS: <u>TheDowells@hotmail.com</u>
APPLICANT INFORMATION: ☒ Same as property owner	
NAME: <u>Same</u>	MAILING ADDRESS:
CITY, STATE, ZIP:	PHONE #:
FAX #:	EMAIL ADDRESS:
CONTACT PERSON: ☒ Same as property owner ☐ Same as applicant	
NAME:	MAILING ADDRESS:
CITY, STATE, ZIP:	PHONE #:
FAX #:	EMAIL ADDRESS:
DESCRIPTION OF SUBJECT PROPOSAL: ☐ Additional pages attached	
PROPOSED WORK: <u>Same as shotzlers as attached</u>	

CHECK ONE:

- ☒ I am the property owner and I grant permission to city staff to enter the project site to verify presence or absence of critical areas and to perform inspections of the work proposed by this application; **or**
- ☐ Attached is a letter of authorization stating that I have the consent of the property owner to submit the subject application on their behalf. Additionally, the property owner has granted permission to city staff to enter the project site in order to verify the presence or absence of critical areas and to perform inspections of work proposed by this application.

SIGNATURE REQUIRED:

I certify that the information, statements, answers above regarding the subject application(s) are true and correct to the best of my knowledge and belief.

Signature: 
 Print Name: Lester R. Dowell
 Date: 19 Jul 2019

Title: Owner
 Company: _____

REQUIRED: A notarized affidavit (see below) is required to be completed by all persons having an ownership interest in the subject property and the applicant, if different from the property owner(s). If the signatory is not listed as the owner in the title report, or if the signatory is signing on behalf of an entity, documentation authorizing the signatory to sign the affidavit on behalf of the individual or entity shall provided.

STATE OF WASHINGTON)

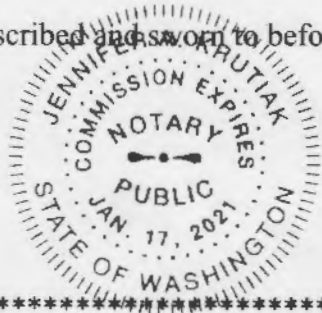
) ss

CITY OF ANACORTES

I (we) Elaine M Dowell, being duly sworn, depose and say that I am (we are) the **OWNER(s)** of the property involved in this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: Elaine M Dowell
Owner

Subscribed and sworn to before me this 27 day of July, 20 19.



[Signature]
Notary Public in and for the State of Washington
residing at 910 D Ave, Anacortes, WA 98221

STATE OF WASHINGTON)

) ss

CITY OF ANACORTES

I (we) Elaine M Dowell, being duly sworn, depose and say that I am (we are) the **APPLICANT(s)** for this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: Elaine M Dowell
Applicant

Subscribed and sworn to before me this 27 day of July, 20 19.



[Signature]
Notary Public in and for the State of Washington
residing at 910 D Ave, Anacortes, WA 98221

REQUIRED: A notarized affidavit (see below) is required to be completed by all persons having an ownership interest in the subject property and the applicant, if different from the property owner(s). If the signatory is not listed as the owner in the title report, or if the signatory is signing on behalf of an entity, documentation authorizing the signatory to sign the affidavit on behalf of the individual or entity shall provided.

STATE OF WASHINGTON)

) ss

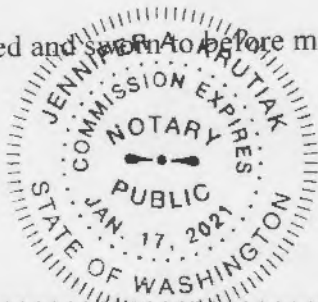
CITY OF ANACORTES

I (we) Lester Dowell, being duly sworn, depose and say that I am (we are) the **OWNER(s)** of the property involved in this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: [Signature]

Owner

Subscribed and sworn to before me this 27 day of Jul, 2019.



[Signature]
Notary Public in and for the State of Washington

residing at 910 D Ave, Anacortes, WA 98221

STATE OF WASHINGTON)

) ss

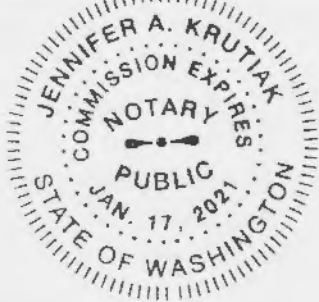
CITY OF ANACORTES

I (we) Lester Dowell, being duly sworn, depose and say that I am (we are) the **APPLICANT(s)** for this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: [Signature]

Applicant

Subscribed and sworn to before me this 27 day of Jul, 2019.



[Signature]
Notary Public in and for the State of Washington

residing at 910 D Ave, Anacortes, WA 98221



WASHINGTON STATE

Joint Aquatic Resources Permit Application (JARPA) Form^{1,2} [\[help\]](#)

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.



US Army Corps
of Engineers®
Seattle District

AGENCY USE ONLY

Date received: _____

Agency reference #: _____

Tax Parcel #(s): _____

Part 1—Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [\[help\]](#)

Schutzler, Dowell & Foster Bulkhead Repair

Part 2—Applicant

The person and/or organization responsible for the project. [\[help\]](#)

2a. Name (Last, First, Middle)

Schutzler, Jerome & Janice

2b. Organization (If applicable)

2c. Mailing Address (Street or PO Box)

4905 Croatian Way

2d. City, State, Zip

Anacortes, WA 98221

2e. Phone (1)

2f. Phone (2)

2g. Fax

2h. E-mail

360.293.9216

jcs4905@comcast.net

¹ Additional projects may be required for Department of Ecology authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.

• Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

² To access an online JARPA form with [\[help\]](#) screens, go to
http://www.epermitting.wa.gov/site/alias_resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

Part 3—Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [\[help\]](#)

3a. Name (Last, First, Middle)			
Amos, Meg			
3b. Organization (If applicable)			
Marine Surveys & Assessments			
3c. Mailing Address (Street or PO Box)			
380 Jefferson Street			
3d. City, State, Zip			
Port Townsend, WA 98368			
3e. Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail
360.385.4073			meg@marinesurveysandassessments.com

Part 4—Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [\[help\]](#)

- ☐ Same as applicant. (Skip to Part 5.)
- ☐ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)
- ☒ There are multiple upland property owners. Complete the section below and fill out [JARPA Attachment A](#) for each additional property owner.
- ☐ Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete [JARPA Attachment E](#) to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
Dowell, Bob and Elaine			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
4907 Croatian Way			
4d. City, State, Zip			
Anacortes, WA 98221			
4e. Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail
360.333.8044	360.708.2137		Bobdowell@hotmail.com

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [\[help\]](#)

- ☐ There are multiple project locations (e.g. linear projects). Complete the section below and use [JARPA Attachment B](#) for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [\[help\]](#)

- ☒ Private
☐ Federal
☐ Publicly owned (state, county, city, special districts like schools, ports, etc.)
☐ Tribal
☐ Department of Natural Resources (DNR) – managed aquatic lands (Complete [JARPA Attachment E](#))

5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [\[help\]](#)

4905, 4907 and 4911 Croatian Way

5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [\[help\]](#)

Anacortes, WA 98221

5d. County [\[help\]](#)

Skagit County

5e. Provide the section, township, and range for the project location. [\[help\]](#)

¼ Section	Section	Township	Range
SW	27	35N	01

5f. Provide the latitude and longitude of the project location. [\[help\]](#)

- Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)

4905 – 48.48833333/-122.67166667; 4907 – 48.48833333/-122.67222222; 4911 – 48.48861111/-122.67277778

5g. List the tax parcel number(s) for the project location. [\[help\]](#)

- The local county assessor's office can provide this information.

P83311, P83310 and P83308

5h. Contact information for all adjoining property owners. (If you need more space, use [JARPA Attachment C.](#)) [\[help\]](#)

Name	Mailing Address	Tax Parcel # (if known)
Denise Root & Wendy Barto	4900 Croatian Way Anacortes, WA 98221	P83312
McIntyre Revocable Living Trust John & Colleen McIntyre	5003 Croatian Way Anacortes, WA 98221	P83307

5i. List all wetlands on or adjacent to the project location. [help]
The US Fish & Wildlife National Wetlands Inventory shows estuarine and marine wetlands.
5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]
Burrows Bay
5k. Is any part of the project area within a 100-year floodplain? [help] .
☒ Yes ☐ No ☐ Don't know
5l. Briefly describe the vegetation and habitat conditions on the property. [help]
The property above the OHWM consists of single-family residences with a concrete capped riprap wall, which sits on the beach. The beach immediately adjacent to the bulkhead (below the OHWM) consists of sand, cobble and larger rock. No wetland plants were observed.
5m. Describe how the property is currently used. [help]
Single-family residences with tideland ownership.
5n. Describe how the adjacent properties are currently used. [help]
Single-family residences with tideland ownership.
5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help]
4905 – 2,289 square foot single-family residence built in 2001 – very good condition; 4907 – 2,630 square foot single-family residence built in 1991 – good condition and 4911 – 1,783 square foot single-family residence built in 1988 – good condition. All homes are protected by a rock sea wall that was built around 1988.
5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]
Follow WA-20 west to Campbell Lake Road (1.8 miles); follow Campbell lake road and Rosario Road to Marine Drive (2.4 miles); Slight right onto Marine Drive (1.1 miles); Continue on Marine Drive to Croatian Way (2.4 miles).

Part 6—Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [\[help\]](#)

The proposed work is the construction of a concrete bulkhead placed in the same footprint as the concrete toe protection, which will be removed. The new protection at the base of the existing riprap sea wall will prevent further degradation of the wall by wave action.

6b. Describe the purpose of the project and why you want or need to perform it. [\[help\]](#)

The purpose of this work is to prevent the homes located shoreward of the existing bulkhead from collapsing into the sea. The existing bulkhead (built in the 1980's) has suffered considerable damage from wave action during winter high tide storms. The existing wall is severely undercut and cracked in places.

6c. Indicate the project category. (Check all that apply) [\[help\]](#)

- ☐ Commercial
 ☒ Residential
 ☐ Institutional
 ☐ Transportation
 ☐ Recreational
☒ Maintenance
 ☐ Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [\[help\]](#)

- | | | | |
|--|--|--|---|
| ☐ Aquaculture
☒ Bank Stabilization
☐ Boat House
☐ Boat Launch
☐ Boat Lift
☐ Bridge
☒ Bulkhead
☐ Buoy
☐ Channel Modification | ☐ Culvert
☐ Dam / Weir
☐ Dike / Levee / Jetty
☐ Ditch
☐ Dock / Pier
☐ Dredging
☐ Fence
☐ Ferry Terminal
☐ Fishway | ☐ Float
☐ Floating Home
☐ Geotechnical Survey
☐ Land Clearing
☐ Marina / Moorage
☐ Mining
☐ Outfall Structure
☐ Piling/Dolphin
☐ Raft | ☐ Retaining Wall (upland)
☐ Road
☐ Scientific Measurement Device
☐ Stairs
☐ Stormwater facility
☐ Swimming Pool
☐ Utility Line |
|--|--|--|---|

☐ Other:

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [\[help\]](#)

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

The current proposed project will include:

1. Remove the existing concrete toe
2. Form a stable concrete bulkhead adjoining to the face of the existing bulkhead
3. Backfill all spaces between the face and interior of the existing bulkhead with $\frac{3}{4}$ inch river pebble
4. Stabilize any areas under the sidewalks with reinforced concrete and fill, as necessary.

The construction crew and a small excavator will access the project site using a neighbor's boat ramp 0.19 miles southeast of the project site. Equipment will be staged within the cul-de-sac at the end of Croatian Way, northeast of parcel P83311. Work will be restricted to the area immediately seaward of the existing bulkhead. The proposed bulkhead replacement will stabilize the toe of the slope and protect uplands from further erosion. The approximate 18-inch wide concrete toe and broken concrete debris will be removed and disposed of to an upland site. Construction will include digging two to three feet into beach substrate adjacent, to the existing bulkhead, and creating a footing with 12 inches rebar centers to support a four foot concrete wall. Additional four foot wall sections, with 12 inches rebar centers, will be poured with concrete on top of the initial wall, until the wall is 12 feet in height (2 feet below ground and 10 feet above re-graded marine shore). The vertical wall, above ground, will be 8 inches thick and 8 feet tall with a two foot extended ledge. Drainage holes will be drilled to allow storm water to drain seaward. The proposed project will be located approximately 10 inches landward of the outer edge of the existing toe. Excavation of the existing base, forming of the bulkhead, and pouring concrete will be done in 40-foot sections. Work will be conducted out of water during lower tides. See Biological Evaluation (BE) for further detail.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [\[help\]](#)

- If the project will be constructed in phases or stages, use [JARPA Attachment D](#) to list the start and end dates of each phase or stage.

Start Date: September 2019

End Date: November 2019

☐ See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [\[help\]](#)

\$50,000.00/property (\$150,000.00 total)

6h. Will any portion of the project receive federal funding? [\[help\]](#)

- If **yes**, list each agency providing funds.

☐ Yes ☒ No ☐ Don't know

Part 7–Wetlands: Impacts and Mitigation

☐ Check here if there are wetlands or wetland buffers on or adjacent to the project area.

(If there are none, skip to Part 8.) [\[help\]](#)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [\[help\]](#)

- ☒ Not applicable Note: The US Fish & Wildlife National Wetlands Inventory shows estuarine and marine wetlands. However, no wetland vegetation was observed at the site.

7b. Will the project impact wetlands? [help]
☐ Yes ☐ No ☐ Don't know
7c. Will the project impact wetland buffers? [help]
☐ Yes ☐ No ☐ Don't know
7d. Has a wetland delineation report been prepared? [help]
If Yes, submit the report, including data sheets, with the JARPA package.
☐ Yes ☐ No
7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]
If Yes, submit the wetland rating forms and figures with the JARPA package.
☐ Yes ☐ No ☐ Don't know
7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]
If Yes, submit the plan with the JARPA package and answer 7g. If No, or Not applicable, explain below why a mitigation plan should not be required.
☐ Yes ☐ No ☐ Don't know
7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]
7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]

Activity (fill, drain, excavate, flood, etc.)	Wetland Name ¹	Wetland type and rating category ²	Impact area (sq. ft. or Acres)	Duration of impact ³	Proposed mitigation type ⁴	Wetland mitigation area (sq. ft. or acres)

¹ If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.

² Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

³ Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

⁴ Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [\[help\]](#)

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [\[help\]](#)

Part 8—Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [\[help\]](#)

☒ Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [\[help\]](#)

☐ Not applicable

Above ground repair and replacement of the bulkhead will be within the same footprint as the existing structure. Beach nourishment will include the addition of ¾ inch beach pebble, which will be placed on the seaward face of the proposed project and taper 8 feet to the marine shoreline.

A combined work window is proposed between July 16th to February 15th for the protection of salmon and forage fish.

Backfill behind the rebuilt bulkhead will only use new, clean ¾ inch pebbles that are free from contaminants and fine dirt.

To further minimize effects of the demolition or other earthwork on the adjacent water, all construction activities prior to the creation of the new bulkhead wall, will be performed during low tide.

Utilization of silt curtains and best management practices to minimize potential turbidity caused from sediment disturbed by the proposed project.

8b. Will your project impact a waterbody or the area around a waterbody? [\[help\]](#)

☒ Yes ☐ No

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [\[help\]](#)

- **If Yes**, submit the plan with the JARPA package and answer 8d.
- **If No, or Not applicable**, explain below why a mitigation plan should not be required.

☒ Yes ☐ No ☐ Don't know

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [\[help\]](#)

The proposed mitigation is the removal of concrete from the beach and beach nourishment immediately adjacent to the bulkhead (See BE and mitigation plan).

8e. Summarize impact(s) to each waterbody in the table below. [\[help\]](#)

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name ¹	Impact location ²	Duration of impact ³	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Bulkhead construction and beach nourishment.	Burrows Bay	Bulkhead at and behind OHWM. Beach nourishment below.	2 months	177 cu yards of concrete poured into forms (8" by 10' above grade) for wall and ~200 cu yards of gravel will be placed for beach nourishment.	360 linear feet

¹ If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.

² Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

³ Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [\[help\]](#)

59 cubic yards of concrete per property (177 cy). A trench, 2-3 feet deep will be dug at the base of the existing wall to construct a footing with rebar 12 inches on center. The footing will be below beach grade. A wall will be built on top of the footing, above grade using a form with rebar at 12" on center. Sections will be added four feet at a time to reach the height of the existing wall (12 feet total, including below grade portion).

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [\[help\]](#)

The construction crew and a small excavator will access the project site using a neighbor's boat ramp 0.19 miles southeast of the project site. Equipment will be staged within the cul-de-sac at the end of Croatian Way, northeast of parcel P83311. Concrete debris will be removed from the beach using a boom truck, which will be parked in the cul-de-sac and hauled to an approved dump site.

Part 9—Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [\[help\]](#)

Agency Name	Contact Name	Phone	Most Recent Date of Contact
City of Anacortes	Kevin Cricchio	360.293.1937	7/16/2019
Department of Ecology	David Pater	360.255.4375	7/16/2019
Corps of Engineers	Ron Wilcox	206.764.6602	7/16/2019
9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [help] - If Yes, list the parameter(s) below. - If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d.			
☐ Yes ☒ No			
9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help] Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC.			
171100092			
9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help] Go to https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Watershed-look-up to find the WRIA #.			
WRIA #3			
9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help] Go to https://ecology.wa.gov/Water-Shorelines/Water-quality/Freshwater/Surface-water-quality-standards/Criteria for the standards.			
☐ Yes ☐ No ☒ Not applicable			
9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help] - If you don't know, contact the local planning department. - For more information, go to: https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases.			
☐ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☒ Other: <u>Shoreline Residential</u>			
9g. What is the Washington Department of Natural Resources Water Type? [help] Go to http://www.dnr.wa.gov/forest-practices-water-typing for the Forest Practices Water Typing System.			
☒ Shoreline ☐ Fish ☐ Non-Fish Perennial ☐ Non-Fish Seasonal			
9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help] If No, provide the name of the manual your project is designed to meet.			
☒ Yes ☐ No			

Name of manual: 2012 Stormwater Management Manual for Western Washington, as Amended in December 2014 (The 2014 SWMMWW).

9i. Does the project site have known contaminated sediment? [\[help\]](#)

- If **Yes**, please describe below.

☐ Yes ☒ No

9j. If you know what the property was used for in the past, describe below. [\[help\]](#)

Residential properties.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [\[help\]](#)

- If **Yes**, attach it to your JARPA package.

☐ Yes ☒ No

9l. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [\[help\]](#)

Bull Trout critical habitat, Chum Salmon, Final Deep-water Rockfish critical habitat, Green Sturgeon critical habitat, Leatherback Sea Turtle critical habitat, Marbled Murrelet, marine critical habitat for Puget Sound Chinook Salmon, marine critical habitat for Hood Canal summer-run Chum Salmon, Puget Sound Steelhead critical habitat, Sockeye Salmon critical habitat, Southern Eulachon and Southern Killer Whale critical habitat. See BE (pages 3-7 for detailed information per species).

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [\[help\]](#)

Bull Trout final critical habitat, Chum Salmon, final deep-water Rockfish critical habitat, final near shore Rockfish critical habitat, Green Sturgeon critical habitat, Leatherback Sea Turtle critical habitat, Marbled Murrelet and marine critical habitat for Puget Sound Chinook Salmon. (See BE – page 3)

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <http://apps.oria.wa.gov/opas/>.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.
- For a list of addresses to send your JARPA to, click on [agency addresses for completed JARPA](#).

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [\[help\]](#)

- For more information about SEPA, go to <https://ecology.wa.gov/regulations-permits/SEPA-environmental-review>.

☐ A copy of the SEPA determination or letter of exemption is included with this application.

☒ A SEPA determination is pending with City of Anacortes (lead agency). The expected decision date is September 2019.

☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [\[help\]](#)

☐ This project is exempt (choose type of exemption below).

☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?

☐ Other: _____

☐ SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [\[help\]](#)

LOCAL GOVERNMENT

Local Government Shoreline permits:

- ☒ Substantial Development ☒ Conditional Use ☐ Variance
☐ Shoreline Exemption Type (explain): _____

Other City/County permits:

- ☐ Floodplain Development Permit ☐ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

- ☒ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption – [Attach Exemption Form](#)

Washington Department of Natural Resources:

- ☐ Aquatic Use Authorization
Complete [JARPA Attachment E](#) and submit a check for \$25 payable to the Washington Department of Natural Resources.
Do not send cash.

Washington Department of Ecology:

- ☒ Section 401 Water Quality Certification

FEDERAL AND TRIBAL GOVERNMENT

United States Department of the Army (U.S. Army Corps of Engineers):

- ☒ Section 404 (discharges into waters of the U.S.) ☒ Section 10 (work in navigable waters)

United States Coast Guard:

- ☐ General Bridge Act Permit ☐ Private Aids to Navigation (for non-bridge projects)

United States Environmental Protection Agency:

- ☐ Section 401 Water Quality Certification (discharges into waters of the U.S.) on tribal lands where tribes do not have treatment as a state (TAS)

Tribal Permits: (Check with the tribe to see if there are other tribal permits, e.g., Tribal Environmental Protection Act, Shoreline Permits, Hydraulic Project Permits, or other in addition to CWA Section 401 WQC)

- ☐ Section 401 Water Quality Certification (discharges into waters of the U.S.) where the tribe has treatment as a state (TAS).

Part 11—Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [\[help\]](#)

11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. _____ (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. _____ (initial)

Jerry Schutzler

Applicant Printed Name

Applicant Signature

Date

Bob Dowell

Applicant Printed Name

Applicant Signature

Date

11b. Authorized Agent Signature [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Marine Surveys & Assessments -Meg Amos

Authorized Agent Printed Name

Authorized Agent Signature

Date

11c. Property Owner Signature (if not applicant) [\[help\]](#)

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Property Owner Printed Name

Property Owner Signature

Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-011 rev. 09/2018

Part 11—Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [\[help\]](#)

11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. *JS* (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. _____ (initial)

Jerry Schutzler

Applicant Printed Name

Applicant Signature

Date

Bob Dowell

Applicant Printed Name

Applicant Signature

Date

11b. Authorized Agent Signature [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Marine Surveys & Assessments -Meg Amos

Authorized Agent Printed Name

Authorized Agent Signature

Date

11c. Property Owner Signature (if not applicant) [\[help\]](#)

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Dowell Family Trust
Lester R. Dowell
Property Owner Printed Name

Property Owner Signature

Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

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Part 11—Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [\[help\]](#)

11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. JS (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. JS (initial)

Jerry Schutzler

Applicant Printed Name

Jerry Schutzler

Applicant Signature

07/19/19

Date

Bob Dowell

Applicant Printed Name

Applicant Signature

Date

11b. Authorized Agent Signature [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Marine Surveys & Assessments -Meg Amos

Authorized Agent Printed Name

Meg Amos

Authorized Agent Signature

29 July 2019

Date

11c. Property Owner Signature (if not applicant) [\[help\]](#)

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Property Owner Printed Name

Property Owner Signature

Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

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WASHINGTON STATE
Joint Aquatic Resources Permit
Application (JARPA) [\[help\]](#)



US Army Corps
of Engineers
Seattle District

Attachment A:
For additional property owner(s) [\[help\]](#)

Use this attachment only if you have more than one property owner.
Complete one attachment for each additional property owner
impacted by the project.

Signatures of property owners are not needed for repair or maintenance activities on existing rights-of-way or easements.

AGENCY USE ONLY	
Date received:	_____
Agency reference #:	_____
Tax Parcel #(s):	_____ _____ _____
=====	
TO BE COMPLETED BY APPLICANT [help]	
Project Name:	_____
Location Name (if applicable):	_____ _____

Use black or blue ink to enter answers in white spaces below.

1. Name (Last, First, Middle) and Organization (if applicable)			
Foster, Tom and Sally			
2. Mailing Address (Street or PO Box)			
4911 Croatian Way			
3. City, State, Zip			
Anacortes, WA 98221			
4. Phone (1)	5. Phone (2)	6. Fax	7. E-mail
360-293-6494	541-390-3278		silversally@gmail.com
Address or tax parcel number of property you own:			
P83308			
Signature of Property Owner			
I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.			
Sally Foster Printed Name Thomas N. Foster III Signature Sally Foster Signature			

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-012 rev. 10/2016

Schutzler, Dowell, and Foster Bulkhead Alternatives Analysis

July 23th, 2019

Corps Reference:

Project Location:

4905, 4907 and 4911 Croatian Way
Anacortes, WA 98221

Prepared for:

Jerome & Janice Schutzler,
Lester & Elaine Dowell
and Thomas & Sally Foster



MARINE SURVEYS & ASSESSMENTS

380 Jefferson Street

Port Townsend WA 98368

360-385-4073

msa@marinesurveysandassessments.com

Location and Site Description

The proposed project is located at 4905, 4907, and 4911 Croatian Way Anacortes, Washington 98221 (Skagit County). The site topography consists of vegetated upland and concrete (including a road), extending to residences; followed by a narrow concrete walkway, protected by an existing bulkhead along the shoreline. The failing rock/concrete bulkhead is approximately 21'- 61' varying height, 1' wide, and 214' long with approximately 3' of visible gravel backfill. The creosote timber bulkhead extends into another existing bulkhead. The existing bulkhead is approximately 12 feet above the marine substrate. The bulkhead includes a concrete toe along the base which measures approximately 18" x 18" in cross-section. The lateral length of the existing bulkhead extends approximately 110 feet at parcel P83308, 110 feet at parcel P83310, and 145 feet at parcel P83311.

As observed during the Marine Surveys & Assessments (MSA) Habitat Survey, at the 4905 and 4907 Croatian Way addresses, substrate is mostly sand and large rock, with pea gravel and sand along the upper-intertidal zone along the bulkhead. Areas of macroalgae cover included *Ulva* 2-90%, *Fucus* 2-40%, *Mastocarpus* 2-10%, and foliose reds 2-50%. A *Z. marina* eelgrass bed was observed at the site approximately 50-100 feet offshore. At the 4911 Croatian Way address, Substrate at the site is mostly sand and cobble or large rock. Areas of macroalgae cover included *Ulva* 2-90%, *Fucus* 2-40%, *Mastocarpus* 2-10%, and foliose reds 2-60%. A *Z. marina* eelgrass bed was observed along three of the transects at the site approximately 50-80 feet offshore, with a few small patches elsewhere.

Purpose and Need

The basic purpose of this project is to address a failing bulkhead. The overall purpose of the proposed project is to address that rock/concrete bulkhead while protecting landward structures including the 3 houses and garages from erosion. Because the project will need to address the existing structures located behind the existing bulkhead; all proposed alternatives are located at or near the site of the existing shoreline armoring and are marine dependent.

Project Alternatives

Alternative 1. Partially replace the bulkhead

Alternative 2. Replace the bulkhead

Alternative 3. Remove the existing bulkhead and do not replace

Alternative 4. Remove the existing bulkhead and replace with soft armoring

Alternative 5: Take no action; leave the existing structure in place

Evaluating Project Alternatives

Alternative 1 – Partially Replace Bulkhead

The partial bulkhead replacement would replace or repair and stabilize sections of the existing bulkhead and protect uplands from further erosion. The existing 18-inch wide concrete toe and broken concrete debris would be removed and disposed to an upland site. Construction would include digging two to three feet into beach substrate adjacent, to the existing bulkhead, and creating a footing with 12 inch rebar centers to support a 4-foot concrete wall. Additional 4-foot wall sections, with 12 inch rebar centers, would be poured with concrete on top of the initial wall, until the wall is 12 feet in height (2 feet below ground and 10 feet above existing beach grade). The vertical wall would be 8 inches thick and 10 feet tall with a 16 in wide lip at the top, which would allow water to drain. The proposed project would be located 12 inches landward of the outer edge of the existing toe. Excavation of the existing base, forming of the bulkhead, and pouring concrete would be done in 40-foot sections. Beach nourishment would include $\frac{3}{4}$ -inch river pebbles along a 10-foot wide swath adjacent to the new bulkhead face.

Alternative 2 – Fully Replace Bulkhead

Replacing the whole bulkhead with sheet pile or other new and improved materials would be ideal in such a high wave energy situation. Nevertheless, the concern with the 3-parcel bulkhead work is that the foundations of the houses are adjacent to the bulkhead. The proximity of the bulkhead to the foundation would create challenges for whole replacement due to the potential damage incurred to the foundation during the demolition of the bulkhead. The risk of foundation damage makes this alternative challenging and a risky choice for the home owners.

Alternative 3 - Remove the existing bulkhead and do not replace

Removing the existing bulkhead without replacing it would benefit the marine environment by providing more usable shoreline for species. It would also remove the dangers to tidelands and marine waters associated with the failing concrete/rock structure and backfill but would not meet the basic or overall purposes of the project. Without the bulkhead, the existing structures (family homes) would be subject to wave damage and erosion. Furthermore, due to the positioning of the parcels, with bulkheads on the adjacent parcels, the removal of the existing bulkhead without replacement would create erosion impacts to the adjacent parcels. While this alternative would not result in construction-related short-term impacts, demolition-related short-term impacts would still occur, as outlined in the BE for this project.

Alternative 4 - Remove the existing bulkhead and replace with soft armoring

Whenever possible, removing the existing hard armoring and replacing it with soft armoring would be desirable, and most in line with Skagit County SMP guidelines. However, in this instance, the proximity of the existing structures immediately landward of the bulkhead make this alternative impossible to solely implement. The project site is inundated up to the MHHW line approximately 12 times a week, with more frequent inundation occurring during the winter. While soft armoring is desirable under other circumstances, at this site, the location and low elevation of the existing structures is not well-suited because they are not located landward enough, or high enough, for soft

armoring to fully protect them from wave action. Within a few hundred feet to the northwest, an accretion shoreform (due to the marina armoring) would be ideal for softshore armoring. Furthermore, less than 1 mile northwest of the project location (Washington Park – no appreciable drift), there is graduated beach which would be suitable for soft armoring strategies, but the project location is not suitable for soft-shore strategies as the Department of Ecology Coastal Atlas “Drift Cell” layer shows a long right-to-left drift cell.

Furthermore, with the modified shoreline (bulkhead), WDFW (Marnie Shoreline Design Guidelines) MSDG Risk Calculator shows the project site as “moderate risk” which would include soft armoring as an option. However, if the existing bulkhead was removed, the shoretype reclassification would change the risk to “high risk”. The appropriate technique for “high risk” areas based on the MSDG “Appropriate Technique” is hard armoring.

Alternative 5 - No Action

Alternative 4 would perpetuate the same permanent effects as Alternative 1, without addressing the safety concerns associated with the failing original bulkhead. At best, Alternative 4 would be a stop-gap solution; the worsening condition of the original bulkhead would warrant action at some point. Currently, with the modified shoreline (bulkhead), WDFW MSDG Risk Calculator shows the project site as “moderate risk”. Additionally, the damaged structure will likely partially or fully fail in the future leading to increased erosion and the introduction of debris from the collapsed structure into marine waters. Concrete/rock structures show signs of advanced erosion and disintegration (large cracks), with Prime Flex 920 polyurethane grout and concrete grout addition being necessary to stabilize the bulkhead. When the bulkhead fails, due to no action, the shoretype reclassification would change the risk to “high risk”. The appropriate technique for “high risk” areas based on the MSDG “Appropriate Technique” is hard armoring, since damage would be incurred to structures on the parcels by taking no action. The partial bulkhead replacement would address this current condition by stabilizing the homes on site.

Site Selection

Because this project addresses a privately-owned failing bulkhead, alternate site locations were not feasible. All proposed alternatives are located at 4905, 4907, and 4911 Croatian Way Anacortes, Washington 98221 (Skagit County), the site of the bulkhead currently proposed for replacement.

Preferred Project Alternative

The site topography creates challenges to shoreline stabilization. The shoreline offers little to no zone for logs or other material to be placed as soft armoring to buffer the property structures for wave energy. The permanent private structures on the properties lie less than 5 ft backshore from the existing MHHW line. There are graduated beaches to the northwest of the project location where soft armoring would potentially be feasible, but the unique constraints of this site require other solutions. The proximity of the existing structures to the current bulkhead limits the proponent’s ability to re-site a future bulkhead landward of the existing structure.

The preferred alternative is Alternative 1, partial replacement of the bulkhead. Alternative 1 was selected because it best addresses the project need while minimizing and compensating for

ecological impacts. Although Island County SMP guidance requires that replacement bank activities should consist of the softest structure that will maintain current shoreline functions, soft armoring is not feasible at this site. As discussed in the Location and Site Description, topography is a key consideration for this location: the proximity of existing structures to the MHHW line offers no zone for location of logs or other materials to buffer the properties from wave energy. At high-high tides with exposure to significant storm waves during winter, all logs or other materials are swept away. The bulkhead is the only buffer between the shoreline structures and the water at high-high tides, so any alternative to a similar replacement bulkhead would result in potentially significant erosion to the coastline, which will only be exacerbated by rising sea levels.

Soft shoreline armoring or a sloped rockery would not adequately protect the structures from wave action due to the strong wave action at the site. Furthermore, Because the upland structures are extensive, and because removing or relocating the structures would result in substantial additional costs and short-term impacts related to demolition and construction, MSA considers the Least Environmentally Damaging Practicable Alternative (LEDPA) to be the alternative that also best protects the existing structures in their current locations. Because the project is a replacement for a similar bulkhead in the similar footprint, and because the proposed project includes mitigation by creosote pile removal and conservation measures including a liner to prevent backfill from behind the bulkhead from seeping through it, implementing Alternative 1 (the current proposal) does not result in any additional net loss of shoreline function. No other alternative sufficiently protects the tidelands and the upland structures located behind the existing bulkhead.

Implementing the proposed project would not result in a long-term loss of shoreline ecological function beyond current baseline conditions. The full description of the proposal, evaluation of impacts, and the determination of effects is included in the Biological Evaluation for this project. Implementing the currently proposed project would result in short-term demolition and construction-related effects. The Biological Evaluation includes a detailed analysis of these effects, which are minimized through avoidance measures described in the BE and offset by mitigation measures. Although the proposed project would not result in any new net loss of shoreline ecological function, it would perpetuate a permanent loss of intertidal habitat.

References

Coyle, J.M. and Dethier, M.N. 2010. Appendix C. Review of shoreline armoring literature.

MacDonald, K, D Simpson, B Paulsen, J Cox, J Gendron. 1994. Shoreline armoring effects on physical coastal processes in Puget Sound, Washington. Coastal Erosion Management Studies, Vol. 5. Washington Department of Ecology, Olympia WA.

Rodil, D.L. Revell, and Schroeter, S. 2008. Ecological effects of coastal armoring on sandy beaches. *Marine Ecology* 29:160-170.

City of Anacortes. Shoreline Master Program. 2010. The Watershed Company.

Table 1. Alternative Comparison Matrix

Category	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Environmental impact	Alternative one would perpetuate habitat loss but would not result in new long-term environmental impacts. Short-term, construction-related impacts would be avoided and minimized as outlined in the project BE.	A full replacement would perpetuate habitat loss but would not result in new long-term environmental impacts. Short-term, construction-related impacts would be avoided and minimized as outlined in the project BE. Impact could be lessened by using new improved materials such as corrugated sheet pile which would diminish some wave refraction impacts.	Removing the existing bulkhead without replacing it would result in short-term impacts due to demolition. As a private residence with existing structures are remaining, the topography of the site would result in minimal habitat increase if the bulkhead were removed.	Removing the existing bulkhead and replacing it with soft armoring would be the desired alternative for many extant bulkheads, including nearby locations. However, the nearshore topography of this site is not suitable for soft armoring. The demolition of the existing bulkhead would result in the same short-term impacts noted for Alternatives One and Two.	Taking no action would continue to perpetuate habitat loss due to the existing bulkhead. While this alternative would delay short-term demolition and construction-related impacts, the current bulkhead is failing and will require repair or replacement at some point. Deferring this work will not remove the eventual need for it and does not prevent the movement of fill through the bulkhead into the marine environment.
Feasibility	Alternative one is topographically and financially feasible.	Alternative two is not feasible due to the location of the structures on the property. The foundation is extremely close to the bulkhead, removal could potentially damage the foundation.	Alternative three is not feasible because removing the existing bulkhead without replacing it could result in catastrophic shoreline erosion and property loss.	Alternative four is not feasible because the topography of this site is not suitable for soft-armoring because of the narrow backshore and high wave action. Soft-armoring is not appropriate. It would not be durable would expose the shoreline to the risk of catastrophic erosion.	Alternative five may be temporarily feasible. However, it does not address cumulative and ongoing damage to the extant structures.
Summary	Alternative one addresses the existing failing bulkhead without introducing <u>new</u> long-term habitat loss.	Alternative two is partially feasible, however the risk to the foundation is extremely high.	Alternative three would yield only minimal habitat benefits while dramatically increasing the risk of catastrophic erosion.	Alternative four is not suitable because, like Alternative Two, it would yield only minimal habitat benefits while dramatically increasing the risk of catastrophic erosion.	Taking no action is a short-term solution to a long-term problem. Risks that could result from catastrophic failure of the unrepaired structure would not be resolved.
Recommended	Yes	No	No	No	No

Figure 1. Alternatives Analysis Aerial Photo (Ecology Coastal Atlas)

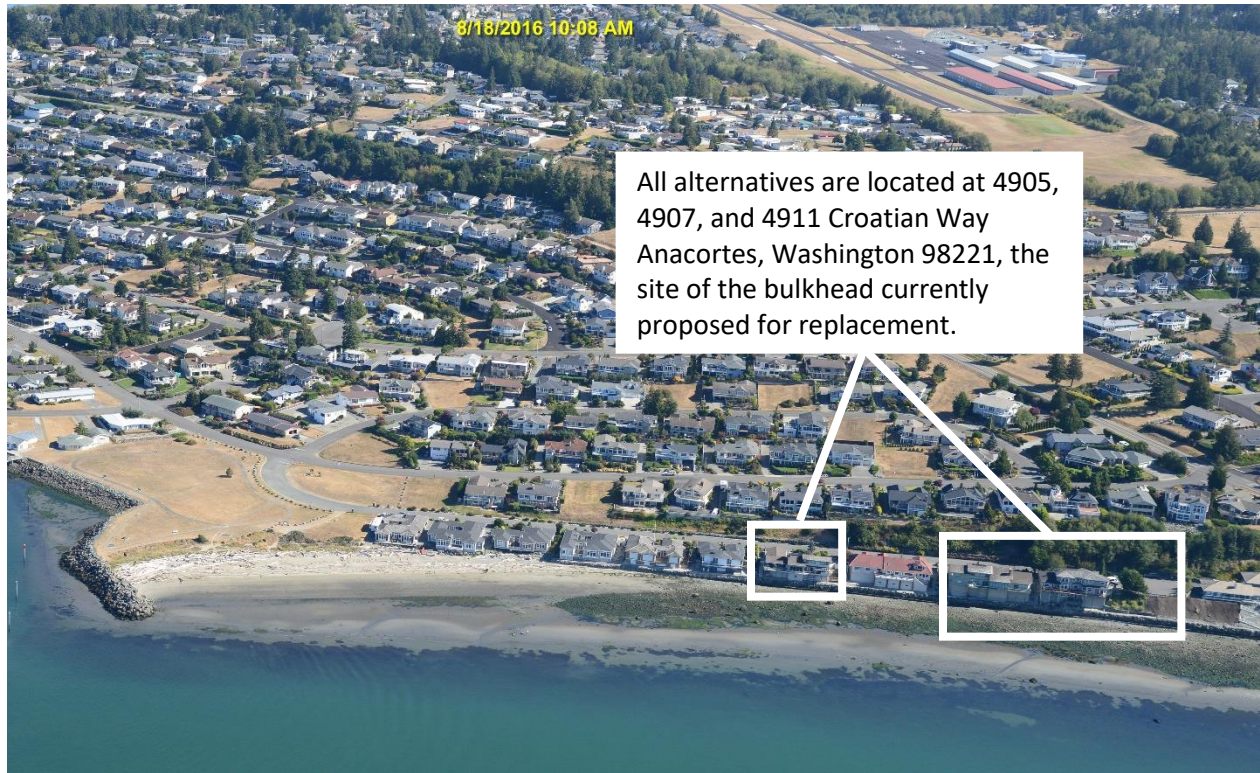


Figure 2. Bulkhead Portion



Figure 3. Winter Wave Action



City of Anacortes Narrative Description for Proposed Bulkhead Work

The proposed work at 4905, 4907 and 4911 Croatian Way in the City of Anacortes (Figures 1 & 2A.) is the somewhat time sensitive replacement of a bulkhead. The permits required for this project include: Shoreline Substantial Development, Shoreline Conditional Use and a Building Permit. The existing residences are adjacent to and supported by a riprap/concrete wall at the OHWM on Burrows Bay in Puget Sound. The property is zoned as shoreline residential.

The properties are currently protected from seawater damage by a rock wall grouted at the seaward surface. There is a concrete toe along the base of the rock wall measuring approximately 18 x 18 inches in cross-section. The walls are capped by concrete sidewalks running from the top of the wall to the residences foundations (Figure 3).

Two years ago voids were discovered behind the rock walls caused by loss of backfill from seawater surging below the toe and wall. The voids were filled in some cases with gravel and a polyurethane resin was injected to stabilize the backfill and prevent further voiding. This year additional voids were discovered and in some locations the rock wall sagged leaving cracks along the face. It is evident that the resin injection did not completely result in a long-term solution to prevent further voiding behind the walls.

The proposed new work will:

1. Remove the existing concrete toe,
2. Form a stable concrete bulkhead adjoining the face of the existing rock wall,
3. Backfill all spaces between the face of the rock wall and the inside of the bulkhead with $\frac{3}{4}$ -in gravel and
4. Stabilize any areas under the sidewalks with reinforced concrete and fill as necessary.

The work will be restricted to the area immediately seaward of the rock wall and will utilize a small excavator to be brought to the work site from a nearby access ramp. All remains of the existing toe will be removed from the area to shore-side disposal.

The bulkhead is to be constructed of reinforced concrete with a four-foot base located at least two feet below the current beach level at the wall (Figure 4). The beach material excavated for the bulkhead base will be retained on site and used to backfill to the original beach level.

After completion the seaward face of the new bulkhead will be located about 12-inches landward of the outer edge of the existing toe, thereby providing additional beach compared to the existing installation.

Work is to be accomplished in 40-foot sections starting with excavation for the base footing, forming for bulkhead with steel rebar to above the high tide line, and pouring concrete during one low tide cycle. The work will proceed in this fashion and then the

upper portions of the bulkhead will be formed and poured until completion. Construction noise will be temporary, mostly during daylight hours while the excavator is operating. The intent is to complete the work before the next winter high tide and storm season, preferably finishing by some time in October of 2019.



SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants: [\[help\]](#)

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals: [\[help\]](#)

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND [\[help\]](#)

1. Name of proposed project, if applicable: [\[help\]](#)

Schutzler, Dowell & Foster Bulkhead Repair

2. Name of applicant: [\[help\]](#)

Schutzler, Jerome & Janice; Dowell, Bob and Elaine; Foster, Tom and Sally

3. Address and phone number of applicant and contact person: [\[help\]](#)

**4905, 4907 and 4911 Croatian Way, Anacortes, WA 98221/360.293.9216; Agent Contact
Marine Surveys & Assessments (Meg Amos)/ 360.385.4073**

4. Date checklist prepared: [\[help\]](#)

July 29, 2019

5. Agency requesting checklist: [\[help\]](#)

City of Anacortes

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)

Work to begin immediately after permits are obtained. Expected duration is two months.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)

No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)

Biological Evaluation with No Net Loss , Alternatives Analysis, Mitigation Plan

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [\[help\]](#)

No

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)

**Shoreline Conditional Use and building permit (City of Anacortes), HPA (WDFW), 401
Water Quality (Ecology), Section 10 (Corps)**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [\[help\]](#) **The proposed work is the construction of a concrete bulkhead placed in the same footprint as the concrete toe protection, which will be removed. The extent of the repair will span three properties, approximately 360 linear feet.**

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and

range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)

4905, 4907 and 4911 Croatian Way, Anacortes, WA 98221/SW 1/4 Section 27, T35N, R01W

B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

1. Earth

a. General description of the site [\[help\]](#)

(circle one): **Flat**, rolling, hilly, steep slopes, mountainous,
other _____

b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

0 to 5%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

Sand, cobble and large rock.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

No

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)

Approximately 177 cy of concrete will be poured into forms to create a wall 8" thick by 12' high. This includes all three properties.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

[\[help\]](#)

No

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)

Concrete wall will be located on beach below the OHWL.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

Does not apply.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)

Fuel emissions from excavator during construction.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

No

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)

None

3. Water

- a. Surface Water: [\[help\]](#)

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)

Yes, Burrows Bay in the Salish Sea

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)

Yes, work will occur below the OHWM.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [\[help\]](#)

Approximately 59 cubic yards of concrete per property (177 cubic yards total)

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

[\[help\]](#) **Yes, according to the FEMA Flood Map this area is classified as AE. Additionally, the area is regularly flooded – tides alternately flood and expose the substrate at least once daily.**

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [\[help\]](#)

No

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

Does not apply

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [\[help\]](#)

Does not apply

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [\[help\]](#)

Does not apply

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)

No

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No, outfall pipes are located in bulkhead/wall.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Does not apply

4. Plants [\[help\]](#)

- a. Check the types of vegetation found on the site: [\[help\]](#)

____deciduous tree: alder, maple, aspen, other

____evergreen tree: fir, cedar, pine, other

____shrubs

____grass

____pasture

____crop or grain

____Orchards, vineyards or other permanent crops.

____wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

____ water plants: water lily, eelgrass, milfoil, other

____ other types of vegetation

No plants located in project footprint vicinity (see habitat survey)

- b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

None

- c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

There is eel grass located waterward of proposed construction location, well outside of work area.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

None

- e. List all noxious weeds and invasive species known to be on or near the site.

No invasive plant species were observed on site.

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [\[help\]](#)

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other _____

- b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)

Salmon and forage fish species (See Biological Evaluation for species information)

- c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Yes, salmon migrate through the area (See BE)

- d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

Salmon and forage fish work windows

- e. List any invasive animal species known to be on or near the site.

No known invasive animal species exist on site.

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)

Does not apply

- b. Would your project affect the potential use of solar energy by adjacent properties?

If so, generally describe. [\[help\]](#)

No

- c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)

Does not apply

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
If so, describe. [\[help\]](#)

Potential fuel spill from construction equipment.

- 1) Describe any known or possible contamination at the site from present or past uses.

None

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None

- 4) Describe special emergency services that might be required.

None

- 5) Proposed measures to reduce or control environmental health hazards, if any:

Equipment will be maintained regularly.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

Does not apply

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)

Short term construction noise.

- 3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

None

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

Single family residences. Adjacent properties also have bulkheads.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe.
How much agricultural or forest land of long-term commercial significance will be converted

to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#) **Does not apply.**

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: **No**

c. Describe any structures on the site. [\[help\]](#)

All three properties are developed with single family residences and a concrete and rock bulkhead.

d. Will any structures be demolished? If so, what? [\[help\]](#)

Yes, old bulkhead toe protection will be removed and taken away to an approved upland dump site.

e. What is the current zoning classification of the site? [\[help\]](#)

Shoreline residential.

f. What is the current comprehensive plan designation of the site? [\[help\]](#)

Unknown

g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

Aquatic environment

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

Yes, the adjacent water body (Salish Sea) and associated shoreline has been designated a "critical area".

i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

Does not apply

j. Approximately how many people would the completed project displace? [\[help\]](#)

Does not apply

k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

Does not apply

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

Compliance with local, state and federal regulations. WDFW "Best Management Practices Compliance".

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#) **Does not apply**
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#) **Does not apply**
- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)
Does not apply

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [\[help\]](#)
A concrete wall 10' above grade at the toe of existing 10 foot wall. The new structure will not be taller than the existing structure.
- b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)
No views will be altered or obstructed.
- c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)
None

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)
None
- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)
No
- c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)
None
- d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)
None

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)
Boating, swimming, fishing, beach combing.
- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)
No, the repair will take place at the toe of the existing wall on private tidelands.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#) **None**

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [\[help\]](#)

Unknown

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)

Unknown

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [\[help\]](#)

Tribes will be notified through the permit review process with the City and Corps of Engineers.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Mitigation is proposed on site. In addition to reducing the footprint impacting the beach, concrete debris will be removed and gravel will be brought in for beach nourishment.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)

Does not apply

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

Does not apply.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

Does not apply.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

No

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#) **No**

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

Does not apply

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Does not apply

- h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

Does not apply

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

No

- b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

None

16. Utilities

- a. Circle utilities currently available at the site: [\[help\]](#)

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#) **Does not apply**

C. SIGNATURE [\[HELP\]](#)

I certify (or declare) under penalty of perjury under laws of the State of Washington that the above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make a decision.

Signature: _____

Name of signee _____

Position and Agency/Organization _____

Date Submitted: _____

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

Does not apply

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Does not apply

- h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

Does not apply

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

No

- b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

None

16. Utilities

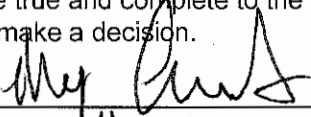
- a. Circle utilities currently available at the site: [\[help\]](#)

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#) **Does not apply**

C. SIGNATURE [\[HELP\]](#)

I certify (or declare) under penalty of perjury under laws of the State of Washington that the above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make a decision.

Signature: 

Name of signee Meg Amos

Position and Agency/Organization Marine Surveys & Assessments - Permit Agent

Date Submitted: 7/29/19

The residences at 4905, 4907 and 4911 Croatian Way are currently protected from wave erosion by a rock wall with front surface mortar between adjoining rocks. A reinforced concrete toe approximately 18 x 18-inches in cross section is at the base of the rock wall. A concrete cap extends from the top of the rock wall to the residence's foundation.

Tidal and wave action at the base under the toe and wall has removed some of the backfill material from behind the wall leaving a void under the concrete cap. In the region of the void the wall has sagged resulting in a crack along the front face of the rock wall. Measurements of the void cavity behind the wall were performed and the results show two cavities extending shoreward from the face of the wall as far as 5-feet.

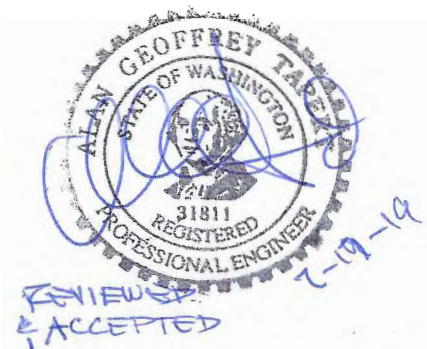
The failure mode in action is clearly erosion and removal of backfill by wave action from under the toe and wall. Inspection of the home's foundation and surrounding lot reveals no evidence of ground water intrusion from shoreward. Long-term stabilization of the property is obviously required to prevent loss of the property from continuing erosion.

Alternative armoring solutions were considered, including removal of the existing wall and replacement by a concrete bulkhead, sheet piles, or soft armoring. None of these concepts is feasible in view of the home's location relative to the shoreline and each would require significant construction along the beach.

Given the objective of providing long-term protection to the legally constructed and occupied property with minimal net change to the current effect on the ecology of the beach, a reinforced concrete bulk head with a base at least 2-feet below the beach level and placed immediately in front of the existing rock wall is not only the best, but the only feasible protection concept.

Removal of the existing 18 x 18-in. toe permits the exterior face of the bulkhead to be placed approximately 10-12-inches shoreward of the existing protection. This placement of the bulkhead assures that no water ward beach will be taken for the project. Additionally, soft armoring will be placed in front of the bulkhead to reduce sand drift compared to the current wall. The soft armoring will consist of river pebbles placed on the beach from the toe of the bulkhead water ward to ten feet. Large rocks will be placed at 20-foot intervals along the toe to stabilize the gravel.

There currently exist several bulkheads of identical construction to the proposed bulkhead within half a mile on either side of the property. These bulkheads were constructed up to 40 years ago and have experienced no failures in the same environment as the proposed project. The proposed project is clearly within the same geological zone as the existing bulkheads.



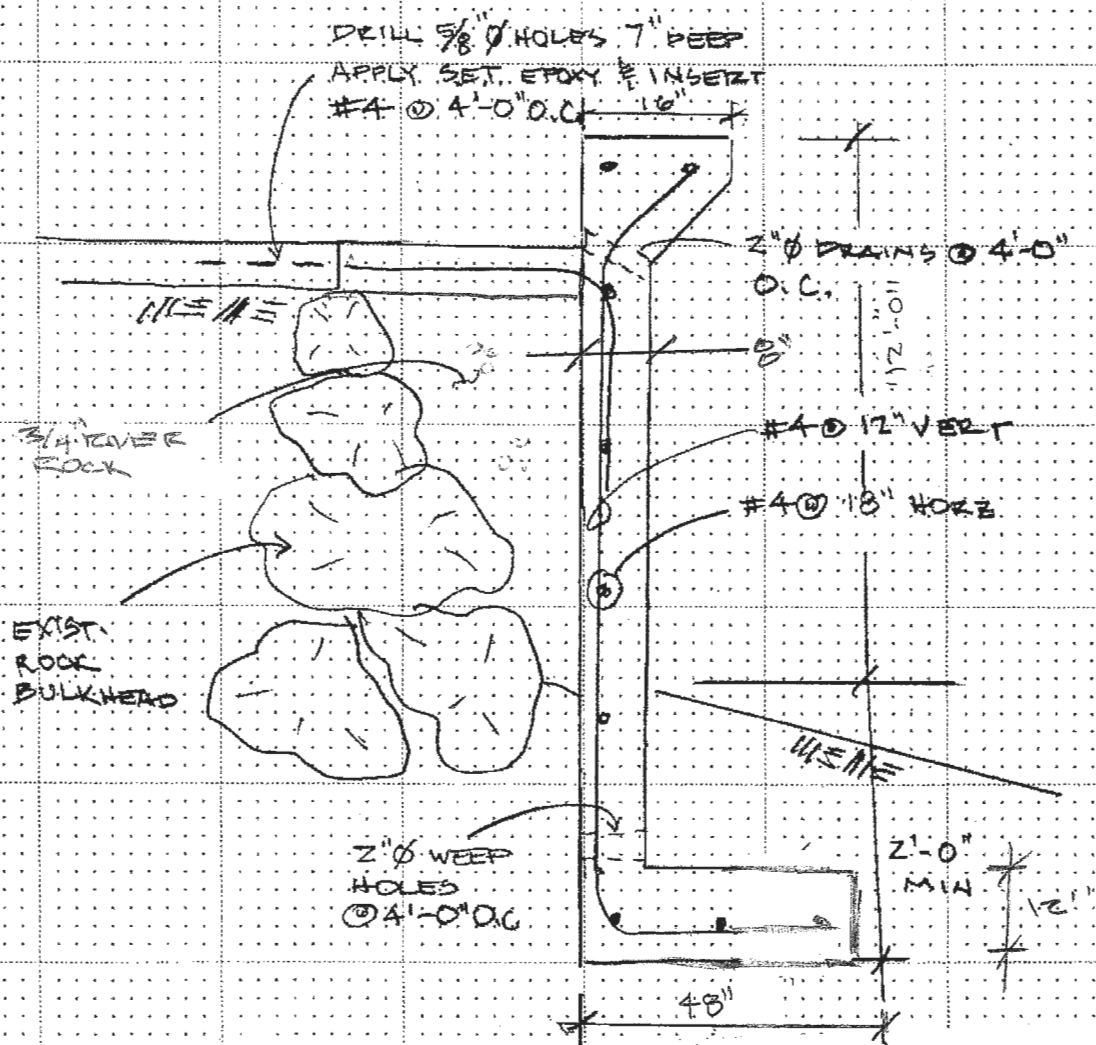
ENGINEERING, INC.

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JOB _____ NO. _____

BY AGT DATE 12

CONC. BULKHEAD



6-17-19

Cantilever Retaining Wall Calculations

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Design Assumptions

Project: Puget Sound Shoreline
By: AGT
Date: 6/17/19

f'_c	=	3,000	psi
f_y	=	60	ksi
Soil Bearing Capacity, S	=	2,000	psf (Table 1804.2)
Equivalent Soil Pressure, g	=	35	pcf
Soil Weight, w	=	120	pcf
Sliding Coefficient, μ	=	0.35	(Table 1804.2)
Lateral Soil Bearing, L_b	=	150	psf/ft (Table 1804.2)
Wall Width, b	=	8	in
Design d	=	6.0	in
Footing Depth, T	=	12	in
Wall Height, H	=	10.00	ft
Toe Width, x	=	0	in
Design Heal Width, y	=	48	in
Total Footing Width, D	=	56	in
$F_1 = wyH$	=	4,800	lbs
$F_2 = (h^2)g/2$	=	1,750	lbs
$Ma(cw)$	=	12,800	ft-lbs
$Ma(ccw)$	=	5,833	ft-lbs

Overturning

$Ma(ccw) * 1.5 \text{ F.S.}$	=	8,750	ft-lbs
$Ma(ccw) = Ma(cw)$	=		
$Ma(cw) = F_1(y/2+b)$	=		
$y_o = 2((Ma(cw)/F_1)-b)$	=	28	in

Sliding

Weight of Wall/ft, F_w	=	1,700	lbs/ft
Weight of Soil above Heal, F_1	=	4,800	lbs/ft
Total Weight, F_t	=	6,500	lbs/ft
Friction Resistance, μF_t	=	2,275	lbs
Buried Toe Depth, T	=	12	in
$F_3 = T * L_b / (12 * 3)$	=	50	lbs/ft
Total Sliding Resistance	=	2325	lbs

Bearing Capacity

Min D per Soil Bearing Capacity	=		
$D = (F.S.) * (F_1 + F_w) / S$	=	117	in

Seismic Lateral

Seismic Importance Factor, I	1.00	S_s	1.25
Seismic Use Group	I	S_1	0.5
Site Class	D	F_a	1.00
Response Modification Factor, R	3	(Table 9.5.2.2)	
$S_{MS} = F_a S_s$	=	1.25	
$S_{DS} = (2/3) * S_{MS}$	=	0.84	
$C_s = S_{DS} / (R/I)$	=	0.26	
Seismic Base Shear, $V = C_s W$	=	1701	lbs/ft

Reinforcement - Stem

$M_u = 1.4 Ma$	=	8,167	ft-lbs
$M_n = M_u / 0.9$	=	9,074	ft-lbs

$$M_n = A_s f_y d - \frac{A_s^2 f_y^2}{1.7 f'_c b}$$

$$A_s^2 - \frac{0.425 b f'_c}{f_y} + \frac{0.85 M_n f'_c b}{f_y^2} = 0$$

$$A_s = 0.329 \text{ si/ft}$$

$$A_s = \frac{0.85 f'_c b d}{f_y} \pm \sqrt{\left(\frac{1.7 f'_c b d}{f_y}\right)^2 - 4(1)\left(\frac{1.7 f'_c b M_n}{f_y^2}\right)}$$

$$\rho_{min} = \frac{200}{f_y} \quad \rho_{min} = \frac{A_{s(min)}}{A_c} \quad A_{s(min)} = \rho_{min} A_c = \frac{200 A_c}{f_y} = \frac{200 b (12)}{f_y}$$

Area of Steel, A_s (si/ft)

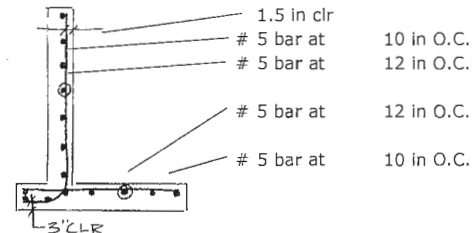
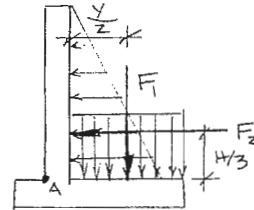
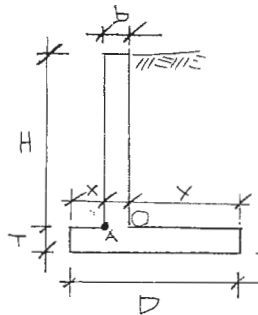
	6 in O.C.	8 in O.C.	10 in O.C.	12 in O.C.	14 in O.C.	16 in O.C.
# 4	0.393	0.294	0.236	0.196	0.168	0.147
# 5	0.613	0.460	0.368	0.307	0.263	0.230
# 6	0.883	0.662	0.530	0.442	0.378	0.331
# 7	1.202	0.902	0.721	0.601	0.515	0.451
# 8	1.570	1.178	0.942	0.785	0.673	0.589

Use #	5 bar at	10 in O.C.	Vertical	$A_s =$	0.368	si/ft
Use #	5 bar at	12 in O.C.	Horizontal			

10.00 foot wall

Overturning	F.S.
Sliding	2.19
Bearing	1.99
Seismic	1.44

Min. Cover =	1.5 in
$d_{(avail)}$ =	6.19 in



***Compensatory Mitigation Plan for Impacts to
Overwater Structures Impacts in Marine Waters in the Seattle District,
U.S. Army Corps of Engineers***

Compensatory Mitigation Plan for:

***Schutzler, Dowell, & Foster Bulkhead Repair
Corps reference #:***

*Applicants: Jerome & Janice Schutzler
4905 Croatian Way
Anacortes, WA 98221*

*Lester Dowell
4907 Croatian Way
Anacortes, WA 98221*

*Tom & Sally Foster
4911 Croatian Way
Anacortes, WA 98221*

Prepared by: Marine Surveys & Assessments

July 29, 2019

1. Project Description

The current proposed project will include:

1. Remove the existing concrete toe.
2. Form a stable concrete bulkhead adjoining to the face of the existing 360 ft bulkhead.
3. Backfill all spaces between the face and interior of the existing bulkhead with $\frac{3}{4}$ inch river pebble.
4. Stabilize any areas under the sidewalks with reinforced concrete and fill, as necessary.

The construction crew and a small excavator will access the project site using a neighbor's boat ramp 0.19 miles southeast of the project site. Equipment will be staged within the cul-de-sac at the end of Croatian Way, northeast of parcel P83311. The proposed bulkhead replacement will stabilize the toe of the slope and protect uplands from further erosion. The approximate 18 inch wide concrete toe and broken concrete debris will be removed and disposed to an upland site. Construction will include digging two to three feet into beach substrate, adjacent to the existing bulkhead, and creating a footer with 12 inch rebar centers to support a four-foot concrete wall. Additional four-foot wall sections, with 12 inch rebar centers, will be poured with concrete until the wall is 12 feet in height (2 feet below ground and 10 feet above marine shore). The vertical wall, above ground, will be 8 inches thick and 10 feet tall with a 16 inch thick lip at the top. Drainage holes will be drilled to allow stormwater to drain seaward. The proposed project will be located approximately 10 inches landward

(not seaward) of the outer edge of the existing toe. According to Professional Engineer Alan Geoffrey Tapert, “This placement of the bulkhead assures that no waterward beach will be taken for the project.” Excavation of the existing base, forming of the bulkhead, and pouring concrete will be done in 40-foot sections. Beach nourishment and soft armoring will include $\frac{3}{4}$ inch river pebbles, that taper approximately 10-feet seaward from the proposed project. 61-78 cubic yards will be added to each property participating in the proposed project (total 177 ft³). According to the Washington State Coastal Atlas Map, drift cells currently move southeast to northwest along the shoreline of the project site. Periodic re-nourishment may be necessary to prevent future drift of the $\frac{3}{4}$ inch river pebbles.

See the Biological Evaluation for more details.

2. Existing Conditions of Aquatic Resources

The property above the OHWM consists of single-family residences with a concrete capped riprap wall, which sits on the beach. The beach immediately adjacent to the bulkhead (below the OHWM) consists of mostly sand and large rock with pea gravel and sand along the upper intertidal zone along the bulkhead. Areas of macroalgae cover included *Ulva* 2-90%, *Fucus* 2-40%, *Mastocarpus* 2-10%, and foliose reds 2-50%. A *Zostera marina* bed was observed approximately 50-100 ft offshore in the northwest portion of the surveyed area. No wetland plants were observed.

There is no documented forage fish spawning habitat at the site, however, there is documented sand lance and surf smelt spawning northwest of the site within the 0.5 mile action area (Figure 5).

3. Avoidance and Minimization of Aquatic Resource Impacts

Avoidance and minimization measures to prevent impacts to listed species and designated critical habitat include management and design decisions that were made during the planning phases of the project and are outlined in the Alternatives Analysis. The project is not proposing to reposition the wall to pre-disaster alignment, however, the bulkhead will be repaired and replaced within the existing footprint and will be located approximately 10 inches landward of the outer edge of the existing toe.

Site specific conservation measures for the proposed project include:

- Although a four-foot wide footer will be buried below the current marine shore grade, above ground repair and replacement of the bulkhead will be within the same footprint as the existing structure. Beach nourishment will include the addition of $\frac{3}{4}$ inch beach pebble, which will be placed on the seaward face of the proposed project and taper 10 feet to the marine shoreline.
- A combined work window of July 16th to February 15th is proposed for any work to occur in. At any time during the work window, a forage fish survey should be completed by a WDFW certified biologist to confirm presence/absence of forage fish spawning on the beach before any work commences.
- Backfill behind the rebuilt bulkhead will only use new, clean $\frac{3}{4}$ inch pebbles that are free from contaminants and fine dirt (minus).

- To further minimize effects of the demolition or other earthwork on the adjacent water, all construction activities prior to the creation of the new bulkhead wall, will be performed during low tide.

4. Unavoidable Aquatic Resources Impact Acreage

Table 1. Expected Impacts to Aquatic Resources From Bulkhead Repair

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name	Impact location²	Duration of impact	Amount of material to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Bulkhead construction	Burrows Bay	At and behind OHWM	Permanent	177 cu yd of concrete poured into forms (8" by 10' above grade) for wall	360 linear ft
Beach Nourishment	Burrows Bay	Below OHWM	Permanent	200 cu yd	360 linear ft
Concrete toe removal	Burrows Bay	Below OHWM	Permanent	483 cu ft	423 sq ft

5. Impacted Aquatic Resource Functions

Work will be done in the dry but there may be some temporary turbidity and noise associated with the construction activities. Indirect effects associated with bulkheads include sediment impoundment and scouring which may degrade potential forage fish spawning habitat and nearshore habitat utilized by juvenile salmon at the site over time.

6. Mitigation Site Selection Rationale

Mitigation will be on site and will involve the removal of a total of approximately 483 cu ft of the existing bulkhead toe. 423 sq ft of concrete will be removed from the upper intertidal area which has the potential to be forage fish spawning habitat.

Table 2. Breakdown by property of concrete bulkhead toe to be removed

Toe Measurements for Mitigation Plan						
				Bulkhead thickness (in)		8
Property	Distance from West End (ft)	Toe extent from wall (in.)	Toe Height (in.)	Shoreward Mitigation w/8-in. bulkhead	Area Mitigated per Segment (sq ft)	Net Volume Removed (cu ft)
Foster	0	19	18	11		
	55	18	18	10	48	72
	110	18	18	10	46	69
Dowell	0	22	18	14		
	55	36	18	28	96	72
	110	23	18	15	99	69
Schutzler	0	20	18	12		
	70	20	18	12	70	105
	140	18	18	10	64	96
Total Shoreward area mitigated (sq. ft.)				Total net volume removed (cu ft)		
Foster			94	Foster		141
Dowell			195	Dowell		141
Schutzler			134	Schutzler		201
Total project shoreward mitigation (sq ft)			423	Total project concrete volume removed (cu ft)		483

Beach nourishment comprised of $\frac{3}{4}$ inch river pebbles will be placed along the bulkhead at 12 inches deep at the bulkhead and taper to 0 inches 10 ft out. That would result in a breakdown of nourishment at each property as follows:

- Foster: 61 cu yd
- Dowell: 61 cu yd
- Schutzler: 78 cu yd

7. Mitigation Work Plan and Description of Aquatic Functions Provided at Mitigation Site

Work Plan

The construction crew and a small excavator will access the project site using a neighbor's boat ramp 0.19 miles southeast of the project site. Equipment will be staged within the cul-de-sac at the end of Croatian Way, northeast of parcel P83311. The excavator that will be used to remove the concrete from the beach will also spread the beach nourishment. Work will be done in the dry at low tide.

Aquatic Functions Provided

Removal of these impervious surfaces will restore the shoreline to a more natural state. Nearshore habitat for juvenile salmonid migration and potential forage fish spawning will be restored by removing 423 sq ft of concrete from the upper beach. Beach nourishment will create suitable habitat for forage fish spawning and may reduce sediment impoundment and drift.

8. Site protection instrument

No site protection is proposed.

9. Maintenance plan

No maintenance for the beach nourishment is proposed. Once it is initially placed on the beach, it will be left to natural processes.

10. Performance standards

All concrete rubble and debris will be removed and waste hauled to a permitted site.

General BMPs will be followed:

- Daily inspection of equipment and storage areas will be conducted prior to commencing work activities to prevent drips, leaks, or failures of hoses, valves, fittings, containers, pumps, or other systems that contain or transfer hazardous materials to prevent spills into State waters.
- All fueling locations and procedures are via double wall fuel tanks, secondary containment, near spill kits, etc. as described in the SPCC Plan under separate SPCC Plan Submittal.
- BMPs such as spill kits on board vessels, including diapers and secondary containment basins placed underneath equipment stored onsite. The BMPs will be maintained daily.
- Any equipment having petroleum products or having spill potential will have spill response kits and containment booms nearby due to the proximity to the beach. These kits and booms shall be maintained, immediately accessible and located near all hazardous materials and equipment.
- Containment shall be provided for spill sources. Secondary containment containing 110% of the volume of the largest tank shall be used under fuel tanks and during fueling of equipment. Double walled tanks shall not require additional secondary containment.
- Portable restrooms shall be anchored down to prevent tipping and/or losing these structures near state waters during high wind events.
- Throughout the work the Contractor shall ensure that all construction-related debris is collected and contained and that no debris, garbage, or fuel shall enter the water via the implementation of the BMPs.

11. Monitoring requirements

No monitoring is proposed.

12. Long-term management plan

No long-term management is anticipated to be needed and is therefore not proposed.

Figure 1. Overall Site Plan

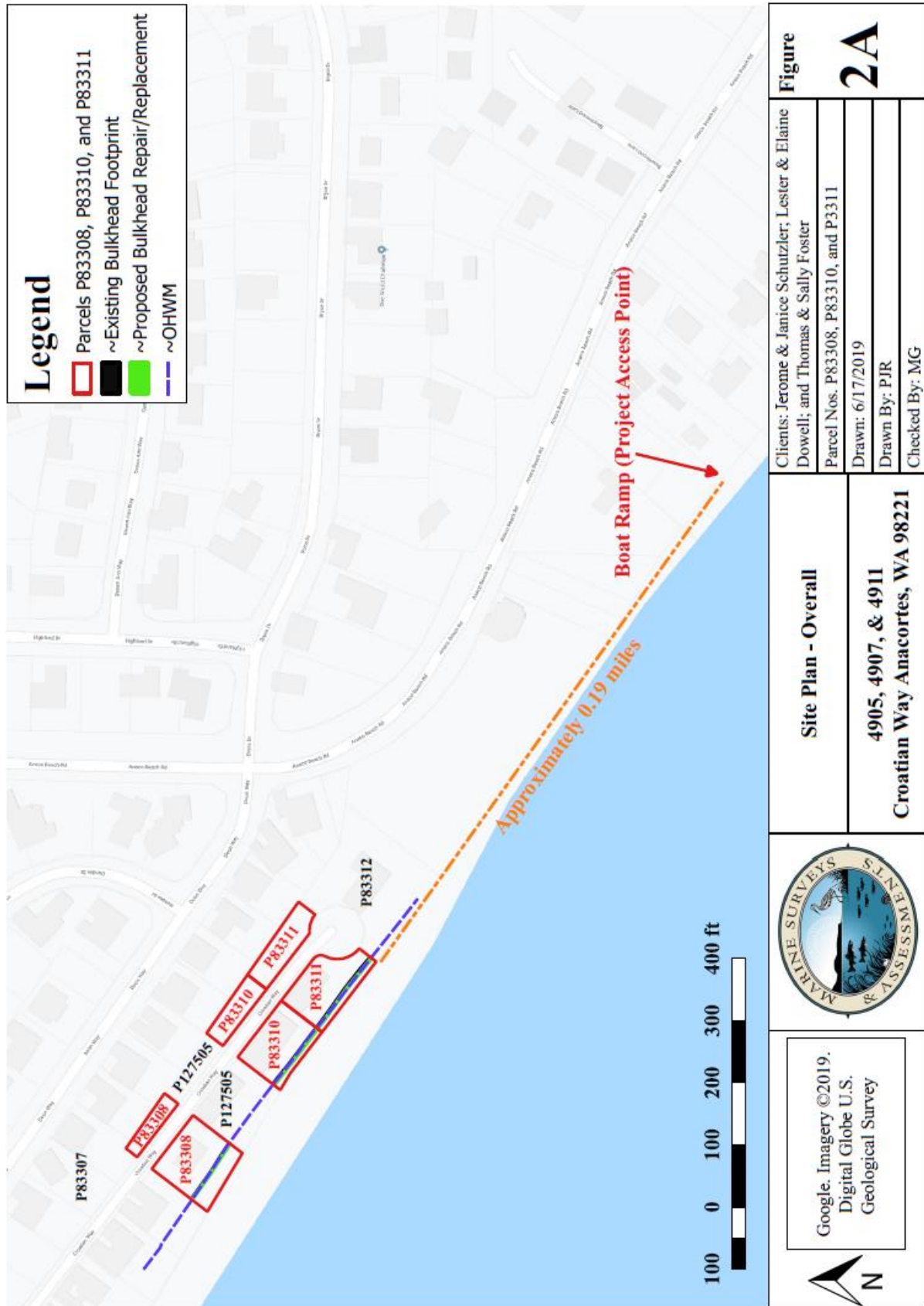


Figure 2. Proposed Site Plan-Schutzler property

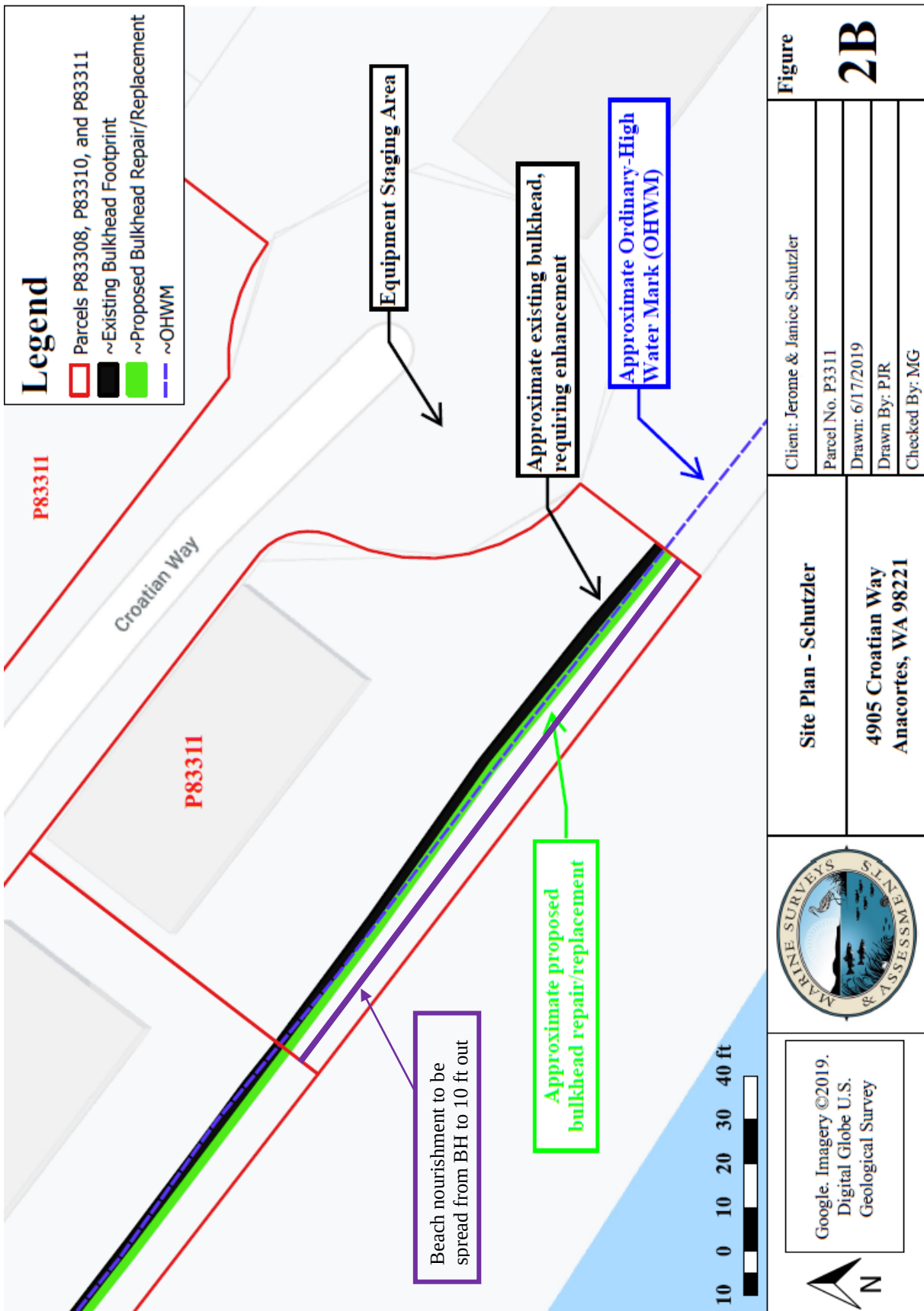


Figure 3. Proposed Site Plan-Dowell property

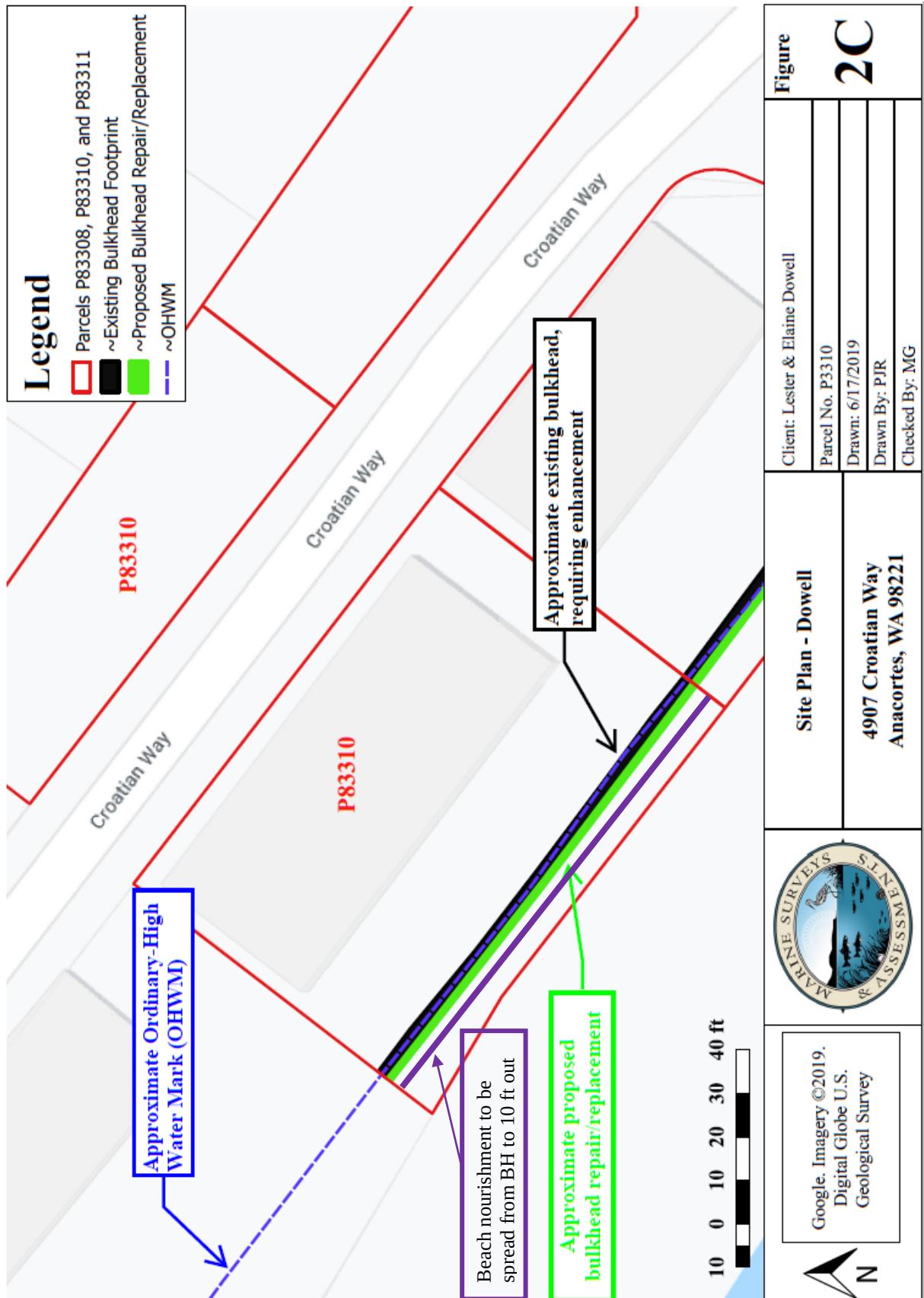


Figure 4. Proposed Site Plan-Foster property

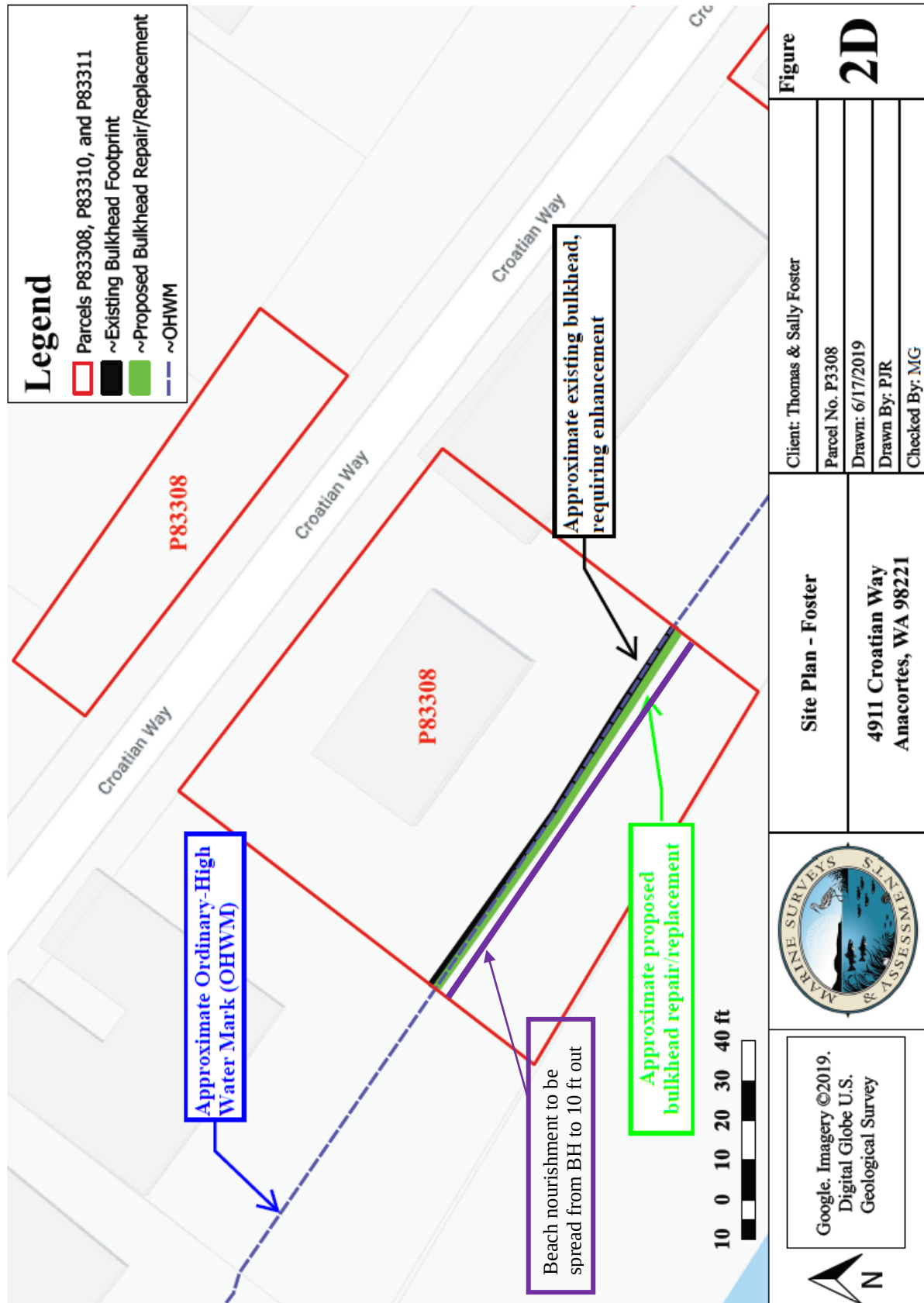
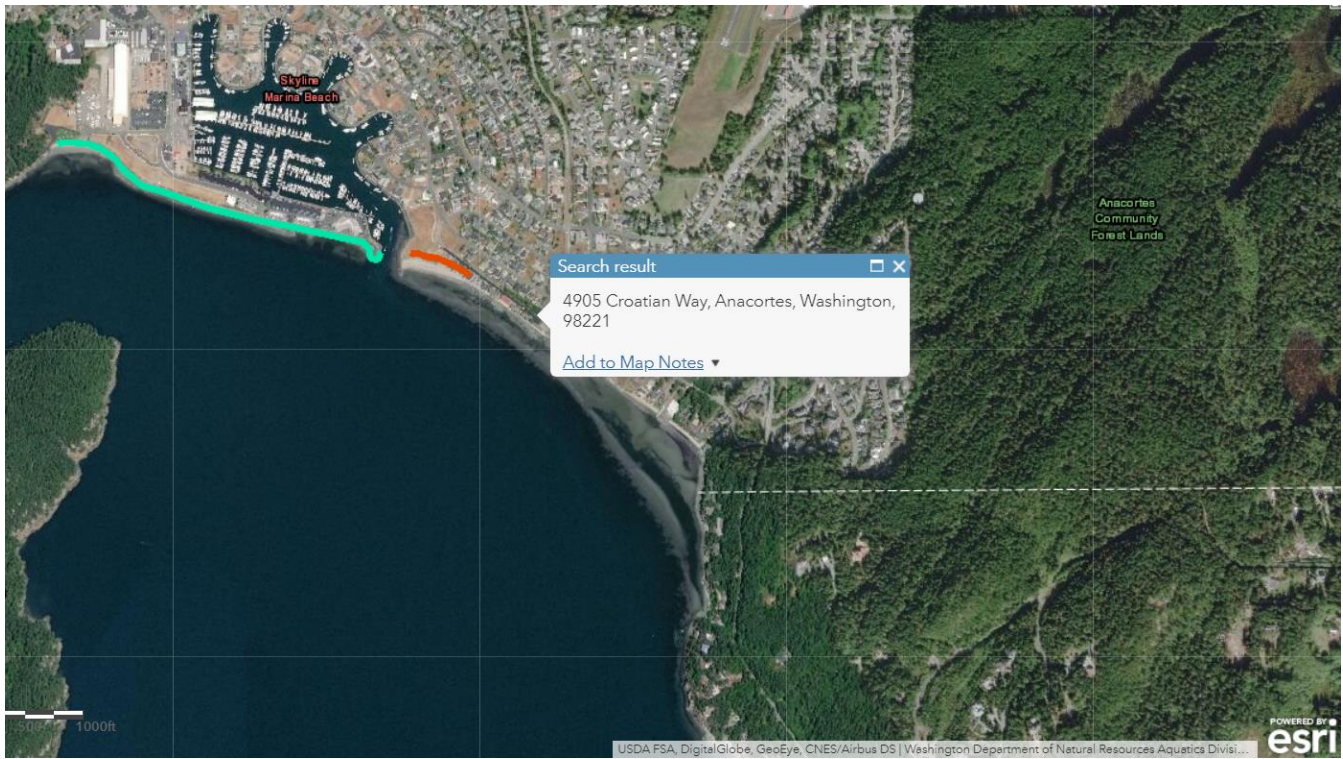


Figure 5. WDFW Documented Forage Fish Spawning



Legend

Forage Fish Spawning Data

Sand Lance Spawning



Smelt Spawning



Herring Spawning

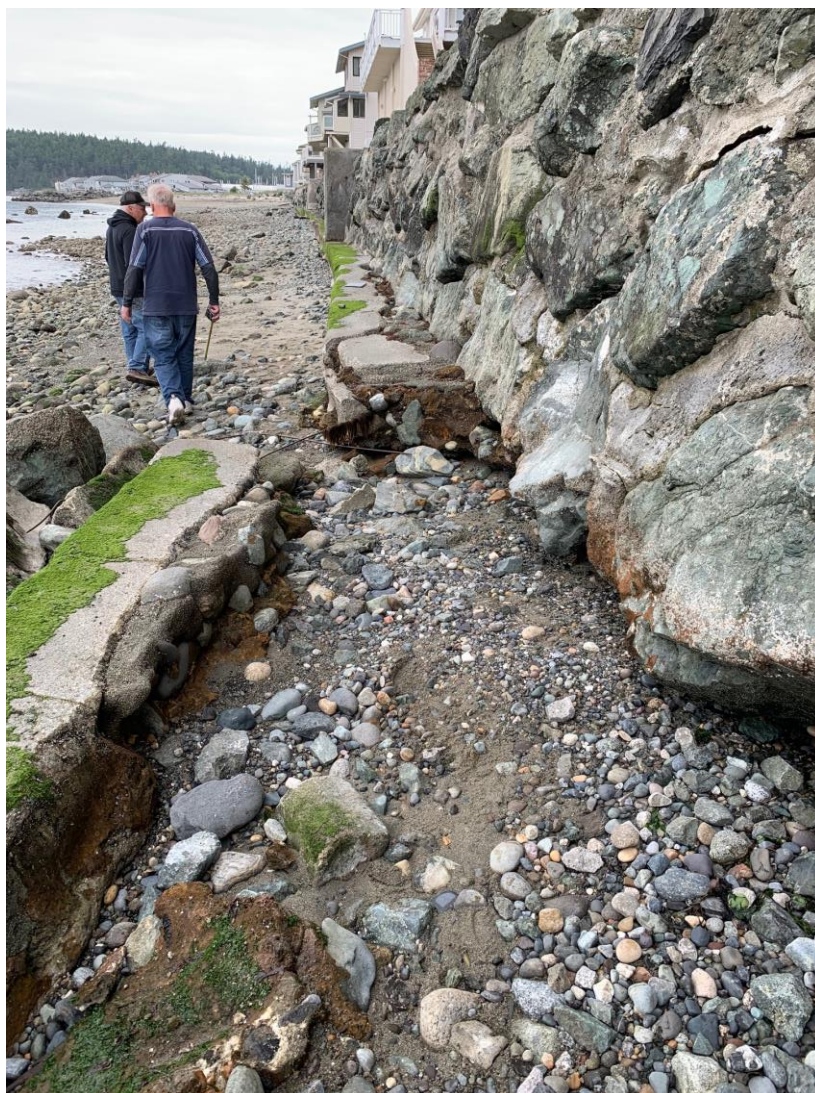


Pre-spawner Herring Holding Areas



Attachment 1. Photos of the Existing Bulkhead





**Schutzler, Dowell, and Foster
Bulkhead Repair & Replacement
Biological Evaluation**

July 23rd, 2019

Corps Reference:

Project Locations:

4905, 4907, and 4911 Croatian Way Anacortes,
Washington 98221

Prepared for:

Jerome & Janice Schutzler,
Lester & Elaine Dowell,
and Thomas & Sally Foster



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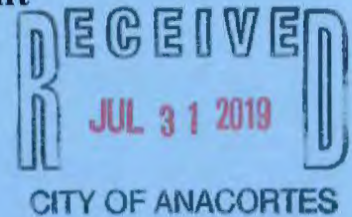


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Appendices and Attachments

Appendix A. Habitat Reports
Appendix B. ESA Species List
Appendix C. IPaC Resource List
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Attachment 5. Assessments of Impacts to Southern Resident Killer Whale Critical Habitat

I. Project Information

1.0 Introduction

The proposed project described herein is to repair and replacement of a failing bulkhead at parcels P83308, P83310, and P83311, in Skagit County, Washington (Figure 1). The existing bulkhead is actively being eroded, exposing the single-family residences to potential damage from wave action (Appendix D). The proposed project aims to repair the existing bulkhead and replace failed areas closest to the marine shoreline with new hard armoring. Soft armoring is also being proposed to reduce further damage to the existing bulkhead (Figures 2A-4B). Marine Survey's & Assessments (MSA) completed a habitat survey at the project site to assess potential impacts to listed species and associated critical habitat (Appendix A).

2.0 Project Location and Description

Addresses: 4905, 4907, and 4911 Croatian Way, Anacortes, Washington 98221

County: Skagit County

Parcels: P83308, P83310, and P83311

PLSS: SW ¼ Section 27, Township 35, Range 01

Latitude: 48° 29'18.78" N, Longitude: 122° 40'19.55 W

The three parcels belong to the following clients:

- Jerome and Janice Schutzler at 4905 Croatian Way Anacortes, Washington (P83311);
- Lester and Elaine Dowell at 4907 Croatian Way Anacortes, Washington (P83310);
- and Thomas and Sally Foster at 4911 Croatian Way Anacortes, Washington (P83308) (Figure 1)

Upland elevation adjacent to the project site is consistently descending southwest from 60-80 feet above sea level between Dundee Drive and Doon Way to 20-40 feet along Croatian Way. The existing bulkhead is approximately 12 feet above marine substrate. The bulkhead includes a concrete toe along the base and measures approximately 18" x 18" in cross-section. The lateral length of the existing bulkhead extends approximately 110 feet at parcel P83308, 110 feet at parcel P83310, and 140 feet at parcel P83311 (Figures 2A, 2B, 2C, and 2D).

Repairs were attempted in 2017 by injecting polyurethane resin and gravel into large voids in the bulkhead. Storm surge and ordinary-high water, below the toe and wall, was considered to be the cause of the loss of backfill within the bulkhead. Seven locations were previously repaired at parcels P83308, P83310, and P83311 (Figure 3). Additional large voids have been discovered since unsuccessful repairs were attempted in 2017; therefore, further repair and replacement is proposed to maintain the functionality of the bulkhead.

The current proposed project will include:

1. Remove the existing 18" x 18" concrete toe
2. Form a stable concrete bulkhead adjoining to the face of the existing bulkhead
3. Backfill all spaces between the face and interior of the existing bulkhead with ¾ inch river pebble
4. Stabilize any areas under the sidewalks with reinforced concrete and fill, as necessary.

The construction crew and a small excavator will access the project site using a neighbor's boat ramp 0.19 miles southeast of the project site (Figure 2A). Equipment will be staged within the cul-de-sac at the end of Croatian Way, northeast of parcel P83311 (Figure 2B). The proposed bulkhead replacement will stabilize the toe of the slope and protect uplands from further erosion. The approximate 18 inch wide concrete toe and broken concrete debris will be removed and disposed to an upland site. Construction will include digging two to three feet into beach substrate, adjacent to the existing bulkhead, and creating a footer with 12 inch rebar centers to support a four-foot concrete wall. Additional four-foot wall sections, with 12 inch rebar centers, will be poured with concrete until the wall is 12 feet in height (2 feet below ground and 10 feet above marine shore). The vertical wall, above ground, will be 8 inches thick and 10 feet tall with a 16

inch thick lip at the top. Drainage holes will be drilled to allow stormwater to drain seaward (Figure 4A). The proposed project will be located approximately 10 inches landward (not seaward) of the outer edge of the existing toe. According to Professional Engineer Alan Geoffrey Tapert, "This placement of the bulkhead assures that no water ward beach will be taken for the project." Excavation of the existing base, forming of the bulkhead, and pouring concrete will be done in 40-foot sections. Beach nourishment and soft armoring will include ¾ inch river pebbles, that taper approximately 10-feet seaward from the proposed project (Figure 4B). Fifty-nine cubic yards will be added to each property participating in the proposed project (total 177 ft³). According to the Washington State Coastal Atlas Map, drift cells currently move southeast to northwest along the shoreline of the project site (Figure 4C). Periodic re-nourishment may be necessary to prevent future drift of the ¾ inch river pebbles.

3.0 Habitat Reports

An intertidal survey was performed by Marine Surveys & Assessments (MSA) on June 10th, 2019 (72°F, clear and calm) between approximately 2:30 pm to 5:30 pm at 4905 (Schutzler; P83311) and 4907 (Dowell; P83310) Croatian Way Anacortes, Washington. Staff Biologist Meg Amos surveyed 13 transects (T1 to T13) to identify flora, fauna, substrate types, and other qualitative information in the proposed project area. The survey transects were oriented perpendicular to the bulkhead baseline, which was also the Mean-Higher High Water (MHHW) mark. Transects extended 100 feet seaward from the bulkhead and were separated from each other by 25 feet. Sand and large rock substrate were observed throughout the survey area, with pea gravel and sand along the upper-intertidal zone near the bulkhead. Areas of macroalgae cover included *Ulva* 2-90%, *Fucus* 2-40%, *Mastocarpus* 2-10%, and foliose reds 2-50%. An eelgrass bed (*Zostera marina*), was observed at the site approximately 50-100 feet offshore in the northwest portion of the survey area (T1 to T7). *Please see the Schutzler-Dowell Bulkhead Habitat Report and Survey Results Map for more detailed information (Appendix A).*

MSA also performed an intertidal survey on July 9th, 2019 (65°F, overcast and calm) between approximately 3:00 pm to 5:00 pm at 4911 Croatian Way Anacortes, Washington (Foster; P83308). Staff Biologist Meg Amos surveyed 7 transects (T1 to T7), which were oriented perpendicular to the bulkhead baseline (MHHW). Transects extended 100 feet seaward from the bulkhead and were separated from each other by 25 feet. Sand and cobble or large rock substrate were identified throughout the survey area. Areas of macroalgae cover included *Ulva* 2-90%, *Fucus* 2-40%, *Mastocarpus* 2-10%, and foliose reds 2-60%. An eelgrass bed (*Zostera marina*) was observed along three of the transects at the site approximately 50-80 feet offshore, with a few small patches elsewhere. *Please see the Schutzler-Dowell Bulkhead Habitat Report and Survey Results Map for more detailed information (Appendix A).*

Upland behind the existing bulkhead is entirely impervious surface with no observed vegetation. Horticultural grasses were observed along a natural slope adjacent to the southeast portion of the project site. Vegetation was also observed along a steep slope between the southeast portion of the project site and the project access site (boat ramp).

4.0 Action Area

The "project site" is the area within the actual bulkhead footprint, including areas used for staging materials and equipment and accessing the site. The "action area" includes any areas with potential ecological effects from short-term construction activities or long-term habitat modifications and would cover an approximate ½ mile radius from the project site (Figure 5).

II. Fish and Wildlife Habitat Conservation Areas

1.0 State Priority Species and Critical Habitat

The National Wetland Inventory (NWI) and Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) mapping tools indicate the following wetland habitats present within the project action area: *Estuarine and Marine Wetland* and *Estuarine and Marine Deepwater* (Figures 6 and 7). The Washington Department of Natural Resources (WDNR) recorded continuous eelgrass fringe, and patchy kelp fringe along the shoreline of the project location. Surfgrass and salt marsh are not present within the mapped action area (Figures 8). MSA's habitat surveys found native eelgrass and macroalgae adjacent to the project site and within the project action area. No critical species or habitat were observed within the project footprint (Appendix A).

Breeding area of WDFW priority species within the action area include Pacific sand lance (*Ammodytes hexapterus*), Surf smelt (*Hypomesus pretiosus*), and Yuma myotis (*Myotis yumanensis*). The presence of Pandalid shrimp (*Pandalus platyceros*) and Pinto Abalone (*Haliotis kamtschatkana*) was also recorded (Figure 7). WDFW priority species were not observed during both MSA intertidal surveys (Appendix A).

Table 1. WDFW PHS Report (within the 1/2 mile action area)

Common Name	Scientific Name	Area of Concern	Federal Status	State Status
Estuarine/Marine Wetland	-	Aquatic Habitat	-	-
Pacific Sand Lance	<i>Ammodytes hexapterus</i>	Breeding Area	-	-
Pandalid Shrimp	<i>Pandalus platyceros</i>	Presence	-	-
Pinto Abalone	<i>Haliotis kamtschatkana</i>	Presence	-	-
Surf Smelt	<i>Hypomesus pretiosus</i>	Breeding Area	-	-
Yuma myotis	<i>Myotis yumanensis</i>	Breeding Area	-	-

Previous forage fish surveys recorded Pacific sand lance (*Ammodytes hexapterus*) and Surf smelt (*Hypomesus pretiosus*) spawning habitat northwest of the project site and within the action area (Figure 9). Potentially suitable forage fish spawning habitat was observed throughout the project site (sand, cobble, and large rock) during both MSA habitat surveys (Appendix A).

2.0 Federal ESA Species Critical Habitat

The fish, marine mammal, and bird species listed under the Endangered Species Act that occur, or have critical habitat, within the proposed action area are identified below in Table 2.

Table 2. NMFS/USFWS Critical Habitat Query Results

NMFS/USFWS Critical Habitat	Action Area	Footprint
Bull Trout Final Critical Habitat (USFWS, 2016)	N	N
Chum Salmon (NMFS, 2005)	N	N
Final Deepwater Rockfish Critical Habitat (NMFS, 2014)	N	N
Final Nearshore Rockfish Critical Habitat (NMFS, 2014)	Y	Y
Green Sturgeon Critical Habitat (NMFS, 2009)	Y	Y
Leatherback Sea Turtle Critical Habitat (NMFS, 2012)	N	N
Marbled Murrelet (USFWS, 2016)	N	N
Marine Critical Habitat for Puget Sound Chinook Salmon (NMFS, 2005)	Y	Y
Marine Critical Habitat Hood Canal Summer-run Chum Salmon (NMFS, 2005)	N	N
Puget Sound Steelhead Critical Habitat (NMFS, 2016)	N	N

Table 2. NMFS/USFWS Critical Habitat Query Results (Continued)

NMFS/USFWS Critical Habitat	Action Area	Footprint
Sockeye Salmon Critical Habitat (NMFS, 2005)	N	N
Southern Eulachon (NMFS, 2011)	N	N
Southern Resident Killer Whale Critical Habitat (NMFS, 2006)	Y	Y

Listed species that could potentially be in the project action area are addressed below, with the listing status, distribution of species, and relevant life history traits. An Assessment of Impacts to Critical Habitat is also included for species with critical habitat within the action area (Attachments 2-5).

A. Bull Trout

Bull trout (*Salvelinus confluentus*) were listed as threatened by the United States Fish and Wildlife Service (USFWS) in 1999 (Federal Register/Vol. 64, No. 210/Monday, November 1, 1999/Rules and Regulations). "In marine nearshore areas, the inshore extent of critical habitat is the MHHW line, including the uppermost reach of the saltwater wedge within tidally influenced, freshwater heads of estuaries. Critical habitat extends offshore to the depth of 10 meters (m) (33 feet (ft)) relative to the mean low low-water (MLLW) line" (Federal Register/ Vol.75, No. 200/ Monday, October 18, 2010/ Rules and Regulations). The nearest designated Puget Sound bull trout critical habitat is 10.75 miles northeast at the mouth of the Samish River and 12.75 southeast of the project site at the mouth of the Skagit River. The project site is not located on a shoreline designated as critical habitat for coastal Puget Sound bull trout (Appendix B).

Relevant life history: Coastal Puget Sound bull trout have ranged geographically from northern California (at present they are extinct in California) to the Bering Sea coast of Alaska, and northwest along the Pacific Rim to northern Japan and Korea. Bull trout are members of the char subgroup of the salmon family. Spawning occurs typically from August to November in streams and migration to the open sea (for anadromous populations) takes place in the spring. Eggs and juveniles require extremely cold water for survival. Temperatures in excess of about 15 degrees C are thought to limit bull trout distribution (Rieman and McIntyre 1993). They live both in fresh and marine waters. Some migrate to larger rivers (fluvial), lakes (adfluvial), or saltwater (anadromous) before returning to smaller streams to spawn. Others (resident bull trout) complete all of their life in the streams where they were reared. Habitat degradation, dams and diversions, and predation by non-native fish threaten the Coastal Puget Sound population (Federal Register, Vol. 64, No. 210, 1999).

B. Green Sturgeon

On April 7, 2006, NMFS determined that the Southern Distinct Population Segment of North American green sturgeon (*Acipenser medirostris*; hereafter, "Southern DPS") is at risk of extinction in the foreseeable future throughout all or a significant portion of its range and listed the species as threatened under the Endangered Species Act (ESA) (71 FR 17757). Critical habitat for the threatened Southern DPS green sturgeon was subsequently designated by NMFS in 2009 (Federal Register / Vol. 74, No. 195 / Friday, October 9, 2009). Southern DPS green sturgeon occupy coastal bays and estuaries from Monterey Bay, CA to Puget Sound, WA. Observations of green sturgeon in Puget Sound are much less common compared to the other estuaries in Washington State. The proposed project is located within Southern DPS green sturgeon critical habitat (Figure 10). An "Assessment of Impacts to Critical Habitat for Southern DPS Green Sturgeon" is provided in Attachment 2.

Relevant life history: Green sturgeon have a complex anadromous reproductive cycle and do not reach reproductive age until 15 years old for males and 17 years old for females; female green sturgeon are thought to spawn every 5 years (NMFS, 2002). Activities of concern in Puget Sound include dredging and capping, which could affect benthic habitats, alter water flow and water quality (NMFS, 2009).

C. Hood Canal Summer Run Chum

NMFS has listed the Hood Canal summer run chum ESU (*Oncorhynchus keta*) as threatened under the ESA (Federal Register / Vol. 70, No. 123 / Tuesday, June 28, 2005). However, the project site is not in

an area designated as critical habitat for the Hood Canal summer run chum ESU (Federal Register / Vol 70, No.170 / Friday, September 2, 2005 / Rules and Regulations). The project site is 23 miles north of the nearest critical habitat for this species and individuals are highly unlikely to be present within the action area.

D. Humpback Whale

NMFS has divided the globally listed endangered species humpback whale (*Megaptera novaeangliae*) into 14 Distinct Population Segments (DPS). After removing species-level listing, four humpback whale DPS were designated endangered and one DPS was designated threatened. The final status for western North Pacific humpback whale DPS was designated as endangered (81 FR 62259). Although this species may be present in Puget Sound, there is no designated critical habitat for humpback whales in Washington at this time.

Relevant life history: Due to excessive whaling practices, southern British Columbia and northern Washington State humpback whale populations declined significantly. In the recent past, humpback whales were rarely observed in Puget Sound (Angell and Balcomb 1982). However, observation rates of humpback whales in Puget Sound have been increasing in recent years, particularly May through June (Orca Network 2019).

E. Leatherback Sea Turtle

NMFS has listed the Pacific leatherback turtle (*Dermochelys coriacea*) as an endangered species that may occur in Puget Sound. There is no designated critical habitat for Pacific leatherback turtles in Washington state at this time.

Relevant life history: Breeding habitat for leatherback sea turtles in Washington does not exist, even though they are occasionally seen along the coast (Bowlby et al. 1994). Leatherback sea turtles are rarely seen in Puget Sound (McAllister, pers. comm.). It is highly unlikely leatherback turtles would be found near the project site.

F. Marbled Murrelet

Marbled murrelets (*Brachyramphus marmoratus*) have also been listed as threatened by the USFWS since 1992. Critical habitat is not present within project action area (WDFW 2016a, NOAA 2016; Appendix B).

Relevant life history: Marbled murrelets are small marine birds in the alcidae family. They spend most of their time at sea and only use old growth areas for nesting. In critical nesting areas, habitat fragmentation and loss of old growth forest has a significant impact on the survival and conservation of the species (WDFW 1993). Adult birds are found within and/or adjacent to the marine environment where they dive for sand lance, sea perch, Pacific herring, surf smelt, other small schooling fish and invertebrates.

G. Nearshore Rockfish

NOAA has listed the distinct population segments (DPSs) of yelloweye (*Sebastes ruberrimus*) as threatened species under the Endangered Species Act (ESA) and listed the Georgia Basin DPS of bocaccio rockfish (*Sebastes paucispinis*) as endangered (Federal Register/Vol. 75, No. 81, April 28, 2010, Final Rule). The Georgia Basin refers to all of Puget Sound, including the area around the San Juan Islands, and the Strait of Georgia, north to the mouth of the Campbell River in British Columbia. The western boundary of the Georgia Basin runs from east of Port Angeles to Victoria in the Strait of Juan de Fuca. The proposed project is in the Nearshore Rockfish Critical Habitat (Figure 10). Deepwater rockfish critical habitat was recorded immediately outside of the project action area (NMFS 2005). An "Assessment of Impacts to Critical Habitat for Rockfish" is provided in Attachment 3.

Relevant life history: Bocaccio and yelloweye rockfish remain close to the surface as larvae and pelagic juveniles. As juveniles they settle to benthic environment. They prefer to settle in rocky reefs, kelp beds, low rock and cobble areas (Love et al. 2002). As the three species grow larger, they move

into deeper waters. Adults are found around rocky reefs and coarse habitats. Adult yelloweye and bocaccio rockfish generally inhabit depths from approximately 90' to 1400' (Love et al. 2002). All three species are opportunistic feeders, with their prey dependent on their life stage. Predators of adult rockfish include marine mammals, salmon, other rockfish, lingcod and sharks.

H. Puget Sound Chinook

The Puget Sound Chinook (*Oncorhynchus tshawytscha*) is listed under the Endangered Species Act (ESA) as threatened according to the National Marine Fisheries Service (NMFS) (Vol. 70, No. 123/Tuesday, June 28, 2005/Rules and Regulations). In addition, NMFS has designated critical habitat for 12 Evolutionarily Significant Units (ESUs) of West Coast salmon, including the Puget Sound Chinook Salmon ESU. The project is within designated marine critical habitat for the Puget Sound Chinook ESU (Federal Register/Vol 70, No.170/Friday, September 2, 2005/Rules and Regulations). Puget Sound Chinook marine critical habitat is present throughout the project site (Figure 10). An "Assessment of Impacts to Critical Habitat for Puget Sound Chinook" is provided in Attachment 4.

Relevant life history: Puget Sound Chinook, also called king salmon, are distinguished from all other Pacific salmon by their large size. Most Chinook in the Puget Sound are "ocean-type" and migrate to the marine environment during their first year (Myers et al. 1998). They may enter estuaries immediately after emergence as fry from March to May at a length of 40 mm or they may enter the estuaries as fingerling smolts during May and June of their first year at a length of 60-80 mm (Healey 1982). Chinook fry in Washington estuaries feed on emergent insects and epibenthic crustaceans (gammarid amphipods, mysids, and cumaceans). As they grow and move into neritic habitats, they feed on decapod larvae, larval and juvenile fish, drift insects, and euphausiids (Simenstad et al. 1982). These ocean-type Chinook use estuaries as rearing areas and are the most dependent of all salmon species on estuaries for survival.

I. Puget Sound Steelhead

NMFS has listed the Puget Sound steelhead (*Oncorhynchus mykiss*) as a threatened species under the ESA (Federal Register/Vol. 72, No. 91/Friday, May 11, 2007/Rules and Regulations). Critical habitat for Puget Sound Steelhead was finalized in 2016 (81 FR 9252, February 24, 2016). The nearest designated Puget Sound steelhead critical habitat is 10.75 miles northeast at the mouth of the Samish River and 12.75 southeast of the project site at the mouth of the Skagit River. Critical habitat for Puget Sound Steelhead is not present within the action area.

Relevant life history: Steelhead is the name given to the anadromous form of the species *Oncorhynchus mykiss*. The freshwater species of steelhead are commonly known as Rainbow trout. Steelhead can return to the ocean after spawning and migrate to freshwater to spawn again, unlike Pacific salmon. Steelhead fry can spend one to two years in freshwater before heading to the open ocean. Steelhead may reside in open ocean for two to four years before returning to Washington streams.

J. Southern Resident Killer Whales

On November 15, 2005 NMFS listed the Southern Resident killer whale (SKRW; *Orcinus orca*) as endangered under ESA (Federal Register, Vol. 70, No. 222, November 18, 2005/Rules and Regulations). NOAA Fisheries has designated critical habitat for killer whales: "Critical habitat includes waters deeper than 20' relative to a contiguous shoreline delimited by the line of extreme high water." (Federal Register / Vol. 71, No. 229 / November 29, 2006 / Final Rule). Critical habitat for SKRW's is present throughout the action area (Figure 10). "Assessment of Impacts to Critical Habitat for Southern resident Killer Whale" is provided in Attachment 5.

According to NOAA Critical Habitat GIS data, the action area is within Southern Resident killer whale critical habitat. Critical habitat begins at waters of 20' depth relative to the extreme high-water line and the project footprint spans the MHWW mark; the project footprint would not be within critical habitat even at the highest tide since work for the proposed bulkhead repair and replacement will be performed at low tide on dry land.

K. Steller Sea Lion

NMFS has removed the eastern DPS (including Puget Sound) of the Steller sea lion (*Eumetopias jubatus*) from the List of Endangered and Threatened Wildlife (Federal Register/Rule 78 FR 66167/Wednesday, November 4, 2013).

III. Effects of the Action

Effects are presented and evaluated here in the context of the Federally listed species and their critical habitat, and state-regulated (WDFW) Priority Habitats. The proposed project has been described and the action area has been defined (Figure 5). The status of each of the listed species in the action area has been provided (Figures 7-10B). When reviewing data presented, the potential direct and indirect effects of the proposed action on listed species and their critical habitat are considered. Effects of the proposed alternatives are evaluated to determine whether these actions are likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species proposed for listing; or (3) adversely modify proposed critical habitat.

1.0 Direct Effects

Direct impacts to water quality and increased noise have the potential to occur during construction.

- A. Water Quality Impacts:** Increased turbidity and other short-term impacts, associated with removal and replacement of the existing bulkhead, may occur due to loosened and suspended sediments. Increased turbidity could have adverse effects for species with critical habitat, photosynthesizing aquatic vegetation and macroalgae, and potential forage fish spawning within the project site. The impact level depends on duration of exposure, turbidity, life stage during the increased exposure and options available for species to avoid increased turbidity. Adverse effects can be discussed in terms of lethal, sublethal or behavioral (Nightingale and Simenstad 2001a; Simenstad, editor, 1988). For this project, turbidity effects are expected to be localized and brief.

To minimize the potential adverse effects of increased turbidity on migrating salmonids, intertidal work is proposed during a multi-agency approved work window for salmonids and bull trout between July 16th to February 15th. Furthermore, demolition and construction will take place during low tide and materials will be removed off the beach. To further minimize both short-and long-term turbidity increases related to the project, the entire bulkhead will have filter fabric as a barrier to prevent soil from escaping through the bulkhead. Materials taken off-site will be placed in containers and disposed of in an upland facility. Additional avoidance and minimization measures are presented in 5.0 Conservation Measures.

The northwest portion of the action area includes a Category 2 and Category 5 – 303d impacted waterway. The Category 2 (Listing ID: 65616) exceeded normal water temperature levels, however, Washington Department of Ecology (WDOE) staff concluded that additional study was needed for this waterbody. The Category 5 – 303d (Listing ID: 64707) exceeded levels of copper within the water. A water quality improvement project is in development throughout the Puget Sound for nutrient source reduction and includes the project site (Figure 11). The proposed project is unlikely to affect or be affected by any of these sites beyond the action area.

- B. Noise Impacts:** Noise above ambient levels will occur during removal, and construction of the replacement bulkhead. Work will be performed at low tide. Noise levels within the water are not anticipated to be harmful, considering all work will be done on the dry beach.

2.0 Indirect Effects

Indirect impacts are commonly associated with bulkheads and armored shorelines. Indirect impacts from the proposed project include sediment impoundment, scouring, and shading impacts.

- A. Sediment Impoundment:** The most potentially significant impact of the proposed project is continued impoundment of sediment behind the bulkhead wall. A bulkhead prevents upland erosion, depriving the local littoral system of the sediment that is necessary for the maintenance of beaches (Coyle and Dethier 2010, Macdonald et al 1994, Johanssen and MacLennan 2007). This is likely to be most significant when bulkheads are used to stabilize actively eroding bluffs (Macdonald et al 1994). The current project, as a bulkhead replacement, will not impound a greater amount of sediment than is currently “locked up” behind the existing bulkhead. However, when longshore drift takes sediment away from the beach in front of the bulkhead, as is likely at the current site, the sediment may not be replenished via natural erosion from the area behind the bulkhead. Over time, the combination of decreased longshore transport of sediment with little upland replacement may lead towards a narrowing of the beach area below the bulkhead. Drift cells currently move southeast to northwest along the shoreline of the project site (Figure 4C). Periodic beach re-nourishment is recommended to prevent movement of baseline substrate conditions.
- B. Scouring:** When waves reflect off the bulkhead, wave scour can accelerate the loss of sand and small sediment (Kraus and McDougal 1996). A study in nearby Thurston County demonstrates the end effect of these physical processes. Herrera Environmental Consultants 2005 compared beach structures; armored versus unarmored shorelines. The study found that armored beaches were significantly narrower and had a smaller upper beach area (Herrera Environmental Consultants 2005). Physical changes in beach structure, specifically beach narrowing and lowering, are also linked to biological effects. Specifically, forage fish spawning habitat in the upper intertidal zone may continue to be degraded in both extent and quality with the repair and replacement of the existing bulkhead (Pentilla 2007).
- C. Shading Impacts:** Bulkheads can result in shading of the intertidal zone. Shading may occur and could reduce or eliminate the potential for macroalgae and associated epibenthic organisms. This may result in reduced prey and refugia resources for salmon and bull trout. While the height of the seawall will increase, repair and replacement of the bulkhead is not likely to result in new or additional shading impacts to nearby native eelgrass and macroalgae due to the orientation of the bulkhead facing west.

3.0 Interrelated/Interdependent Effects

Completion of this project may lead to repair and replacement of adjacent properties not currently seeking bulkhead replacement or repair. Future construction will have similar effects addressed in this Biological Evaluation.

4.0 Take Analysis

The ESA Section 3 defines “take” as to “harass, harm, pursue, hunt, shoot, wound, trap, capture, collect or attempt to engage in any such conduct.” The USFWS further defines “harm” as “significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.” It is likely that no “take” will result from this project.

5.0 Conservation Measures

All shoreline development must be located, designed, constructed, and maintained in a manner that protects ecological functions and ecosystem processes (*Please see mitigation plan for full analysis*). This Biological Evaluation is proposing the least environmentally damaging practicable alternative that achieves the project goal of stabilizing the shoreline and preventing erosion and loss of property. The FEMA Programmatic Biological Assessment – For Fourteen Common Disaster Activities (June 29, 2009)

is being referenced here for guidelines on effective and appropriate conservation measures and covers the following seawall repairs:

1. Reposition wall to pre-disaster alignment.
2. Replace damaged panels.
3. Repair panels in place.
4. Pour new concrete panels in place.
5. Backfill eroded soil material

The project is not proposing to reposition the wall to pre-disaster alignment, however, the bulkhead will be repaired and replaced within the existing footprint. Six Conservation Measures (CM) are recommended for repairing concrete walls near or along nearshore areas (Table 3).

Table 3. Conservation Measures Index

Type	CM No.	Conservation Measure Description
Timing	CM-1	Schedule non-emergency activities and in-water work to abide by the approved work windows for all relevant species.
	CM-2	Perform "Emergency Response Notifications" before initiating actions as applicable.
Best Management Practices (BMPs)	CM-4	Check with WDFW Biologist to determine whether or not fish are present or likely to be present during the proposed in-water work. Select, implement, and monitor BMPs appropriate for species present.
	CM-7	This action shall be covered for no more than once per structure, facility, stream reach, or site during the five-year span of the Programmatic Biological Assessment (PBA)
	CM-33	Work will be restricted to between two hours after sunrise and two hours before sunset during the murrelet nesting season (April 1 through September 15).
Material	CM-14	Uncured concrete will not come in contact with any waterbody.

* CM-30 was referred to in Activity 8, however, no description was located in the PBA

Site specific conservation measures for the proposed project include:

1. Although a four-foot wide footer will be buried below the current marine shore grade, above ground repair and replacement of the bulkhead will be within the same footprint as the existing structure. Beach nourishment will include the addition of ¾ inch beach pebble, which will be placed on the seaward face of the proposed project and taper 10 feet to the marine shoreline. Beach nourishment will create suitable habitat for forage fish spawning and may reduce sediment impoundment and drift. Re-nourishment is recommended to continue at a pace that allows sufficient long-term suitable forage habitat and to recreate natural beach conditions.
2. A combined work window between July 16th to February 15th is proposed before any work can start for this project. The work window by the U.S. Army Corps of Engineers' Approved Work Windows for All Marine/Estuarine Areas for Tidal Reference Area 7 is:
 - Salmon (July 2nd – March 2nd)
 - Bull Trout (July 16th – February 15th)
 - Surf Smelt (Year-round)
3. Due to the presence of Sand lance and Surf smelt northwest of the proposed project site, a forage fish survey will be completed by a WDFW biologist or certified forage fish spawning surveyor prior to any work performed on the beach during the recommended work window.
4. Backfill behind the rebuilt bulkhead will only use new, clean ¾ inch pebbles that are free from contaminants and fine dirt (minus).

5. To further minimize effects of the demolition or other earthwork on the adjacent water, all construction activities prior to the creation of the new bulkhead wall, will be performed during low tide.
6. To utilize silt curtains and best management practices to minimize potential turbidity caused from sediment disturbed by the proposed project.

6.0 Determination of Effect

After reviewing the appropriate data, the determination of effect to each listed species and designated critical habitat within the action area is:

- Bull trout – “May affect, not likely to adversely affect ”
- Green Sturgeon – “May affect, not likely to adversely affect”
- Hood Canal Summer Run Chum – “No Effect”
- Humpback Whale – “No effect”
- Leatherback Sea Turtle – “No effect”
- Marbled Murrelet – “No effect”
- Nearshore Rockfish – “May affect, not likely to adversely affect”
- Puget Sound Chinook – “May affect, not likely to adversely affect”
- Puget Sound steelhead – “May affect, not likely to adversely affect ”
- Southern Resident Killer Whale – “May affect, not likely to adversely affect
- Stellar Sea Lion – “No effect”

IV. No Net Loss Statement

The goal of the proposed project is to achieve no net loss, per the City of Anacortes Shoreline Master Program – Restoration and Adaptive Management Element (4.8) and Washington State Legislature.

According to WAC 173-26-201(2)(c) – Environmental impact mitigation, the following criteria is required:

(i) To assure no net loss of shoreline ecological functions, master programs shall include provisions that require proposed individual uses and developments to analyze environmental impacts of the proposal and include measures to mitigate environmental impacts not otherwise avoided or mitigated by compliance with the master program and other applicable regulations. To the extent Washington's State Environmental Policy Act of 1971 (SEPA), chapter 43.21C RCW, is applicable, the analysis of such environmental impacts shall be conducted consistent with the rules implementing SEPA, which also address environmental impact mitigation in WAC 197-11-660 and define mitigation in WAC 197-11-768. Master programs shall indicate that, where required, mitigation measures shall be applied in the following sequence of steps listed in order of priority, with (e)(i)(A) of this subsection being top priority.

- (A) Avoiding the impact altogether by not taking a certain action or parts of an action;*
- (B) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;*
- (C) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;*
- (D) Reducing or eliminating the impact over time by preservation and maintenance operations;*
- (E) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and*
- (F) Monitoring the impact and the compensation projects and taking appropriate corrective measures.*

(ii) In determining appropriate mitigation measures applicable to shoreline development, lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

(C) An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents, tidal action, or waves.

- The replacement structure should be designed, located, sized, and constructed to assure no net loss of ecological functions.*
- Replacement walls or bulkheads shall not encroach waterward of the ordinary high-water mark or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.*
- Where a net loss of ecological functions associated with critical saltwater habitats would occur by leaving the existing structure, remove it as part of the replacement measure.*
- Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high-water mark.*
- For purposes of this section standards on shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.*

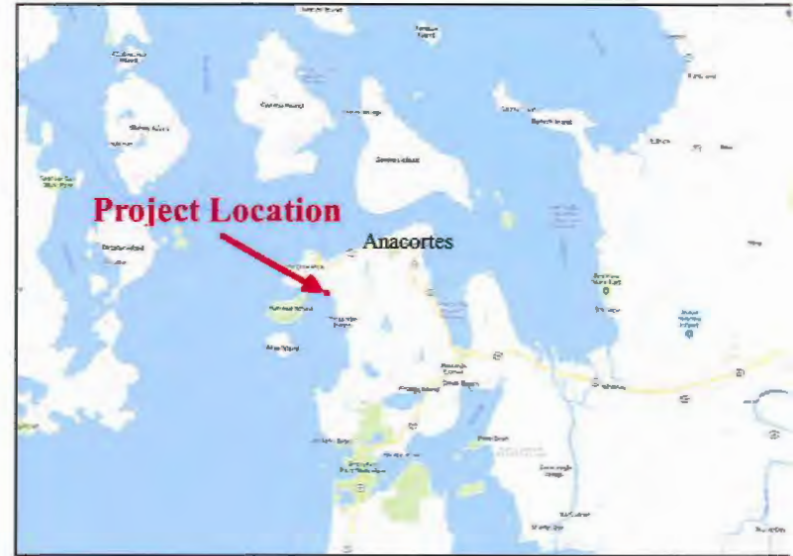
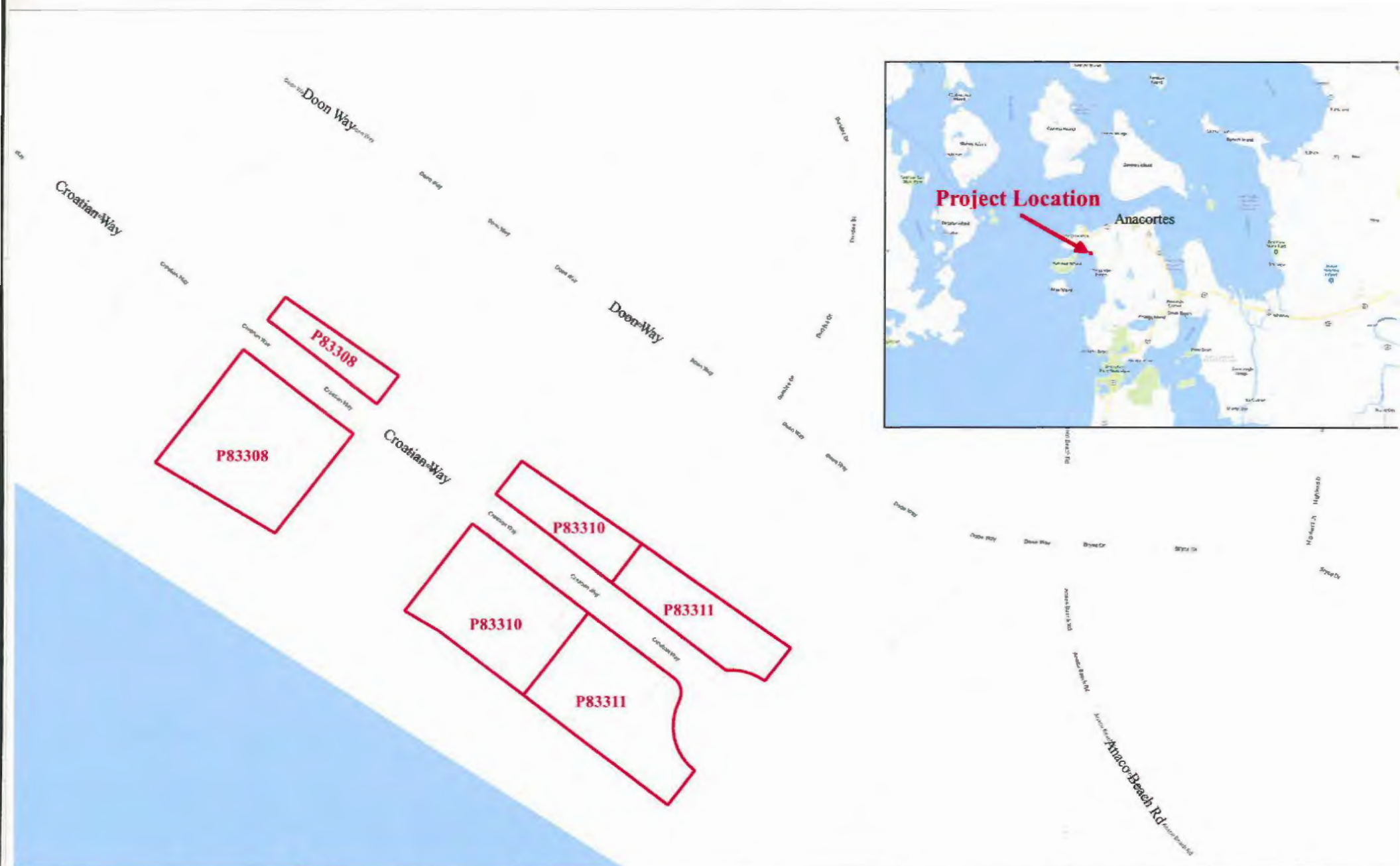
After correspondence between MSA and the City of Anacortes, the proposed project is considered a new structure and not a replacement. Because the proposed project is necessary to protect multiple existing single-family residences (occupied prior to January 1, 1992) from continued wave action, new structural stabilization measures fall within the SMP permissible criteria. Kevin Cricchio, Senior Planner with the City of Anacortes, confirmed that a professional engineer review (Figure 4B) is satisfactory to replace requirements for a geotechnical analysis (WAC 173-26-231(B)(I)). Beach nourishment will include ¾" river pebbles seaward of the bulkhead, which will taper 10 feet to the marine shore. Avoidance measures will be implemented where applicable and short-term impacts from demolition and construction will be minimized through the conservation measures included in Section 5.0. Considering the project scope within the existing footprint, urgency to address the failing bulkhead, potential impacts to ESA listed species critical habitat, proposed mitigation, and proposed conservation measures, no net loss is likely to occur from the proposed project.

V. References

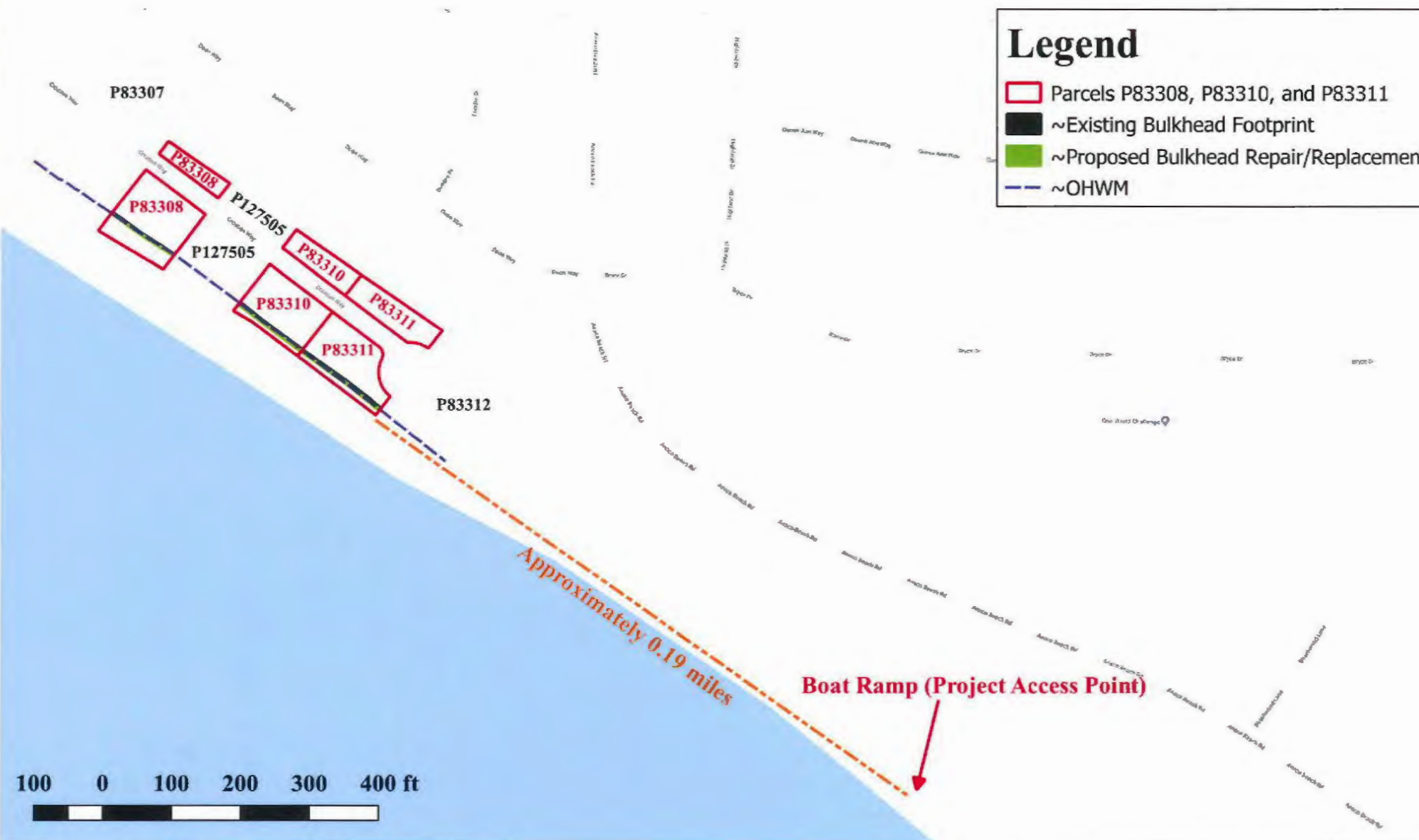
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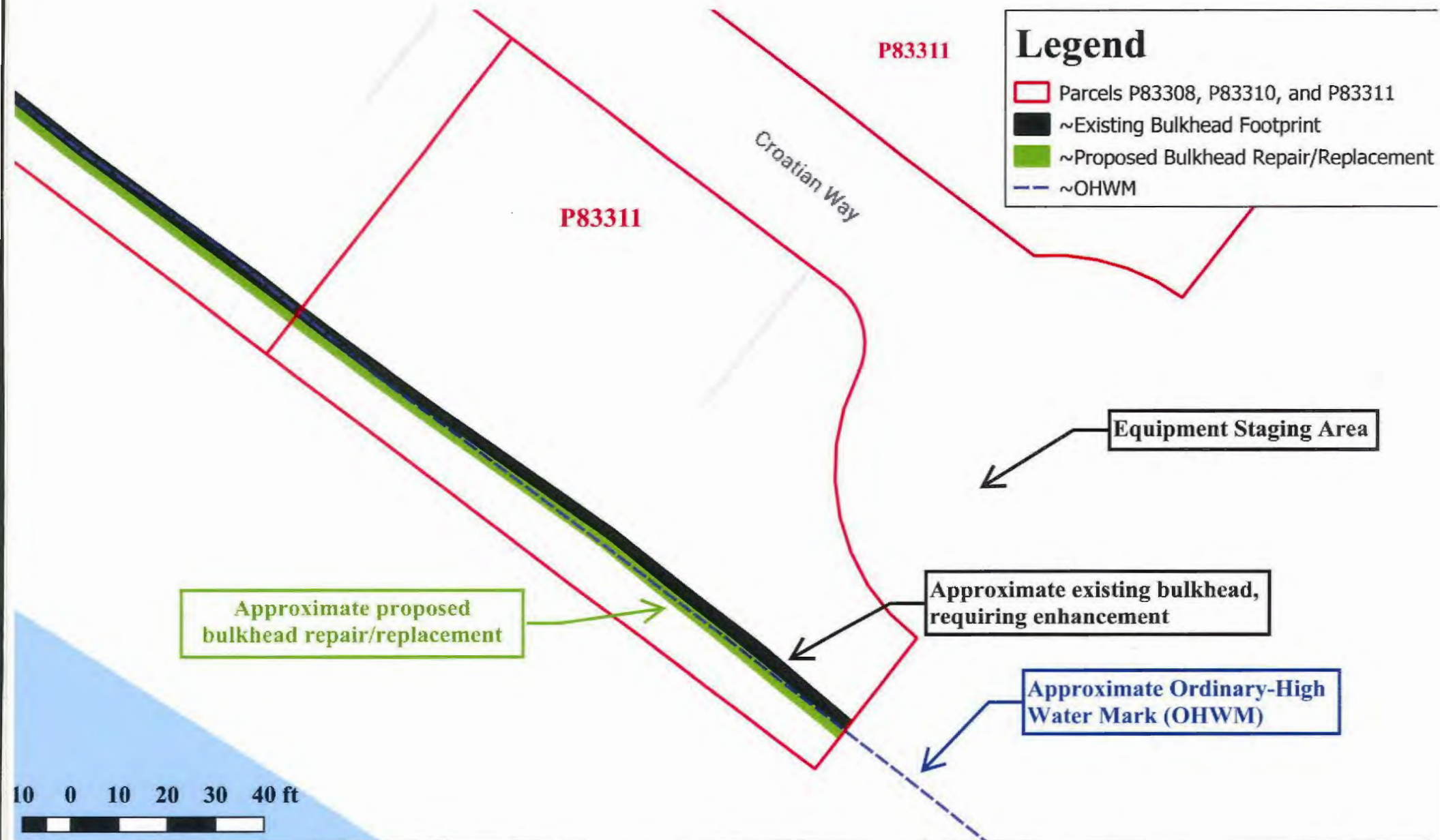
Figures



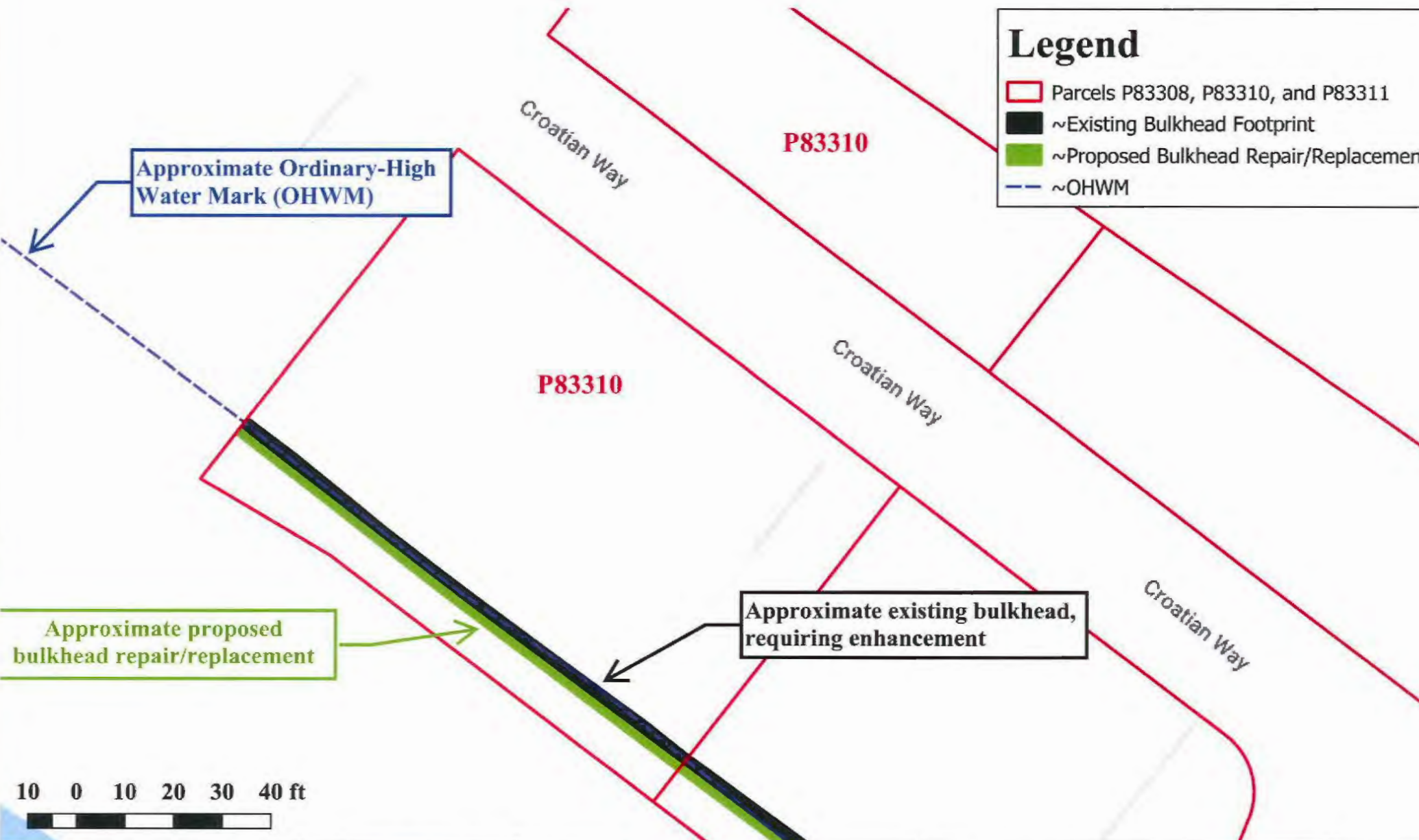
 Google. Imagery ©2019. Digital Globe U.S. Geological Survey		Vcinity Map	Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster	Figure 1
		4905, 4907, & 4911 Croatian Way Anacortes, WA 98221	Parcel Nos. P83308, P83310, and P83311 Drawn: 6/17/2019 SW Quarter Section: 27 Township: 35N Range: 01E Drawn By: PJR Checked By: MG	



		Site Plan - Overall		Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster	Figure 2A
		4905, 4907, & 4911 Croatian Way Anacortes, WA 98221		Parcel Nos. P83308, P83310, and P3311	
				Drawn: 6/17/2019	
				Drawn By: PJR	
				Checked By: MG	



 Google. Imagery ©2019. Digital Globe U.S. Geological Survey		Site Plan - Schutzler	Client: Jerome & Janice Schutzler	Figure 2B
		4905 Croatian Way Anacortes, WA 98221	Parcel No. P3311	
			Drawn: 6/17/2019	
			Drawn By: PJR	
			Checked By: MG	



Legend

- Parcels P83308, P83310, and P83311
- ~Existing Bulkhead Footprint
- ~Proposed Bulkhead Repair/Replacement
- ~OHWM

Legend

- Parcels P83308, P83310, and P83311
- ~Existing Bulkhead Footprint
- ~Proposed Bulkhead Repair/Replacement
- ~OHWM

Approximate Ordinary-High Water Mark (OHWM)

P83308

P83308

Approximate existing bulkhead, requiring enhancement

Approximate proposed bulkhead repair/replacement

10 0 10 20 30 40 ft

Google. Imagery ©2019.
Digital Globe U.S.
Geological Survey



Site Plan - Foster

4911 Croatian Way
Anacortes, WA 98221

Client: Thomas & Sally Foster

Parcel No. P3308

Drawn: 6/17/2019

Drawn By: PJR

Checked By: MG

Figure

2D

Figure 3. Former Site Plan

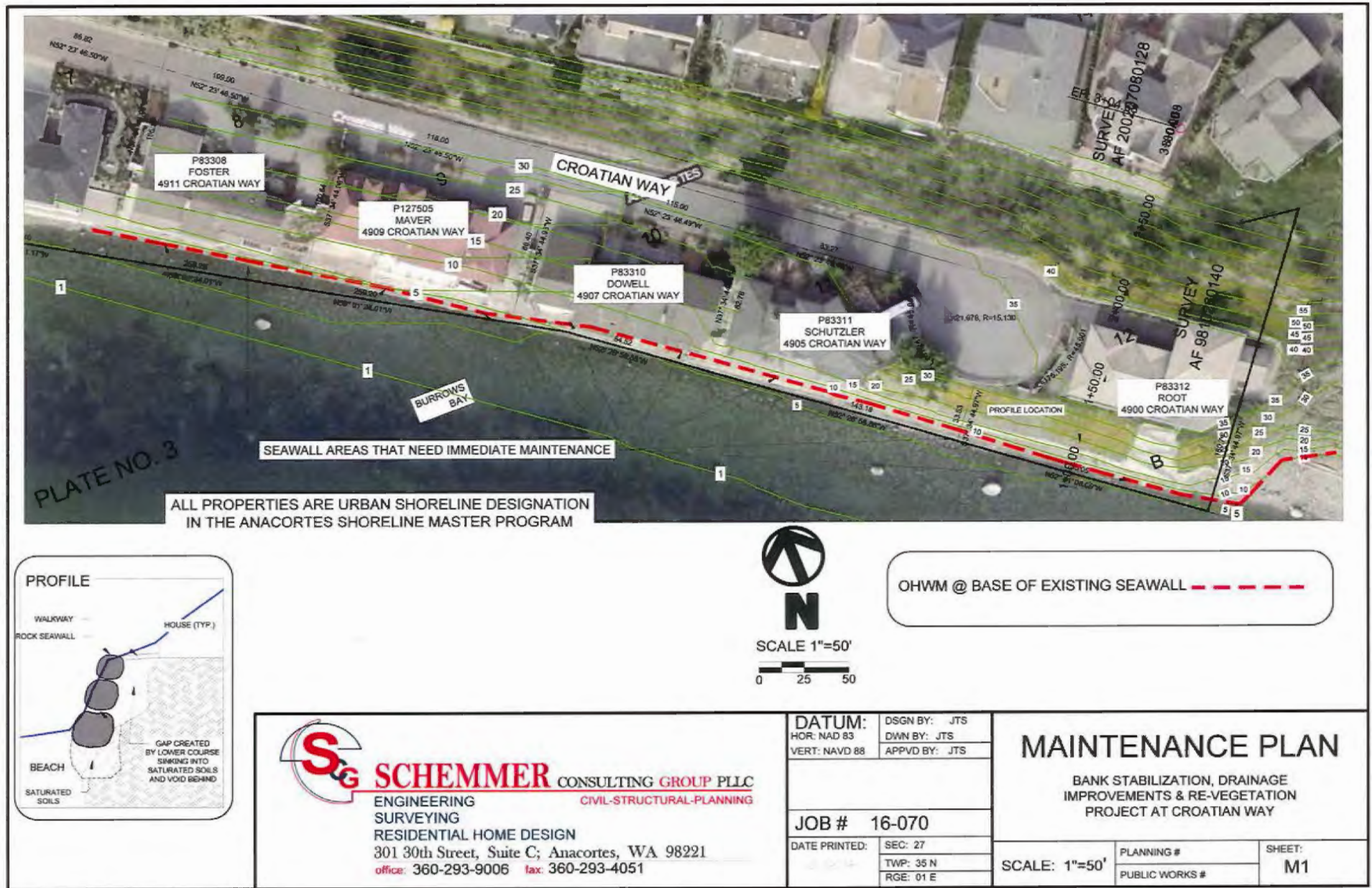


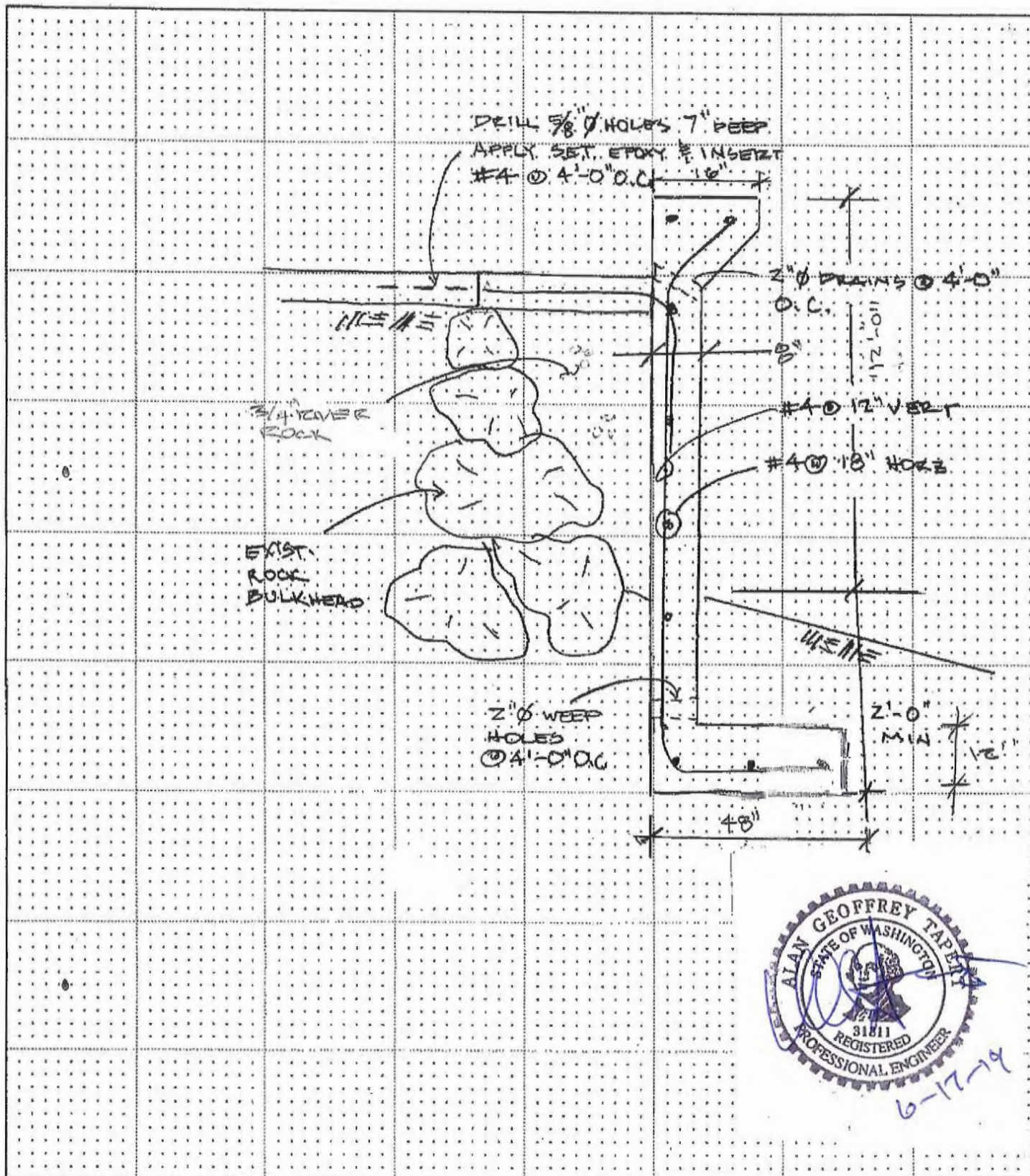
Figure 4A. Design Plan

X-SOUND

ENGINEERING, INC.

P.O. Box 1265
Freeland, WA 98249
(360) 331-3113 (O)
(360) 331-7114 (F)

JOB _____ NO. _____
BY AGT DATE _____
CONC. BULKHEAD



Cantilever Retaining Wall Calculations

© Geoff Tapert, P.E., 2004, All Rights Reserved

Design Assumptions

$f_c =$	3,000	psi
$f_y =$	60	ksi
Soil Bearing Capacity, $S =$	2,000	psf (Table 1804.2)
Equivalent Soil Pressure, $q =$	35	pcf
Soil Weight, $w =$	120	pcf
Sliding Coefficient, $\mu =$	0.35	(Table 1804.2)
Lateral Soil Bearing, $L_b =$	150	psf/ft (Table 1804.2)
Wall Width, $b =$	8	in
Design $d =$	6.0	in
Footing Depth, $T =$	12	in
Wall Height, $H =$	10.00	ft
Toe Width, $x =$	0	in
Design Heel Width, $y =$	48	in
Total Footing Width, $D =$	56	in
$F_1 = wyH$	4,800	lbs
$F_2 = (h^2/2)g/2 =$	1,750	lbs
$Ma(cw) =$	12,800	ft-lbs
$Ma(ccw) =$	5,833	ft-lbs

Overturning

$Ma(ccw)*1.5 F.S. =$	8,750	ft-lbs
$Ma(ccw) = Ma(cw)$		
$Ma(cw) = F_1(y/2+b)$		
$yo = 2((Ma(cw)/F_1)-b) =$	28	in

Sliding

Weight of Wall/ft, $F_w =$	1,700	lbs/ft
Weight of Soil above Heel, $F_1 =$	4,800	lbs/ft
Total Weight, $F_t =$	6,500	lbs/ft
Friction Resistance $= \mu F_t$	2,275	lbs
Buried Toe Depth, $T =$	12	in
$F_3 = T*L_b/(12*3) =$	50	lbs/ft
Total Sliding Resistance $=$	2325	lbs

Bearing Capacity

Min D per Soil Bearing Capacity		
$D = (F.S.)(F_1 + F_w)/S$	117	in

Seismic Lateral

Seismic Importance Factor, I	1.00	S_s	1.25
Seismic Use Group	I	S_1	0.5
Site Class	D	F_a	1.00
Response Modification Factor, R	3	(Table 9.5.2.2)	
$S_{MS} = F_a S_s =$	1.25		
$S_{OS} = (2/3)*S_{MS} =$	0.84		
$C_s = S_{OS}/(R/I) =$	0.26		
Seismic Base Shear, $V = C_s W$	1701	lbs/ft	< Total Sliding Resistance therefore OK

Reinforcement - Stem

$M_U = 1.4 Ma$	8,167	ft-lbs
$M_n = M_U/0.9$	9,074	ft-lbs

$$M_n = A_s f_y d - \frac{A_s^2 f_y^2}{1.7 f_c b}$$

$$A_s^2 - \frac{0.425 b f_c'}{f_y} + \frac{0.85 M_n f_c' b}{f_y^2} = 0$$

$$A_s = 0.329 \text{ sl/ft}$$

$$\rho_{min} = \frac{200}{f_y} \quad \rho_{min} = \frac{A_{s(min)}}{A_c} \quad A_{s(min)} = \rho_{min} A_c = \frac{200 A_c}{f_y} = \frac{200 b (12)}{f_y}$$

Area of Steel, A_s (sl/ft)

	6 in O.C.	8 in O.C.	10 in O.C.	12 in O.C.	14 in O.C.	16 in O.C.
# 4	0.393	0.294	0.236	0.196	0.168	0.147
# 5	0.613	0.460	0.368	0.307	0.263	0.230
# 6	0.883	0.662	0.530	0.442	0.378	0.331
# 7	1.202	0.902	0.721	0.601	0.515	0.451
# 8	1.570	1.178	0.942	0.785	0.673	0.589

Use # 5 bar at 10 in O.C. Vertical $A_s = 0.368$ sl/ft
Use # 5 bar at 12 in O.C. Horizontal

Project: Puget Sound Shoreline

By: AGT

Date: 6/17/19

10.00 foot wall

F.S.	
Overturning	2.19
Sliding	1.99
Bearing	1.44
Seismic	1.37

Min. Cover $=$	1.5	in
$d_{(avail)} =$	6.19	in

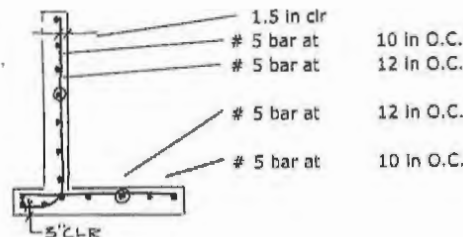
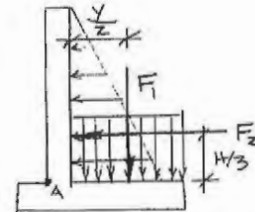
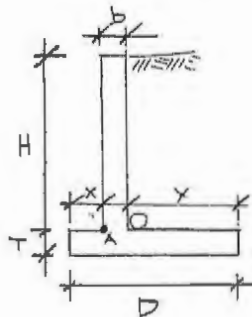


Figure 4B. Professional Engineer Review

The residences at 4905, 4907 and 4911 Croatian Way are currently protected from wave erosion by a rock wall with front surface mortar between adjoining rocks. A reinforced concrete toe approximately 18 x 18-inches in cross section is at the base of the rock wall. A concrete cap extends from the top of the rock wall to the residence's foundation.

Tidal and wave action at the base under the toe and wall has removed some of the backfill material from behind the wall leaving a void under the concrete cap. In the region of the void the wall has sagged resulting in a crack along the front face of the rock wall. Measurements of the void cavity behind the wall were performed and the results show two cavities extending shoreward from the face of the wall as far as 5-feet.

The failure mode in action is clearly erosion and removal of backfill by wave action from under the toe and wall. Inspection of the home's foundation and surrounding lot reveals no evidence of ground water intrusion from shoreward. Long-term stabilization of the property is obviously required to prevent loss of the property from continuing erosion.

Alternative armoring solutions were considered, including removal of the existing wall and replacement by a concrete bulkhead, sheet piles, or soft armoring. None of these concepts is feasible in view of the home's location relative to the shoreline and each would require significant construction along the beach.

Given the objective of providing long-term protection to the legally constructed and occupied property with minimal net change to the current effect on the ecology of the beach, a reinforced concrete bulk head with a base at least 2-feet below the beach level and placed immediately in front of the existing rock wall is not only the best, but the only feasible protection concept.

Removal of the existing 18 x 18-in. toe permits the exterior face of the bulkhead to be placed approximately 10-12-inches shoreward of the existing protection. This placement of the bulkhead assures that no water ward beach will be taken for the project. Additionally, soft armoring will be placed in front of the bulkhead to reduce sand drift compared to the current wall. The soft armoring will consist of river pebbles placed on the beach from the toe of the bulkhead water ward to ten feet. Large rocks will be placed at 20-foot intervals along the toe to stabilize the gravel.

There currently exist several bulkheads of identical construction to the proposed bulkhead within half a mile on either side of the property. These bulkheads were constructed up to 40 years ago and have experienced no failures in the same environment as the proposed project. The proposed project is clearly within the same geological zone as the existing bulkheads.

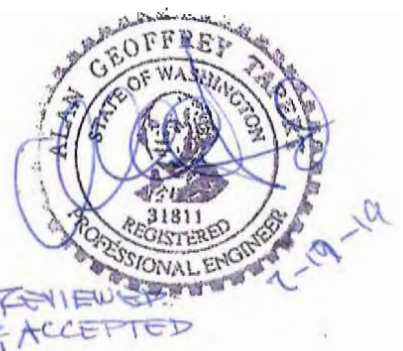


Figure 4C. Washington State Coastal Atlas Map - Drift Cells



July 18, 2019

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),



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Digital Globe U.S.
Geological Survey



Action Area

4905, 4907, & 4911
Croatian Way Anacortes, WA 98221

Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster

Parcel Nos. P83308, P83310, and P3311

Drawn: 6/17/2019

Drawn By: PJR

Checked By: MG

Figure

5

Figure 6. NWI Map



U.S. Fish and Wildlife Service

National Wetlands Inventory



July 16, 2019

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.

Figure 7. WDFW PHS Report



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPublic
REPORT DATE: 06/27/2019 11.45

Query ID: P190627114509

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Estuarine and Marine	N/A NWIWetlands	Aquatic Habitat Aquatic habitat http://www.ecy.wa.gov	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
Estuarine and Marine	N/A NWIWetlands	Aquatic Habitat Aquatic habitat http://www.ecy.wa.gov	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
Estuarine and Marine	N/A NWIWetlands	Aquatic Habitat Aquatic habitat http://www.ecy.wa.gov	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
Pacific Sand Lance Ammodytes hexapterus	Station Number: 1 Forage_Fish_Survey 12693 December 30, 1993	Breeding Area Breeding area	NA	N/A N/A PHS Listed Species	N AS MAPPED	WDFW Lines
Pacific Sand Lance Ammodytes hexapterus	Station Number: 1 Forage_Fish_Survey 8982 November 22, 1996	Breeding Area Breeding area	NA	N/A N/A PHS Listed Species	N AS MAPPED	WDFW Lines
Pandalid Shrimp	Not Given Shellfish_Summary	Presence Presence N/A	NA	N/A N/A PHS Listed	N AS MAPPED	WDFW Polygons
Pinto abalone Haliotis kamtschatkana	Shellfish_Summary	Presence Presence http://wdfw.wa.gov/publications/pub.php?	NA	N/A N/A PHS Listed	Y TOWNSHIP	WDFW Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Pinto abalone Haliotis kamtschatkana	Shellfish_Summary	Presence Presence http://wdfw.wa.gov/publications/pub.php?	NA	N/A N/A PHS Listed	Y TOWNSHIP	WDFW Polygons
Pinto abalone Haliotis kamtschatkana	Shellfish_Summary	Presence Presence http://wdfw.wa.gov/publications/pub.php?	NA	N/A N/A PHS Listed	Y TOWNSHIP	WDFW Polygons
Pinto abalone Haliotis kamtschatkana	Shellfish_Summary	Presence Presence http://wdfw.wa.gov/publications/pub.php?	NA	N/A N/A PHS Listed	Y TOWNSHIP	WDFW Polygons
Surf Smelt Hypomesus pretiosus	Station Number: 17 Forage_Fish_Survey 31244 August 08, 2016	Breeding Area Breeding area	NA	N/A N/A PHS Listed Species	N AS MAPPED	WDFW Lines
Yuma myotis Myotis yumanensis	WS_OccurPoint 144042 August 25, 2017	Breeding Area Biotic detection http://wdfw.wa.gov/publications/pub.php?	GPS	N/A N/A PHS LISTED	Y TOWNSHIP	WA Dept. of Fish and Wildlife Points

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

WDFW Test Map



June 27, 2019

- | | | |
|--|---|--|
|  PHS Report Clip Area |  POLY |  QTR-TWP |
|  PT |  AS MAPPED |  TOWNSHIP |
|  LN |  SECTION | |

1:19,842

0 0.15 0.3 0.6 mi
0 0.275 0.55 1.1 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

 Parcels P83308, P83310, and P83311

Shorezone Vegetation

 Eelgrass - Continuous

 Kelp - Patchy

 Surfgrass - Absent

 Salt Marsh - Absent

50 0 50 100 150 200 ft



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Digital Globe U.S.
Geological Survey



WDNR Shoreline Vegetation

4905, 4907, & 4911
Croatian Way Anacortes, WA 98221

Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster

Parcel Nos. P83308, P83310, and P3311

Drawn: 6/17/2019

Drawn By: PJR

Checked By: MG

Figure

8



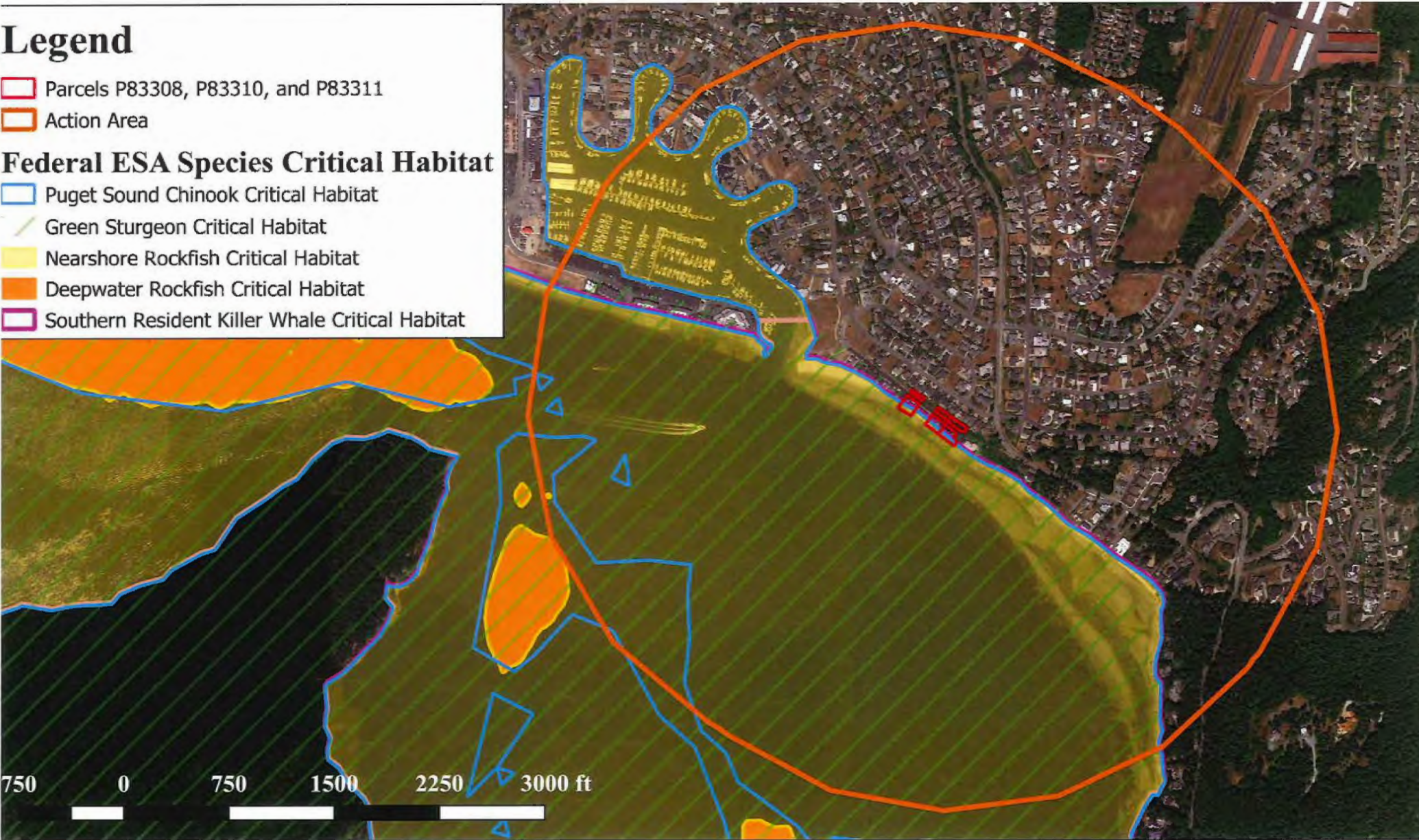
 N	Google. Imagery ©2019. Digital Globe U.S. Geological Survey		Forage Fish Spawning		Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster	Figure 9
			4905, 4907, & 4911 Croatian Way Anacortes, WA 98221		Parcel Nos. P83308, P83310, and P3311	
					Drawn: 6/17/2019	
					Drawn By: PJR	
					Checked By: MG	

Legend

- Parcels P83308, P83310, and P83311
- Action Area

Federal ESA Species Critical Habitat

- Puget Sound Chinook Critical Habitat
- Green Sturgeon Critical Habitat
- Nearshore Rockfish Critical Habitat
- Deepwater Rockfish Critical Habitat
- Southern Resident Killer Whale Critical Habitat



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Digital Globe U.S.
Geological Survey



Federal ESA Species Critical Habitat

4905, 4907, & 4911
Croatian Way Anacortes, WA 98221

Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster
Parcel Nos. P83308, P83310, and P3311
Drawn: 6/17/2019
Drawn By: PJR
Checked By: MG

Figure
10

Figure 11. Water Quality Atlas



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and

Listing ID: 65616**Main Listing Information**

Listing ID: 65616	2014 Category: 2
Waterbody Name: STRAIT OF GEORGIA	2012 Category: 2
Medium: Water	2008 Category: 3
Parameter: Temperature	2004 Category: 3
WQI Project: None Assigned	On 1998 303(d) List?: N
Designated Use: None Assigned	On 1996 303(d) List?: N

Assessment Unit**Assessment Unit ID:** 48122E6J7**Location Identification**

Counties: Skagit	WRIA: 3 - Lower Skagit-Samish
Waterbody ID (WBID): None Assigned	Waterbody Class: None Assigned
Town/Range/Section (Legacy): None Assigned	

Basis

Location ID [Skyline-outer] -- In 2007, 0 out of 3 (0%) samples did not show any excursions beyond the criterion of 13 degrees Celsius. Location ID [Skyline-outer] -- In 2006, 1 out of 3 (33%) samples showed an excursion beyond the criterion of 13 degrees Celsius.

Remarks

Remark	Modified By	Modified On	Visibility
This listing was reviewed by Department of Ecology Environmental Assessment Program staff, who concluded that the excursions in this waterbody cannot be attributed solely to natural conditions or human influences without further study. This listing will remain on Category 2 until a review of long-term influences on temperature by human activity is conducted for this waterbody.	Julia Bos	1/5/2011	Public

EIM**User Study ID:**

AJOH0051

User Location ID:

Skyline-outer

Listing ID: 64707**Main Listing Information**

Listing ID: 64707	2014 Category: 5
Waterbody Name: ROSARIO STRAIT	2012 Category: 5
Medium: Water	2008 Category: 3
Parameter: Copper	2004 Category: 3
WQI Project: None Assigned	On 1998 303(d) List?: N
Designated Use: None Assigned	On 1996 303(d) List?: N

Assessment Unit**Assessment Unit ID:** 48122E6J8**Location Identification**

Counties: Skagit	WRIA: 3 - Lower Skagit-Samish
Waterbody ID (WBID): None Assigned	Waterbody Class: None Assigned
Town/Range/Section (Legacy): None Assigned	

Basis

Location ID [Skyline-inner] -- In 2006, 3 of 3 sample events exceeded the criterion for copper.

Location ID [Skyline-inner] -- In 2007, 2 of 2 sample events exceeded the criterion for copper.

Remarks

No Remarks Entered

EIM**User Study ID:**

AJOH0051

User Location ID:

Skyline-inner

Appendices and Attachments

Appendix A. Habitat Reports

360-385-4073
msa@marinesurveysandassessments.com



380 Jefferson Street
Port Townsend WA 98368

Schutzler- Dowell Bulkhead Habitat Report

An intertidal survey was performed on June 10th, 2019 (72°F, clear and calm) from approximately 2:30 pm to 5:30 pm at the project site located at 4905 and 4907 Croatian Way, Anacortes, WA 98221. Meg Amos from Marine Surveys & Assessments surveyed 13 transects in the area of a proposed emergency bulkhead replacement to identify flora, fauna, substrate types and other qualitative information.

The survey transect baseline was along the MHHW mark at the bulkhead that runs the shoreline at the site. Thirteen transects were surveyed from the baseline and transects were oriented perpendicular to the bulkhead. Transects were each 100 ft long and were arranged from northwest to southeast, or when looking at the water from shore, from right to left (T1 to T13). Transects were separated from each other by 25 ft.

Substrate at the site is mostly sand and large rock, with pea gravel and sand along the upper-intertidal zone along the bulkhead. Areas of macroalgae cover included *Ulva* 2-90%, *Fucus* 2-40%, *Mastocarpus* 2-10%, and foliose reds 2-50%.

An eelgrass bed (*Zostera marina*) was observed at the site approximately 50-100 feet offshore in the northwest portion of the surveyed area.

Transect 1 – Dowell Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand & pea gravel	----
8	Sand and rock; concrete debris: 31"x16"; 41"x12"; 30"x16"	----
10	Sand and rock	----
20	Sand and rock	----
30	Sand and rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
37	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
40	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.

Transect 1 – Dowell Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
50	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
53	Sand and rock	<i>Z. marina</i> , Begin Band/bed running W/E.
56	Sand and rock	<i>Z. marina</i> present.
60	Sand and rock	<i>Z. marina</i> present.
70	Sand and rock	<i>Z. marina</i> present.
80	Sand and rock	<i>Z. marina</i> present.
90	Sand and rock	<i>Z. marina</i> present.
95	Sand and rock	<i>Z. marina</i> , End band/bed running W/E.
100	Sand	----

Transect 2 – Dowell Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand, scattered large rock; Dowell west property line	----
3	Sand, pea gravel, rock	----
11	Sand, pea gravel, rock	----
24	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
30	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
40	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
50	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
56	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. <i>Z. marina</i> , Begin band/bed running W/E.
60	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. <i>Z. marina</i> present.
70	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. <i>Z. marina</i> present.

Transect 2 – Dowell Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
80	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. <i>Z. marina</i> present.
90	Sand, pea gravel, rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. <i>Z. marina</i> present.
94	Sand	<i>Ulva</i> 5%; <i>Fucus</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. <i>Z. marina</i> , End band/bed running W/E.
100	Sand	----

Transect 3 – Dowell Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand	----
5	Sand and rock	----
10	Sand and rock	----
20	Sand and rock	----
30	Sand and rock	----
31	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
40	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
50	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. <i>Z. marina</i> , Begin band/bed running W/E.
54	Sand and rock	<i>Z. marina</i> present.
60	Sand and rock	<i>Z. marina</i> present.
70	Sand and rock	<i>Z. marina</i> present.
80	Sand and rock	<i>Z. marina</i> present.
90	Sand and rock	<i>Z. marina</i> , End band/bed running W/E.
100	Sand	----

Transect 4 – Dowell site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand	----
4	Sand & pea gravel	----
8	Sand and rock	----
10	Sand and rock	----
20	Sand and rock	----
26	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
30	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
40	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
46	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
50	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
56	Sand and rock	----
60	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
62	Sand w/some rock	<i>Ulva</i> 5%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. <i>Z. marina</i> , Begin band/bed running W/E.
70	Sand w/some rock	<i>Ulva</i> 5%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. <i>Z. marina</i> , band/bed .
80	Sand w/some rock	<i>Ulva</i> 5%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. <i>Z. marina</i> , band/bed .
89	Sand w/some rock	<i>Ulva</i> 5%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. <i>Z. marina</i> , End band/bed running W/E.
89	Sand; Elevation rise - sand bar	----
90	Sand	----
100	Sand	----

Transect 5 – Dowell Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand	----
7	Sand & pea gravel; concrete debris: 11.5'x19"; 6'x1.5'; 4'x1'	----
10	Sand and rock	----
20	Sand and rock	----
22	Sand and rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 5%. No eelgrass.
30	Sand and rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 5%. No eelgrass.
40	Sand and rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 5%. No eelgrass.
50	Sand and rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 5%. No eelgrass.
56	Sand and rock	----
60	Sand and rock	<i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
61	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
70	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
80	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
88	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
90	Sand and rock	----
95	Sand and rock	<i>Z. marina</i> , a few shoots.
100	Sand; bare sand to the south	----

Transect 6 – Dowell Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand	----
7	Sand & pea gravel	----
10	Sand & pea gravel	----
11	Sand and rock	----
20	Sand and rock	----

Transect 6 – Dowell Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
28	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
30	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
40	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
50	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
58	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
60	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
70	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
80	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
90	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
94	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
96	Sand and rock	<i>Z. marina</i> , Begin band/bed running W/E.
97	Sand	----
100	Sand	----
102	Sand	<i>Z. marina</i> , End band/bed running W/E.

Transect 7 – Schutzler Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand & pea gravel	----
8	Sand & pea gravel	----
10	Sand and rock	----

Transect 7 – Schutzler Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
20	Sand and rock	----
30	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
40	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
50	Sand and rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 5%. No eelgrass.
59	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
60	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
70	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
80	Sand and rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 50%. No eelgrass.
85	Sand and rock	<i>Z. marina</i> , Begin band/bed running W/E.
90	Sand and rock	<i>Z. marina</i> , Begin band/bed running W/E.
97	Sand and rock	<i>Z. marina</i> , End band/bed running W/E.
100	Sand	----

Transect 8 – Schutzler Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand/gravel/rock	----
10	Sand/gravel/rock	----
20	Sand/gravel/rock	----
30	Sand/gravel/rock	----
37	Sand/gravel/rock	<i>Mastocarpus</i> 2%. No eelgrass.
40	Sand/gravel/rock	<i>Mastocarpus</i> 2%. No eelgrass.
50	Sand/gravel/rock	----

Transect 8 – Schutzler Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
59	Sand/gravel/rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
60	Sand/gravel/rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
70	Sand/gravel/rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. <i>Z. marina</i> , 12 sf to W of transect.
80	Sand/gravel/rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
82	Sand w/some rock	<i>Ulva</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 10%. No eelgrass.
90	Sand w/some rock	<i>Ulva</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 10%. No eelgrass.
100	Sand w/some rock	<i>Ulva</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 10%. No eelgrass.

Transect 9 – Schutzler Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand/gravel/rock	----
10	Sand/gravel/rock; 48" by 19" concrete debris	----
20	Sand/gravel/rock	----
30	Sand/gravel/rock	----
40	Sand/gravel/rock	<i>Ulva</i> 40%; <i>Mastocarpus</i> 2%; foliose reds 2%. No eelgrass.
46	Sand and rock	<i>Ulva</i> 2%; <i>Mastocarpus</i> 5%. No eelgrass.
50	Sand and rock	<i>Ulva</i> 2%; <i>Mastocarpus</i> 5%. No eelgrass.
60	Sand and rock	<i>Ulva</i> 2%; <i>Mastocarpus</i> 5%. No eelgrass.
63	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.

Transect 9 – Schutzler Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
70	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
80	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
90	Sand and rock	<i>Ulva</i> 40%; <i>Fucus</i> 40%; foliose reds 20%. No eelgrass.
96	Sand and rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; foliose reds 5%. No eelgrass.
100	Sand and rock	<i>Ulva</i> 5%; <i>Fucus</i> 5%; foliose reds 5%. No eelgrass.
102	Sand	<i>Z. marina</i> , Begin bed.

Transect 10 – Schutzler Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand & pea gravel	----
10	Large rock on sand	----
20	Large rock on sand	----
30	Large rock on sand	----
40	Large rock on sand	<i>Ulva</i> 10%; <i>Mastocarpus</i> 10%. No eelgrass.
50	Large rock on sand	<i>Ulva</i> 10%; <i>Mastocarpus</i> 10%. No eelgrass.
60	Large rock on sand	<i>Ulva</i> 10%; <i>Mastocarpus</i> 10%. No eelgrass.
67	Large rock on sand	<i>Ulva</i> 80%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
70	Large rock on sand	<i>Ulva</i> 80%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
80	Large rock on sand	<i>Ulva</i> 80%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
90	Large rock on sand	<i>Ulva</i> 80%; <i>Fucus</i> 40%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
93	Large rock on sand	<i>Ulva</i> 2%; <i>Fucus</i> 40%. No eelgrass.

Transect 10 – Schutzler Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
98	Sandy	<i>Ulva</i> 2%. <i>Z. marina</i> , ~10 wide running E/W.
100	Sandy	<i>Ulva</i> 2%. <i>Z. marina</i> , ~10 wide running E/W.

Transect 11 – Schutzler Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand & pea gravel	----
10	Sand and rock	----
20	Sand and rock	----
30	Sand and rock	<i>Ulva</i> 90%; foliose reds 5%. No eelgrass.
40	Sand and rock	<i>Ulva</i> 90%; foliose reds 5%. No eelgrass.
50	Sand and rock	<i>Ulva</i> 90%; foliose reds 5%. No eelgrass.
60	Sand and rock	<i>Ulva</i> 90%; foliose reds 5%. No eelgrass.
65	Sand and rock	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
70	Sand and rock	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
73	Sand and rock	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
80	Sand and rock	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
90	Sand and rock	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
100	Sand and rock	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
102	Sandy; Eelgrass begins past transect end	----

Transect 12 – Schutzler Site

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand & pea gravel	----
5	Large rock on sand	----
10	Large rock on sand	----
22	Large rock on sand	<i>Ulva</i> 5%. No eelgrass.
30	Large rock on sand	<i>Ulva</i> 5%. No eelgrass.
40	Large rock on sand	<i>Ulva</i> 5%. No eelgrass.
50	Large rock on sand	<i>Ulva</i> 5%. No eelgrass.
60	Large rock on sand	<i>Ulva</i> 5%. No eelgrass.
61	Large rock on sand	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
70	Large rock on sand	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
80	Large rock on sand	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
89	Large rock on sand	<i>Ulva</i> 80%; <i>Mastocarpus</i> 5%; foliose reds 20%. No eelgrass.
90	Mostly sand	<i>Ulva</i> 60%; <i>Fucus</i> 30%; <i>Mastocarpus</i> 10%; foliose reds 30%. No eelgrass.
100	Mostly sand	<i>Ulva</i> 60%; <i>Fucus</i> 30%; <i>Mastocarpus</i> 10%; foliose reds 30%. No eelgrass.

Transect 13 – Schutzler Site

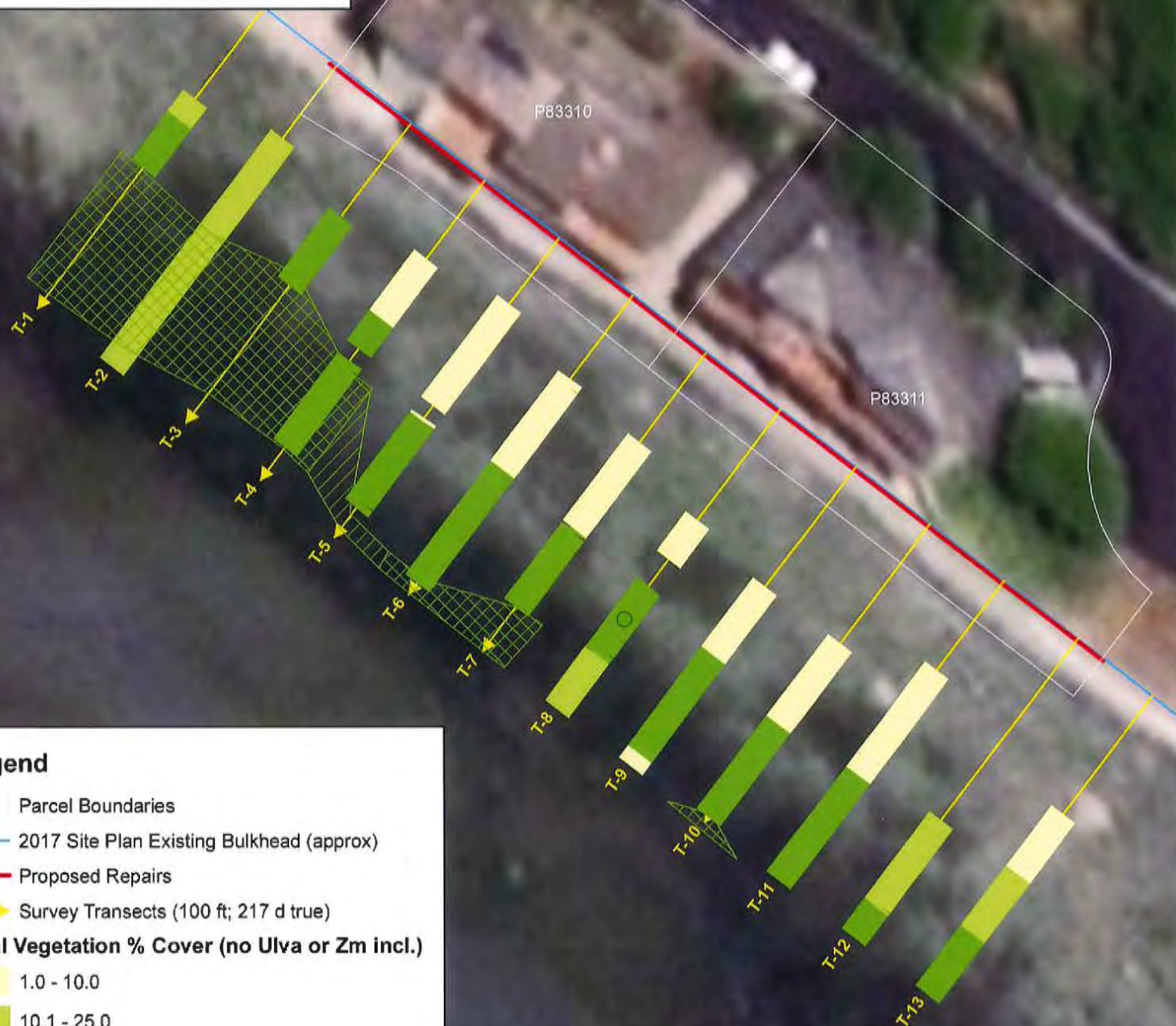
Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	Sand & pea gravel; bulkhead	----
12	Large rock; Concrete debris: 10"x18"; 11"x13"	----
20	Large rock	----
30	Large rock	----
40	Large rock	<i>Ulva</i> 2%; <i>Fucus</i> 2%; foliose reds 2%. No eelgrass.
50	Large rock	<i>Ulva</i> 2%; <i>Fucus</i> 2%; foliose reds 2%. No eelgrass.

Transect 13 – Schutzler Site (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
60	Large rock	<i>Ulva</i> 20%; <i>Fucus</i> 2%; <i>Mastocarpus</i> 5%; foliose reds 10%. No eelgrass.
70	Large rock	<i>Ulva</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 10%. No eelgrass.
80	Large rock on sand; barnacles	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
84	Large rock on sand	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
90	Large rock on sand	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 40%. No eelgrass.
100	Large rock on sand	----

**Schutzler / Dowell
Bulkhead Repair
4905-4907 Croatian Way,
Anacortes, WA
Survey Results**

Survey Date: 6/10/2019
Map Date: 7/18/2019



Legend

- Parcel Boundaries
- 2017 Site Plan Existing Bulkhead (approx)
- Proposed Repairs
- Survey Transects (100 ft; 217 d true)

Total Vegetation % Cover (no Ulva or Zm incl.)

- 1.0 - 10.0
- 10.1 - 25.0
- 25.1 - 75.0
- 75.1 - 85.0

Z. marina Beds

- Z. marina bed
- Z. marina bed (sparse, patchy)

Z. marina patches

- Small Z. marina patch (< 50 sq ft)



0 50 100 200 300 Feet

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Foster Bulkhead Habitat Report

An intertidal survey was performed on July 9th, 2019 (65°F, overcast and calm) at the project site located at 4911 Croatian Way, Anacortes, WA 98221. Meg Amos from Marine Surveys & Assessments surveyed 7 transects in the area of a proposed emergency bulkhead replacement to identify flora, fauna, substrate types and other qualitative information.

The survey transect baseline was along the MHHW mark at the bulkhead that runs the shoreline at the site. Seven transects were surveyed from the baseline and transects were oriented perpendicular to the bulkhead. Transects were each 100 ft long and were arranged from northwest to southeast, or when looking at the water from shore, from right to left (T1 to T7). Transects were separated from each other by 25 ft.

Substrate at the site is mostly sand and cobble or large rock. Areas of macroalgae cover included *Ulva* 2-90%, *Fucus* 2-40%, *Mastocarpus* 2-10%, and foliose reds 2-60%.

An eelgrass bed (*Zostera marina*) was observed along three of the transects at the site approximately 50-80 feet offshore, with a few small patches elsewhere.

Transect 1

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	sand/cobble/rock; At bulkhead	----
10	sand/cobble/rock	----
20	sand/cobble/rock	----
30	sand/cobble/rock	<i>Mastocarpus</i> 10%. No eelgrass.
38	sand/cobble/rock	<i>Ulva</i> 20%; <i>Fucus</i> 15%. No eelgrass.
44	sand/cobble/rock	<i>Ulva</i> 20%; <i>Fucus</i> 15%. No eelgrass.
50	sand/cobble/rock	<i>Ulva</i> 20%; <i>Fucus</i> 15%. No eelgrass.
60	sand	----
63	sand	<i>Ulva</i> 5%; <i>Fucus</i> 5%. No eelgrass.

Transect 1 (Continued)

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
70	sand	<i>Ulva</i> 5%; <i>Fucus</i> 5%. No eelgrass.
80	sand large rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 60%. No eelgrass.
90	sand large rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 60%. No eelgrass.
100	sand large rock	<i>Ulva</i> 40%; <i>Fucus</i> 20%; <i>Mastocarpus</i> 5%; foliose reds 60%. No eelgrass.

Transect 2

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	sand large rock; Oyster catchers	----
10	sand large rock	----
20	sand large rock	----
30	sand large rock	<i>Mastocarpus</i> 10%. No eelgrass.
35	sand large rock	----
40	sand large rock	<i>Mastocarpus</i> 10%. No eelgrass.
42	sand large rock	<i>Ulva</i> 30%; <i>Fucus</i> 10%. No eelgrass.
50	sand large rock	<i>Ulva</i> 70%; <i>Fucus</i> 20%; foliose reds 20%. No eelgrass.
60	sand large rock	<i>Ulva</i> 70%; <i>Fucus</i> 20%; foliose reds 20%. No eelgrass.
63	sand/boulder	<i>Fucus</i> 30%. <i>Z. marina</i> , 8 sf.
70	sand/boulder	<i>Fucus</i> 30%. No eelgrass.
82	sand	----
83	sand	<i>Z. marina</i> , 50 sf.
90	sand	<i>Z. marina</i> , Begin bed, 50 sf.
100	sand	<i>Z. marina</i> , Bed extends beyond 100'.

Transect 3

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	sand large rock	----
10	sand large rock	----
20	sand large rock	----
30	sand large rock	----
31	sand large rock	----
33	sand large rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 10%. No eelgrass.
40	sand large rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 10%. No eelgrass.
50	sand large rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 10%. No eelgrass.
60	sand large rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 10%. No eelgrass.
70	sand large rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 10%. No eelgrass.
80	sand large rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 10%. No eelgrass.
90	sand large rock	<i>Fucus</i> 5%; <i>Mastocarpus</i> 10%. No eelgrass.
97	sand large rock	<i>Ulva</i> 70%; <i>Fucus</i> 30%; foliose reds 10%. No eelgrass.
100	sand large rock	<i>Ulva</i> 70%; <i>Fucus</i> 30%; foliose reds 10%. No eelgrass.

Transect 4

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	sand large rock	----
10	sand large rock	----
20	sand large rock	----
25	sand large rock	----
30	sand large rock	----
38	sand	----
50	sand	----
61	sand	<i>Z. marina</i> , small patch ~2 sf.
71	boulders	<i>Fucus</i> 10%. No eelgrass.

Transect 5

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	sand/cobble/rock	----
11	sand/cobble/rock	----
20	sand large rock	----
27	sand large rock	----
29	sand large rock	----
30	sand large rock	----
45	sand large rock	<i>Ulva</i> 10%; foliose reds 10%. No eelgrass.
50	sand large rock	<i>Ulva</i> 10%; foliose reds 10%. No eelgrass.
56	sand large rock	<i>Ulva</i> 40%; <i>Fucus</i> 10%. No eelgrass.
60	sand large rock	<i>Ulva</i> 40%; <i>Fucus</i> 10%. No eelgrass.
70	sand	<i>Z. marina</i> , begin bed.
80	sand	<i>Z. marina</i> , bed extends beyond 80 feet.
90	sand; visual only from 80'	----
100	sand	----

Transect 6

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	sand & rock	----
8	sand/cobble/large rock	----
10	sand/cobble/large rock	----
20	sand/cobble/large rock	----
30	sand/cobble/large rock	----
40	sand/cobble/large rock	<i>Ulva</i> 5%; <i>Mastocarpus</i> 5%; foliose reds 10%. No eelgrass.
48	sand/cobble/large rock	<i>Ulva</i> 30%; <i>Mastocarpus</i> 5%; foliose reds 10%. No eelgrass.
50	sand/cobble/large rock	<i>Ulva</i> 30%; foliose reds 20%. No eelgrass.
58	sand	Foliose reds 20%. No eelgrass.
59	sand & rock	<i>Ulva</i> 30%; <i>Fucus</i> 10%. <i>Z. marina</i> , 0.05 sq ft patch.
60	sand & rock	<i>Ulva</i> 30%; <i>Fucus</i> 10%. <i>Z. marina</i> , 0.05 sq ft patch.

Transect 6 (Continued)

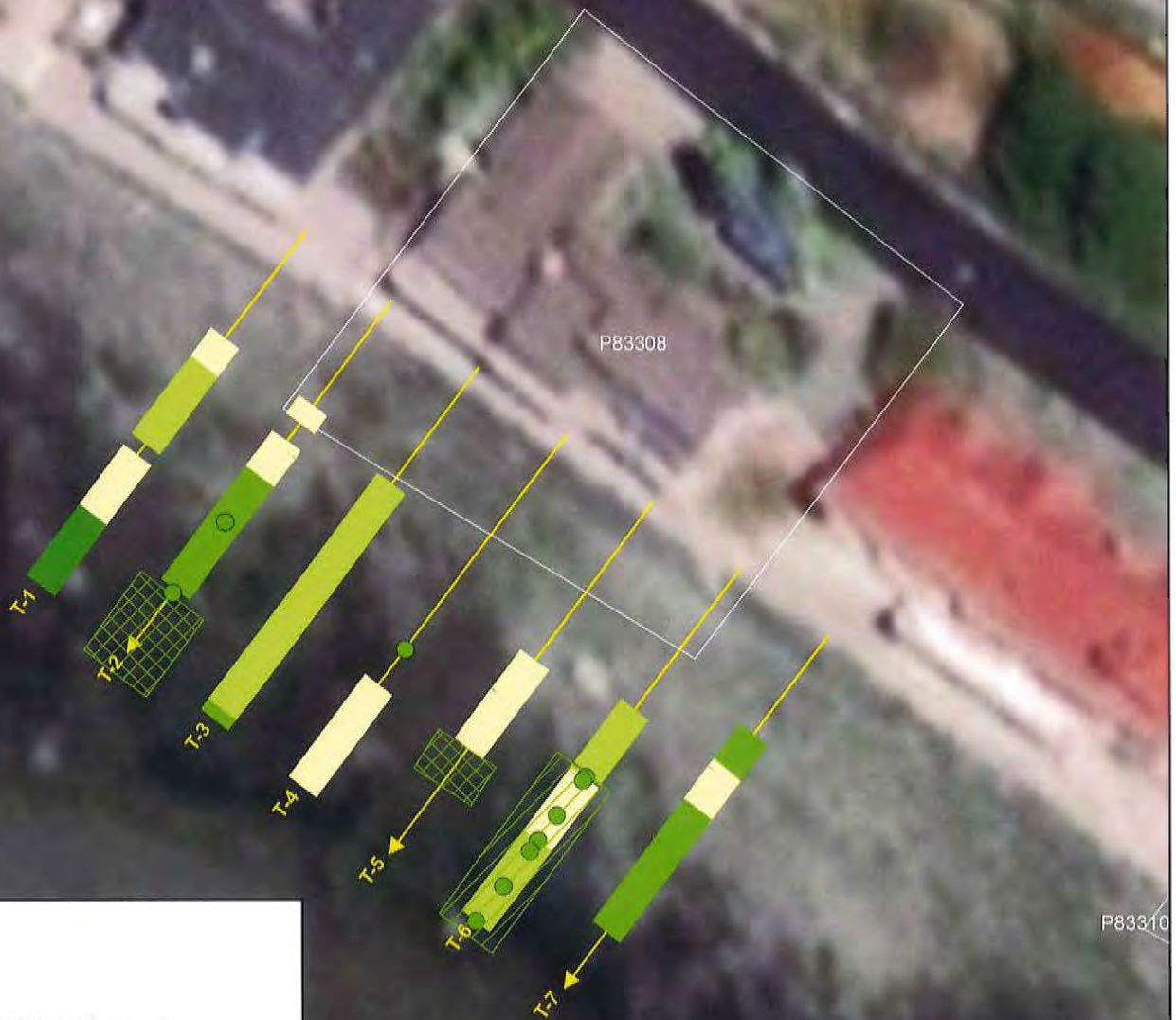
Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
70	sand & rock	<i>Ulva</i> 30%; <i>Fucus</i> 10%. <i>Z. marina</i> , 0.05 sq ft patch.
77	sand & rock	<i>Ulva</i> 30%; <i>Fucus</i> 20%. <i>Z. marina</i> , 0.05 sq ft patch.
80	sand & rock	<i>Ulva</i> 30%; <i>Fucus</i> 20%. <i>Z. marina</i> , 0.05 sq ft patch.
90	sand & rock	<i>Ulva</i> 30%; <i>Fucus</i> 20%. <i>Z. marina</i> , 0.05 sq ft patch.
100	sand & rock	<i>Fucus</i> 20%. <i>Z. marina</i> , 0.05 sq ft patch.

Transect 7

Transect Distance (ft) from baseline	Substrate and Other Features	Macroalgae % Cover & Eelgrass Presence
0	sand	----
7	pea gravel rock	----
14	rock	----
20	rock	----
28	rock	<i>Mastocarpus</i> 5%; foliose reds 30%. No eelgrass.
30	rock	<i>Mastocarpus</i> 5%; foliose reds 30%. No eelgrass.
32	rock	<i>Mastocarpus</i> 5%; foliose reds 30%. No eelgrass.
38	rock	<i>Fucus</i> 10%. No eelgrass.
40	rock	<i>Fucus</i> 10%. No eelgrass.
49	rock	<i>Ulva</i> 5%; <i>Fucus</i> 40%; foliose reds 20%. No eelgrass.
50	rock	<i>Fucus</i> 40%; foliose reds 20%. No eelgrass.
60	rock	<i>Fucus</i> 40%; foliose reds 20%. No eelgrass.
62	large rock	<i>Ulva</i> 30%; <i>Fucus</i> 20%; foliose reds 10%. No eelgrass.
70	large rock	<i>Ulva</i> 30%; <i>Fucus</i> 20%; foliose reds 10%. No eelgrass.
80	large rock	<i>Ulva</i> 30%; <i>Fucus</i> 20%; foliose reds 10%. No eelgrass.
84	sand & rock	<i>Z. marina</i> , Start patchy bed.
90	sand & rock	<i>Z. marina</i> present.
100	sand & rock	<i>Z. marina</i> , patchy bed continues.

**Foster
Bulkhead Repair
4911 Croatian Way,
Anacortes, WA
Survey Results**

Survey Date: 7/9/2019
Map Date: 7/18/2019



Legend

- Parcel Boundaries
- Survey Transects (100 ft; 217 d true)
- Total Vegetation % Cover (no Ulva or Zm incl.)**
 - 1.0 - 10.0
 - 10.1 - 25.0
 - 25.1 - 75.0
 - 75.1 - 85.0
- Z. marina Beds**
 - Z. marina bed
 - Z. marina bed (sparse, patchy)
- Z. marina patches**
 - Small Z. marina patch (< 50 sq ft)



0 50 100 200 300 Feet

Appendix B. ESA Species List



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
Phone: (360) 753-9440 Fax: (360) 753-9405
<http://www.fws.gov/wafwo/>



In Reply Refer To:

June 27, 2019

Consultation Code: 01EWF00-2019-SLI-1232

Event Code: 01EWF00-2019-E-02489

Project Name: Shutzler, Dowell, and Foster Bulkhead Repair/Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated and proposed critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. The species list is currently compiled at the county level. Additional information is available from the Washington Department of Fish and Wildlife, Priority Habitats and Species website: <http://wdfw.wa.gov/mapping/phs/> or at our office website: http://www.fws.gov/wafwo/species_new.html. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether or not the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). You may visit our website at <http://www.fws.gov/pacific/eagle/for> information on disturbance or take of the species and information on how to get a permit and what current guidelines and regulations are. Some projects affecting these species may require development of an eagle conservation plan: (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Also be aware that all marine mammals are protected under the Marine Mammal Protection Act (MMPA). The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas. The importation of marine mammals and marine mammal products into the U.S. is also prohibited. More information can be found on the MMPA website: <http://www.nmfs.noaa.gov/pr/laws/mmpa/>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Related website:

National Marine Fisheries Service: http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Washington Fish And Wildlife Office

510 Desmond Drive Se, Suite 102

Lacey, WA 98503-1263

(360) 753-9440

Project Summary

Consultation Code: 01EWF00-2019-SLI-1232

Event Code: 01EWF00-2019-E-02489

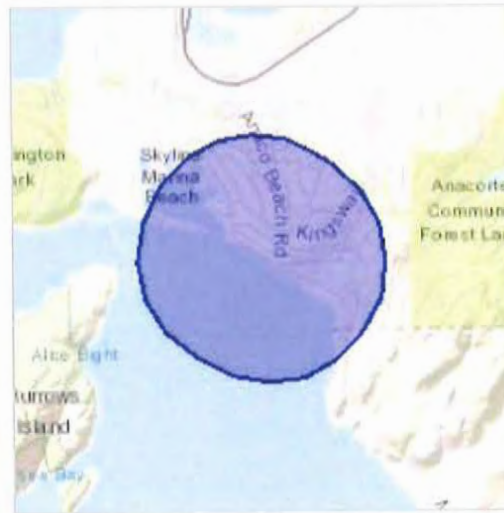
Project Name: Shutzler, Dowell, and Foster Bulkhead Repair/Replacement

Project Type: SHORELINE USAGE FACILITIES / DEVELOPMENT

Project Description: Repairing and replacing damaged bulkhead along the marine shoreline.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/48.48856260725606N122.67211021114272W>



Counties: Skagit, WA

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Wolf <i>Canis lupus</i> Population: Western Distinct Population Segment No critical habitat has been designated for this species.	Proposed Endangered
North American Wolverine <i>Gulo gulo luscus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Proposed Threatened

Birds

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Streaked Horned Lark <i>Eremophila alpestris strigata</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7268	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Bull Trout <i>Salvelinus confluentus</i> Population: U.S.A., conterminous, lower 48 states There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8212	Threatened
Dolly Varden <i>Salvelinus malma</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1008	Proposed Similarity of Appearance (Threatened)

Flowering Plants

NAME	STATUS
Golden Paintbrush <i>Castilleja levisecta</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7706	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

Shutzler, Dowell, and Foster Bulkhead Repair/Replacement

LOCATION

Skagit County, Washington



DESCRIPTION

Repairing and replacing damaged bulkhead along the marine shoreline.

Local office

Washington Fish And Wildlife Office

☎ (360) 753-9440

📠 (360) 753-9405

510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263

<http://www.fws.gov/wafwo/>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical *habitats* under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact: [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

Gray Wolf *Canis lupus*

No critical habitat has been designated for this species.

Proposed Endangered

North American Wolverine *Gulo gulo luscus*

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/5123>

Proposed Threatened

Birds

NAME

STATUS

Marbled Murrelet *Brachyramphus marmoratus*

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/4467>

Threatened

Streaked Horned Lark *Eremophila alpestris strigata*

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/7268>

Threatened

Yellow-billed Cuckoo *Coccyzus americanus*

There is **proposed** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/3911>

Threatened

Fishes

NAME

STATUS

Bull Trout *Salvelinus confluentus*

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/8212>

Threatened

Dolly Varden *Salvelinus malma*

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1008>

PSAT

Flowering Plants

NAME

STATUS

Golden Paintbrush *Castilleja levisecta*

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7706>

Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

Breeds Jan 1 to Sep 30

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Black Oystercatcher *Haematopus bachmani*

Breeds Apr 15 to Oct 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9591>

Black Scoter *Melanitta nigra*

Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Black Turnstone *Arenaria melanocephala*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Black-legged Kittiwake *Rissa tridactyla*

Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Bonaparte's Gull *Chroicocephalus philadelphia*

Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Brown Pelican *Pelecanus occidentalis*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/6034>

Breeds Jan 15 to Sep 30

Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Dec 31

Common Loon *gavia immer*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/4464>

Breeds Apr 15 to Oct 31

Common Murre *Uria aalge*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Apr 15 to Aug 15

Common Tern *Sterna hirundo*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/4963>

Breeds May 10 to Sep 10

Double-crested Cormorant *phalacrocorax auritus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/3478>

Breeds Apr 20 to Aug 31

Great Blue Heron *Ardea herodias fannini*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Mar 15 to Aug 15

Herring Gull *Larus argentatus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Apr 20 to Aug 31

Long-tailed Duck *Clangula hyemalis*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/7238>

Breeds elsewhere

Northern Fulmar *Fulmarus glacialis*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Olive-sided Flycatcher *Contopus cooperi*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

Breeds May 20 to Aug 31

Parasitic Jaeger *Stercorarius parasiticus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Pink-footed Shearwater *Puffinus creatopus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Pomarine Jaeger *Stercorarius pomarinus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Red Phalarope *Phalaropus fulicarius*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Red-breasted Merganser *Mergus serrator*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Red-necked Phalarope *Phalaropus lobatus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Red-throated Loon *Gavia stellata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Ring-billed Gull *Larus delawarensis*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Rufous Hummingbird *elasphorus rufus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Breeds Apr 15 to Jul 15

Surf Scoter *Melanitta perspicillata*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Western Screech-owl *Megascops kennicottii kennicottii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Mar 1 to Jun 30

Whimbrel *Numenius phaeopus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9483>

Breeds elsewhere

White-winged Scoter *Melanitta fusca*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ

"Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

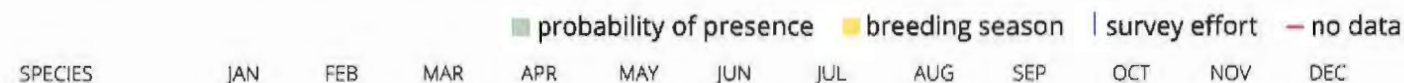
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

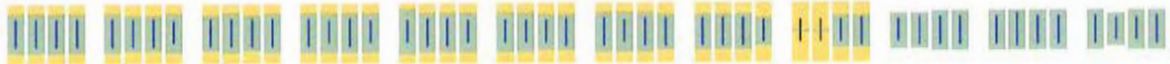


Bald Eagle

Non-BCC Vulnerable
(This is not a Bird of Conservation

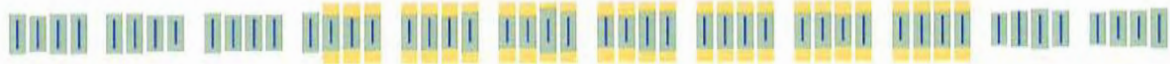
Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential

susceptibilities in offshore areas from certain types of development or activities.)

**Black****Oystercatcher**

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC)

throughout its range in the continental USA and Alaska.)

**Black Scoter**

Non-BCC Vulnerable
(This is not a Bird of Conservation

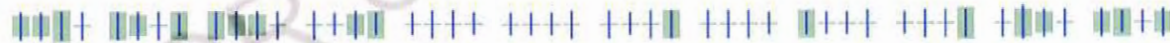
Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential

susceptibilities in offshore areas from certain types of development or activities.)

**Black Turnstone**

BCC Rangewide (CON) (This is a Bird of Conservation

Concern (BCC) throughout its range in the continental USA and Alaska.)

**Black-legged****Kittiwake**

Non-BCC Vulnerable
(This is not a Bird of Conservation

Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential

susceptibilities in offshore areas from certain types of development or activities.)



Bonaparte's Gull
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Brown Pelican
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Clark's Grebe
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Common Loon
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



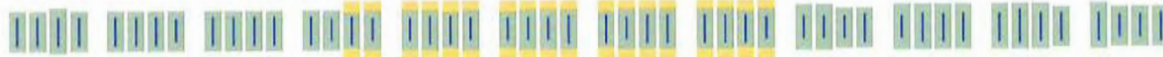
Common Murre
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Common Tern
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Double-crested Cormorant
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



SPECIES

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Great Blue Heron
 BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Herring Gull
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



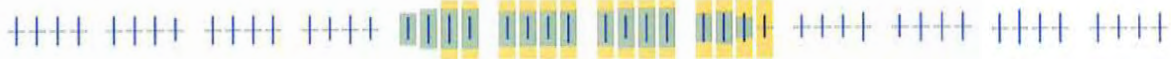
Long-tailed Duck
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Northern Fulmar
Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



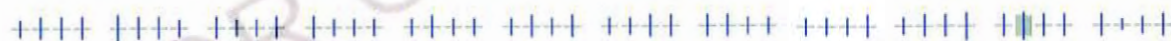
Olive-sided Flycatcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Parasitic Jaeger
Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Pink-footed Shearwater
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Pomarine Jaeger
Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Red Phalarope
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Red-breasted Merganser
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Red-necked Phalarope
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Red-throated Loon
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



SPECIES

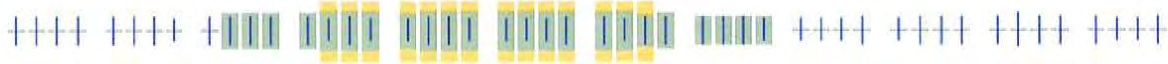
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Ring-billed Gull
 Non-BCC Vulnerable
 (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Rufous**Hummingbird**

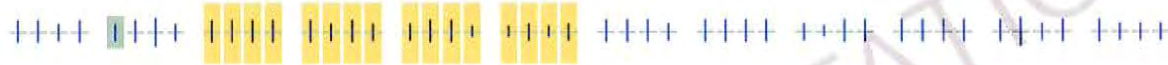
BCC Rangewide
(CON) (This is a Bird
of Conservation
Concern (BCC)
throughout its range
in the continental
USA and Alaska.)

**Surf Scoter**

Non-BCC Vulnerable
(This is not a Bird of
Conservation
Concern (BCC) in this
area, but warrants
attention because of
the Eagle Act or for
potential
susceptibilities in
offshore areas from
certain types of
development or
activities.)

**Western Screech-
owl**

BCC - BCR (This is a
Bird of Conservation
Concern (BCC) only in
particular Bird
Conservation Regions
(BCRs) in the
continental USA)

**Whimbrel**

BCC Rangewide
(CON) (This is a Bird
of Conservation
Concern (BCC)
throughout its range
in the continental
USA and Alaska.)

**White-winged
Scoter**

Non-BCC Vulnerable
(This is not a Bird of
Conservation
Concern (BCC) in this
area, but warrants
attention because of
the Eagle Act or for
potential
susceptibilities in
offshore areas from
certain types of
development or
activities.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER

[M1UBL](#)

[E1UBLx](#)

ESTUARINE AND MARINE WETLAND

[M2USN](#)

[M2AB/USN](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PSSC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Appendix D. Photo Documentation



Wave Action During Winter Storm – Facing Southeast



Schutzler Existing Bulkhead and Residence (from shoreline) – Facing East



Schutzler Existing Bulkhead and Residence – Facing Northwest



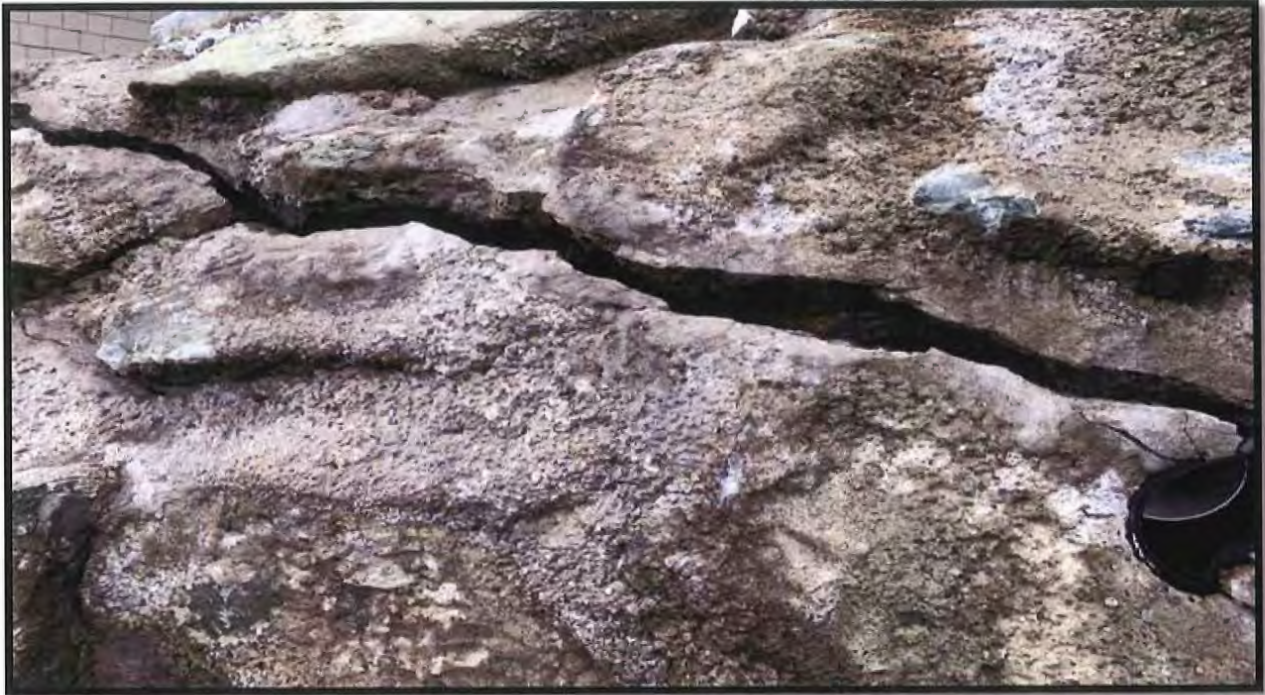
Schutzler Existing Bulkhead and Residence – Facing Southeast



Schutzler Existing Bulkhead– Facing Southeast



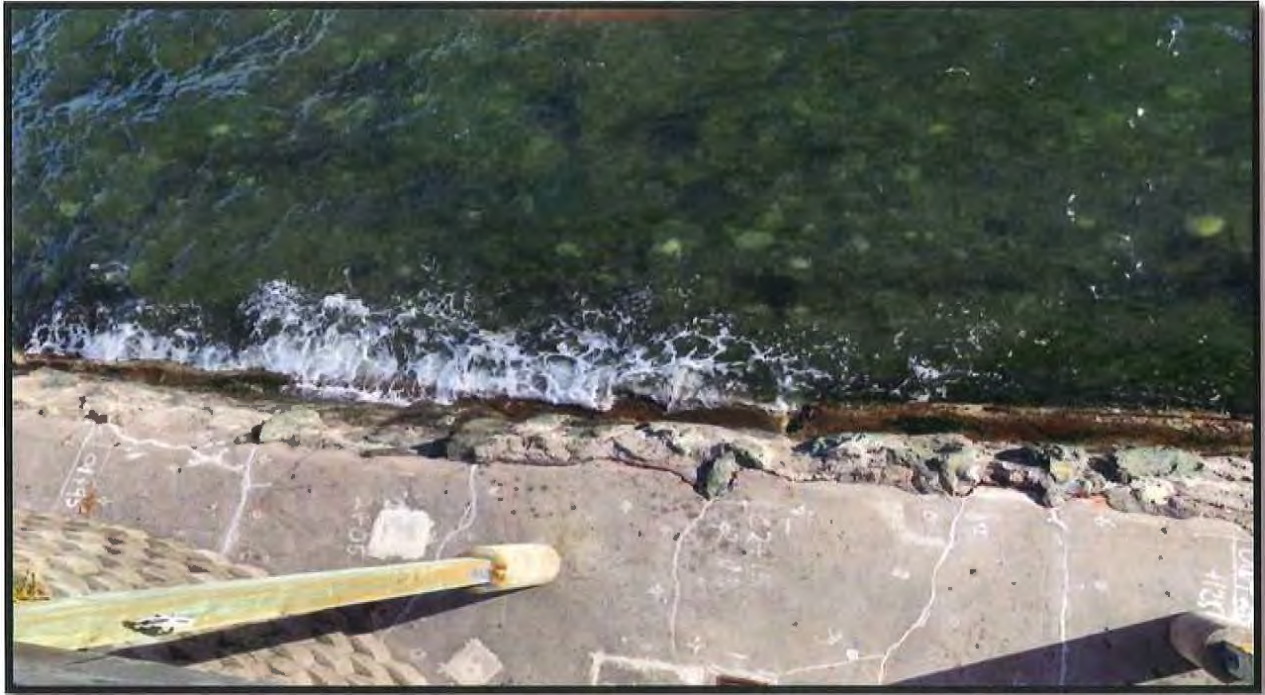
Schutzler Existing Bulkhead (from shoreline) – Facing East



Schutzler Existing Bulkhead Damages (fracturing)



Schutzler Existing Bulkhead (during high-tide)



Schutlzler Existing Bulkhead (during high-tide)



Schutlzler Existing Bulkhead and Residence (during high-tide)

– Facing Southeast



Dowell and Schutzler Residences – Facing Southeast



Dowell Existing Bulkhead (from shoreline) – Facing Northeast



Dowell Existing Bulkhead (from shoreline) – Facing Northeast



Dowell Existing Bulkhead (from shoreline) – Facing Northeast



Dowell Existing Bulkhead (during high-tide)



Foster Existing Bulkhead and Residence (from shoreline)

– Facing North



Foster Residence and Existing Bulkhead – Facing Southeast



Foster Residence and Existing Bulkhead – Facing Southeast



Foster Undercut Existing Bulkhead (from shoreline) – Facing Northeast



Foster (Distance from Residence to Bulkhead) – Facing Southeast



Shoreline Between Project Site and Boat Ramp – Facing Southeast



Eelgrass Bed (Approximately 200 feet from Project Site) – Facing West



Eelgrass Bed (Approximately 200 feet from Project Site) – Facing West



Macroalgae (Approximately 200 feet from Project Site) – Facing West

Attachment 1. Essential Fish Habitat Assessment

A. Background

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public law 104-267), requires Federal agencies to consult with NMFS on activities that may adversely affect designated Essential Fish Habitat (EFH) for the relevant species. According to the MSA, EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." For the Pacific West Coast, the Pacific Fisheries Management Council (Council) has designated EFH for federally managed groundfish (PFMC 1998a), coastal pelagic (PFMC 1998b) and Pacific salmon fisheries (PFMC 1999). The purpose of the EFH Assessment is to determine the effects of the proposed project on the EFH for the relevant species and to recommend conservation measures to avoid, minimize or otherwise offset adverse effects on EFH.

B. Identification of EFH

The designated EFH for groundfish and coastal pelagic species encompasses all waters from the mean high-water (MHW) line, and upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon and California, seaward to the boundary of the U. S. exclusive economic zone (370.4 km) (PFMC 1998a, 1998b). The designated EFH in estuarine and marine areas for salmon species extends from the nearshore and tidal submerged environments within state territorial water out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon and California north of Point Conception to the Canadian border (PFMC 1999).

The project is within marine Essential Fish Habitat (EFH) for salmon. Pacific Salmon Freshwater EFH (NOAA 2016) is identified within the project action area. The project area is a HAPC Area of Interest.

C. Proposed Action

The details of the proposed project are presented in **Project Description** section of the attached BE. The project consists of repair and replacement of a failing bulkhead within the same footprint.

D. Effects of the Proposed Action

The effects of this project on designated EFH are likely to be similar to the effects described in detail in the "Effects Analysis" section of the attached BE. The project may have minor temporary adverse effects on EFH designated for groundfish, coastal pelagic fish and Pacific salmon (Chinook, coho and Puget Sound pink salmon) due to turbidity and noise impacts resulting from construction. Considering that the project will take place within the existing footprint, no new long-term impacts are expected to occur.

E. EFH Conservation Measures

The conservation measures contained in the BE will be implemented to minimize any possible adverse effects to EFH.

F. Conclusion

Because the project proposes to replace the bulkhead in the same footprint within the intertidal zone, there will be no new permanent adverse effects on EFH for groundfish, coastal pelagic fish and Pacific salmon in the form of refugia and prey input.

G. Additional References

PFMC (Pacific Fishery Management Council). 1999. Amendment 14 to the Pacific Coast Salmon Plan. Appendix A: Description and Identification of Essential Fish Habitat, Adverse Impacts and Recommended Conservation Measures for Salmon (August 1999).

PFMC, 1998a. Final Environmental Assessment/Regulatory Review for Amendment 11 to the Pacific Coast Groundfish Fishery Management Plan (October, 1998). PFMC, 1998b. The Coastal Pelagic Species Fishery Management Plan: Amendment 8 (December, 1998).



Essential Fish Habitat - Habitat Areas of Particular Concern

Essential Fish Habitat - Habitat Areas of Particular Concern

Habitat Areas of Particular Concern (HAPC)

Essential Fish Habitat

Essential Fish Habitat

Essential Fish Habitat

Pacific Salmon Freshwater EFH

Pacific Salmon Freshwater EFH

Pacific Salmon Freshwater EFH

HUCs are not EFH

Esri Street Maps



Attachment 2. Assessment of Impacts to Southern DPS Green Sturgeon Critical Habitat

The primary constituent elements (PCE) determined essential to the conservation of Southern DPS Green Sturgeon (*Acipenser medirostris*) are:

(1) Food resources, water flow, water quality, migratory corridors, water depth, and sediment quality in freshwater riverine systems;

Existing Conditions: The project site is located 10.75 miles northeast of the Samish River mouth and 12.75 southeast of the Skagit River. The project site may be used as a migratory corridor; however, no freshwater systems are located within the project action area (Figure 5).

Effects of the Action: The proposed project may have a brief and localized impact on estuarine and coastal marine water quality, due to excavation and replacement of the existing bulkhead. Food resources, water flow, water quality, water depth, and sediment quality are not expected to be impacted in freshwater systems. The proposed project will be completed during low tide on dry beach, therefore no impacts to the migratory corridor of Southern DPS Green Sturgeon are expected to occur.

(2) Food resources, water flow, water quality, migratory corridors, water depth, and sediment quality in estuarine areas;

Existing Conditions: The National Wetland Inventory recorded Estuarine and Marine Wetland and Estuarine and Marine Deepwater habitat throughout the marine shoreline adjacent to the project site (Figure 6). There is documented Pacific sand lance and surf smelt spawning habitat northwest of the project site. Potential suitable forage fish habitat was also observed during an intertidal survey performed by MSA. There is no large riparian vegetation along the shoreline or upland adjacent to the project site. The project site may be used as a migratory corridor by Southern DPS Green Sturgeon.

Effects to PCE: The proposed project may have a brief and localized impact on estuarine and coastal marine water quality, due to excavation and replacement of the existing bulkhead. Brief turbidity and noise may also have negative impacts on prey species for Southern DPS Green Sturgeon in estuarine systems, resulting from excavation and replacement of the existing bulkhead. Water flow, water depth, and sediment quality are not expected to be impacted in estuarine systems. The proposed project will be completed during low tide on dry beach, therefore no impacts to the migratory corridor or water quality of Southern DPS Green Sturgeon are expected to occur.

(3) Food resources, water flow, water quality, migratory corridors, water depth, and sediment quality in coastal marine areas;

Existing Conditions: The project site is adjacent to marine shoreline of Burrow's Bay (Figure 1).

Effects to PCE: Although there is mapped critical habitat adjacent to the project site, Southern DPS Green Sturgeon critical habitat (marine waters) includes areas of 60 fathoms (110 meters) depth (NMFS, 2009)(See attached Figure). The action area does not include areas this deep and the proposed project will be completed during low tide on dry beach. Therefore, the proposed project is unlikely to impact food resources, water flow, water quality, migratory corridors, water depth, and sediment quality.

Determination of Effect:

The determinations of effect for designated critical habitat is: "May affect, not likely to adversely affect"

Conservation Measures: All work will take place on dry beach and between July 16th and February 15th of any year.

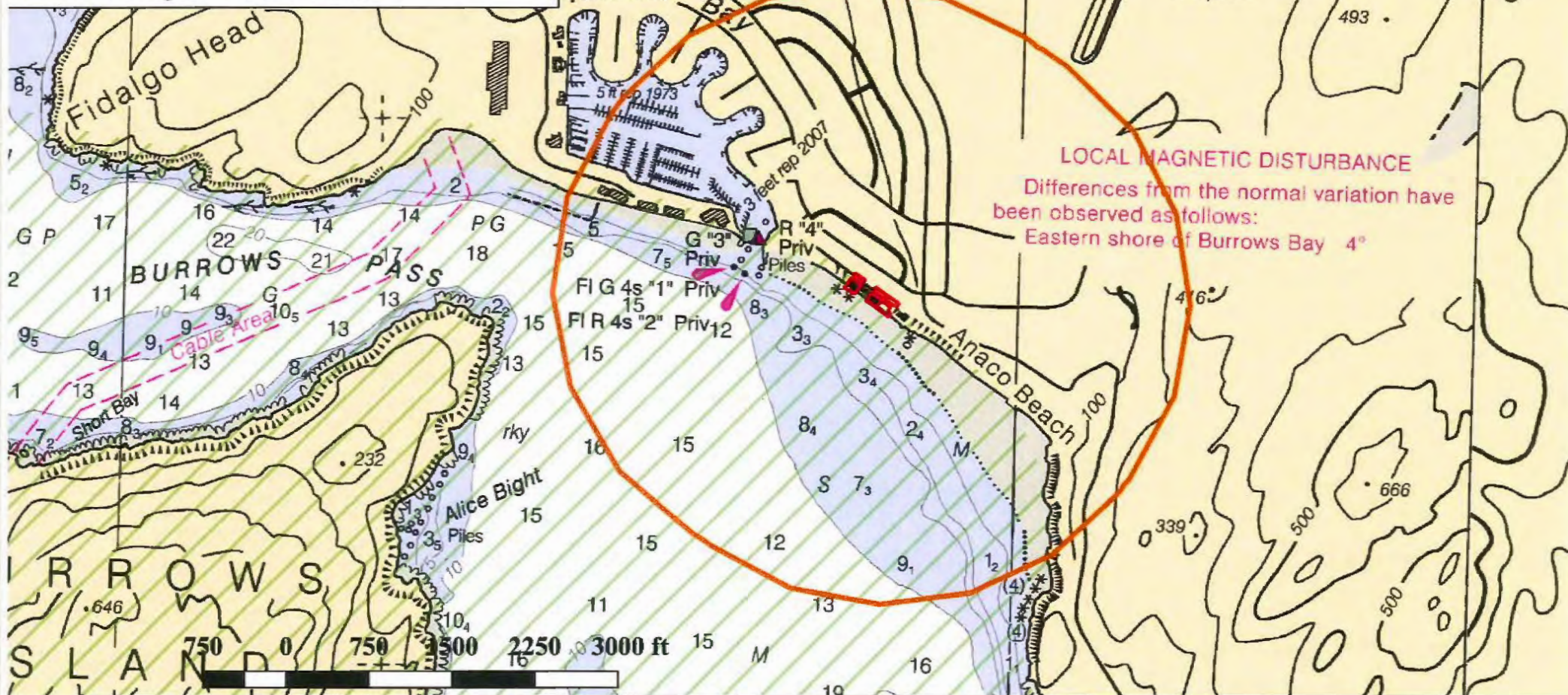
Legend

Parcels P83308, P83310, and P83311

Action Area

Federal ESA Species Critical Habitat

Green Sturgeon Critical Habitat



LOCAL MAGNETIC DISTURBANCE
Differences from the normal variation have been observed as follows:
Eastern shore of Burrows Bay 4°

NOAA RNC Chart Tiles

crs=EPSG:

https://tileservice.charts.noaa.gov/tiles/50000_1/%7Bz%7D/%7Bx%7D/%7By%7D.png&zmax=19&zmin=0



**Southern DPS Green Sturgeon
Critical Habitat
w/ NOAA Depth Chart**

**4905, 4907, & 4911
Croatian Way Anacortes, WA 98221**

Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster

Parcel Nos. P83308, P83310, and P3311

Drawn: 6/17/2019

Drawn By: PJR

Checked By: MG

Attachment 3. Assessment of Impacts to Nearshore Rockfish Critical Habitat

Designation Effective: November 13, 2014 (79 FR 68042)

COE reference: Unknown at this time

Applicant: Jeremy & Janice Schutzler, Lester & Elaine Dowell, and Thomas & Sally Foster

The Physical and Biological Features (PBFs) determined essential to the conservation of Adult Bocaccio and Adult/Juvenile Yelloweye Rockfish (for deep-water sites >30 meters) are:

(1) Quantity, quality, and availability of prey species to support individual growth, survival, reproduction, and feeding opportunities.

Existing Conditions: Not applicable, project is in the nearshore environment.

Effects to PBF: No effect.

(2) Water quality and sufficient levels of dissolved oxygen to support growth, survival, reproduction, and feeding opportunities.

Existing Conditions: Not applicable, project is in the nearshore environment.

Effects to PBF: No effect.

(3) The type and amount of structure and rugosity that supports feeding opportunities and predator avoidance.

Existing Conditions: Not applicable, project is in the nearshore environment.

Effects to PBF: No effect.

Juvenile bocaccio rockfish (nearshore areas are contiguous with the shoreline from the line of extreme high water out to a depth no greater than 30 meters relative to MLLW)

(4) Nearshore juvenile rearing sites with sand, rock, and/or cobble to support forage and refuge.

Juvenile settlement habitats located in the nearshore with substrates such as sand, rock and/or cobble compositions that also support kelp (families Chordaceae, Alariaceae, Lessoniaceae, Costariaceae, and Laminariceae) are essential for conservation because these features enable forage opportunities and refuge from predators and enable behavioral and physiological changes needed for juveniles to occupy deeper adult habitats. Several attributes of these sites determine the quality of the area and are useful in considering the conservation value of the associated feature and, in determining whether the feature may require special management considerations or protection. These features also are relevant to evaluating the effects of a proposed action in a section 7 consultation if the specific area containing the site is designated as critical habitat.

Existing Conditions: Sand, rock, and cobble was documented at the project site, but kelp was not.

Effects to PBF: This project is not anticipated to affect this PBF as the work will occur in the same footprint and BMPs will be followed to avoid any kelp that may be found subtidally in the action area and to reduce turbidity/benthic disturbances. Temporary impacts may occur to existing substrate; however, beach nourishment should improve habitat for juvenile rockfish.

(5) Quantity, quality, and availability of prey species to support individual growth, survival, reproduction, and feeding opportunities.

Existing Conditions: There is an existing bulkhead in the upper intertidal area of the beach with no amount of riparian cover upland at the project site.

Effects to PBF: The project should have little impact on baseline conditions for this PBF assuming turbidity is minimized during construction. However, the replacement bulkhead could perpetuate any existing effects to the prey base through reduced cover and incremental erosion along the shoreline.

(6) Water quality and sufficient levels of dissolved oxygen to support growth, survival, reproduction, and feeding opportunities.

Existing Conditions: There are Category 2 and Category 5 – 303(d) listed waters within the northwest portion of the project action area.

Effects to PBF: There may be some brief turbidity associated with the project. Dissolved oxygen should not occur.

Attachment 4. Assessment of Impacts to Puget Sound Chinook Critical Habitat

Project description: Repair and Replacement of a failing bulkhead in Anacortes, Washington, Skagit County.

Applicant: Jeremy & Janice Schutzler, Lester & Elaine Dowell, and Thomas & Sally Foster

COE reference: Unknown at this time

NMFS reference: unknown at this time

The Physical and Biological Features (PBFs) determined essential to the conservation of salmon are:

(1) Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation, and larval development.

Existing Conditions: Does not apply - the project is in the marine environment

Effects to PCE: None

(2) Freshwater rearing sites with water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; water quality and forage supporting juvenile development; and natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

Existing Conditions: Does not apply - the project is in the marine environment

Effects to PCE: None

(3) Freshwater migration corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

Existing Conditions: Does not apply - the project is in the marine environment

Effects to PCE: None

(4) Estuarine areas free of obstruction with water quality, water quantity and salinity conditions supporting juvenile and adult physiological transitions between fresh-and saltwater; natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels, and juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation.

Existing Conditions: As noted in the Habitat Report section of this BE, an eelgrass bed and macroalgae were observed in the intertidal survey area. The substrate observed at the project site was also suitable for forage fish and Pacific sand lance and Surf smelt breeding area was documented north of the project area.

Effects to PCE: The project will create minor, temporary impacts during construction that may include localized increased turbidity and noise, which may cause short-term avoidance of the area by the listed fish species. The proposed project includes repair and replacement of an existing bulkhead in the same footprint.

(5) Nearshore marine areas free of obstruction with water quality and quantity conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation; and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulder and side channels.

Existing Conditions: See 4 above.

Effects to PCE: The project occurs along a stretch of developed shoreline that is already armored with bulkheads. The project will not obstruct the nearshore marine habitat but will continue to have the same impacts as the existing bulkhead (i.e. impacts associated with shoreline armoring outlined in the BE).

(6) Offshore marine areas with water quality conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation.

Existing Conditions: Does not apply - the site is in a nearshore marine environment

Effects to PCE: None

Determination of Effect: "May affect, not likely to adversely affect"

Attachment 5. Assessments of Impacts to Southern Resident Killer Whale Critical Habitat

The primary constituent elements (PCE) determined essential to the conservation of southern resident killer whales (SKRW; *Orcinus orca*) are:

(1) Water quality to support growth and development;

Existing Conditions: The project site is located in Burrow's Bay. A Category 2 and Category -5 303(d) water were recorded within the northwest portion of the action area (Figure 12).

Effects of the Action: The proposed project may have a brief and localized impact on water quality due to excavation and replacement of the existing bulkhead.

(2) Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development as well as overall population growth;

Existing Conditions: There is documented Pacific sand lance and surf smelt spawning habitat northwest of the project site. Potential suitable forage fish habitat was also observed during an intertidal survey performed by MSA. There is no large riparian vegetation along the shoreline or upland adjacent to the project site.

Effects to PCE: The project could have brief and temporary negative impacts on Chinook salmon (prey species for the SKRW population), due to brief turbidity and noise resulting from excavation and replacement of the existing bulkhead.

(3) Passage conditions to allow for migration, resting, and foraging.

Existing Conditions: See 2 above.

Effects to PCE: According to NOAA Critical Habitat GIS data, Southern Resident killer whale critical habitat begins at waters of 20-foot depth relative to the extreme high-water line. The project site is below 20-foot depth (See attached Figure). The proposed project will be completed on dry beach, which should have no short term impact on migration, resting, and foraging. No long term impacts are expected to occur to the PCE.

Determination of Effect:

The determinations of effect for designated critical habitat is: "May affect, not likely to adversely affect"

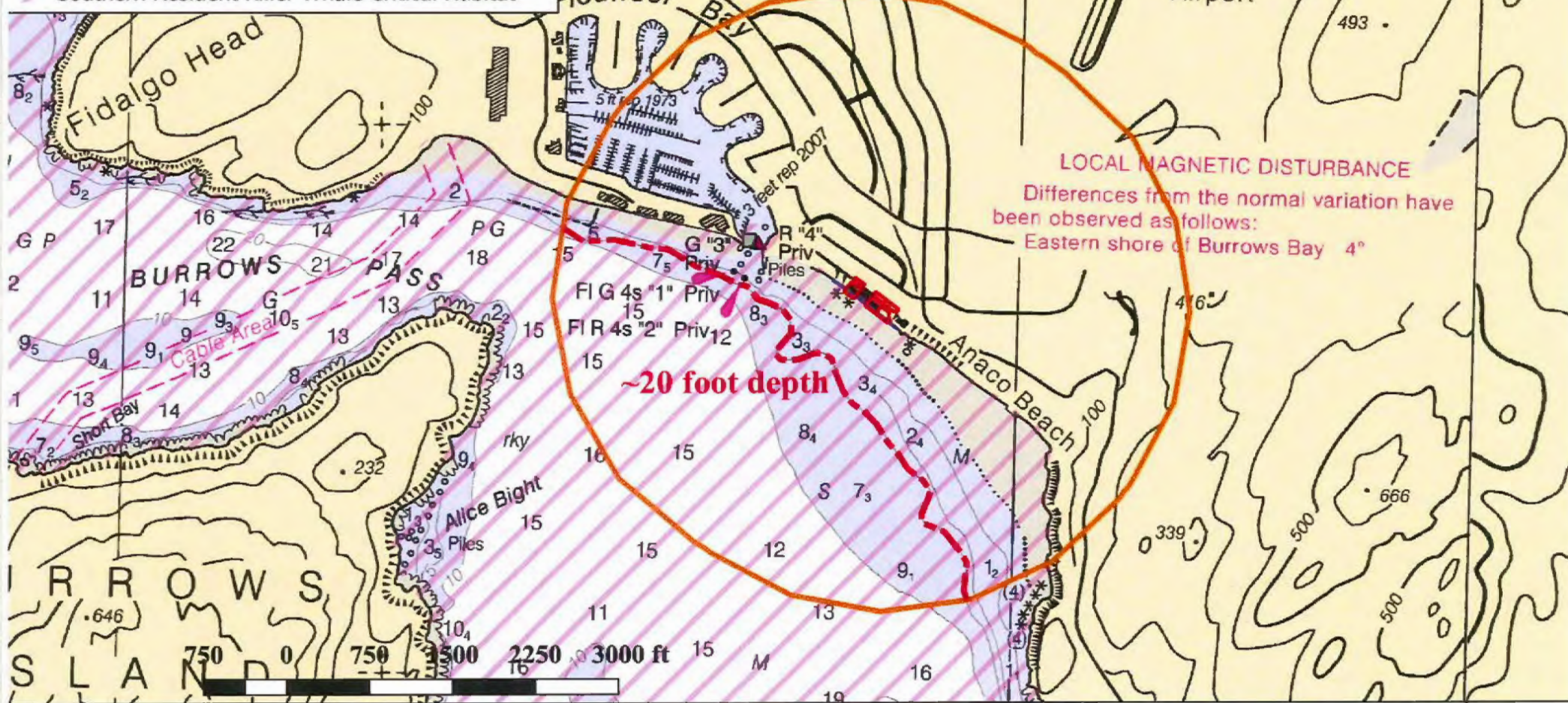
Conservation Measures: All work will take place on dry beach and between July 16th and February 15th of any year. Chinook salmon are less likely to be in the area during this time, thereby minimizing turbidity and noise impacts on this prey species.

Legend

- Parcels P83308, P83310, and P83311
- Action Area

Federal ESA Species Critical Habitat

Southern Resident Killer Whale Critical Habitat



LOCAL MAGNETIC DISTURBANCE
Differences from the normal variation have been observed as follows:
Eastern shore of Burrows Bay 4°

**Southern Resident Killer Whale
Critical Habitat
w/ NOAA Depth Chart**

**4905, 4907, & 4911
Croatian Way Anacortes, WA 98221**

Clients: Jerome & Janice Schutzler; Lester & Elaine Dowell; and Thomas & Sally Foster

Parcel Nos. P83308, P83310, and P3311

Drawn: 6/17/2019

Drawn By: PJR

Checked By: MG

NOAA RNC Chart Tiles

crs=EPSG:

857&format&type=xyz&url=https://
tileservice.charts.noaa.gov/tiles/
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City of Anacortes Shoreline Master Program

3.1 Conditional Use Permits

D. Criteria for Granting Shoreline Conditional Use Permits

Uses classified as conditional uses may be authorized provided that the applicant can demonstrate all of the following:

1. That the proposed use will be consistent with the policies of RCW 90.58.020 and the policies of the Master Program; **The proposed is consistent with the Shoreline Program policies and RCW 90.58.020. All three properties have permitted single-family structures, which are occupied, on a portion of shoreline that's zoned for shoreline residential use. Existing structures are "in imminent danger from shoreline erosion" (SMP Policy 9.11.11). RCW 90.58.020 states, "This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights..." In this case all of the above may be in detriment if the work is not permitted. "It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses." (RCW 90.58.020)**
2. That the proposed use will not interfere with the normal public use of public shorelines; **This proposal will not interfere with normal public use of public shorelines, as the footprint is located on private tidelands. When water covers the area there will be no change in regards to passing vessels (i.e. self propelled boats).**
3. That the proposed use of the site and design of the project will be compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and this Master Program; **The designation for this location is shoreline residential. The City of Anacortes Shoreline Master Program (Policy 5.9.10) states, "While shoreline setbacks based on science are**

preferred to protect ecological functions, using them may not be feasible where previous development has significantly altered the natural shoreline environment, such as along some parts of Burrows Bay.” The residences involved with this proposal are all permitted single-family residences with existing hard shore stabilization structures on the shoreline of burrows Bay. Adjacent properties in both directions are single-family residences with bulkhead protection. Chapter 9.11 (policy 9.11.4 (b)) states, “Allow structural stabilization methods only where it has been demonstrated to be necessary to support or protect a legally established, inhabited structure or ongoing shoreline use that is in danger of loss or substantial damage...” Land managers from The City of Anacortes, Department of Ecology, Fish & Wildlife and the Corps of Engineers all met on site and agreed that structural stabilization was appropriate for this site.

4. That the proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located; **This proposal involves reducing the concrete footprint on the beach. The existing concrete toe protection will be removed along with other concrete debris on the beach. The new structure will not be taller than the existing wall, and the beach footprint will be reduced. Additionally, gravel will be placed on the beach to improve substrate for potential spawning and will absorb some of the wave energy before it hits the hard structure.**
5. That the public interest will suffer no substantial detrimental effect. **As the proposed work reduces the beach footprint and it is not a new structure there should not be a substantial detrimental effect to the public. All agencies will scrupulously review this project to ensure the best outcome for all.**

In the granting of all Conditional Use Permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if Conditional Use Permits were granted for other developments in the area where similar circumstances exist, the total impacts from the conditional uses shall also remain consistent with the policies of RCW 98.58.020 and shall not produce substantial adverse effects to the shoreline environment.

SURVEY IN SECTION 27, TWP. 35 N., RNG. 1 EAST, W.M.

200007120078
Kathy Hill, Skagit County Auditor
7/12/2000 Page 1 of 2 2:21:02PM

DATE: July 7, 2000

EXISTING TRACTS

LOT 8 OF PLAT CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

LOT 9 OF PLAT CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

LOT 10 OF PLAT CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

LOT 11 OF PLAT CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

COMMUNITY PROPERTY TRACT FOR LOT OWNERS 8 THRU 12 AS SHOWN ON PLAT OF CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

TRACTS AFTER BOUNDARY LINE ADJUSTMENT

LOT 9 OF PLAT CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

TOGETHER WITH THAT PORTION OF THE COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 AS SHOWN ON PLAT OF CHEUNG-MAVAR'S NO. 21, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 THENCE N 55°00'00" W 258.442' ALONG THE NORTH BOUNDARY OF SAID TRACT TO THE POINT OF BEGINNING.

THENCE N 55°00'00" W 118.12';
THENCE S 37°34'45" W 28.397' TO THE SOUTH LINE OF SAID TRACT;
THENCE S 52°25'15" E 118.00' ALONG SAID SOUTH LINE;
THENCE N 37°34'45" E 33.713' TO THE POINT OF BEGINNING.

TRACTS AFTER BOUNDARY LINE ADJUSTMENT

LOT 8 OF PLAT CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

TOGETHER WITH THAT PORTION OF THE COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 AS SHOWN ON PLAT OF CHEUNG-MAVAR'S NO. 21, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 THENCE N 55°00'00" W 376.563' ALONG THE NORTH BOUNDARY OF SAID TRACT TO THE POINT OF BEGINNING.
THENCE N 55°00'00" W 109.110' TO THE NORTHWEST CORNER OF SAID COMMUNITY TRACT;
THENCE S 37°34'45" W 23.49' ALONG THE WEST BOUNDARY OF SAID TRACT, TO THE SOUTH LINE OF SAID TRACT;
THENCE S 52°25'15" E 109.00' ALONG SAID SOUTH LINE;
THENCE N 37°34'45" E 28.397' TO THE POINT OF BEGINNING.

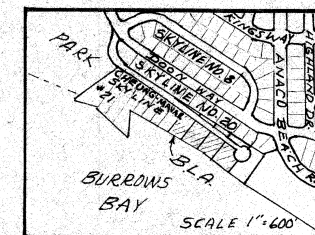
TRACTS AFTER BOUNDARY LINE ADJUSTMENT

LOT 10 OF PLAT CHEUNG-MAVAR'S SKYLINE NO. 21 AS RECORDED IN VOLUME 672 ON PAGES 339-342 UNDER AUDITOR'S FILE # 8610230002, RECORDS OF SKAGIT COUNTY, WASHINGTON.

TOGETHER WITH THAT PORTION OF THE COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 AS SHOWN ON PLAT OF CHEUNG-MAVAR'S NO. 21, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 THENCE N 55°00'00" W 143.325' ALONG THE NORTH BOUNDARY OF SAID TRACT TO THE POINT OF BEGINNING.
THENCE N 55°00'00" W 115.117';
THENCE S 37°34'45" W 33.713' TO THE SOUTH LINE OF SAID TRACT;
THENCE S 52°25'15" E 115.00' ALONG SAID SOUTH LINE;
THENCE N 37°34'45" E 38.893' TO THE POINT OF BEGINNING.

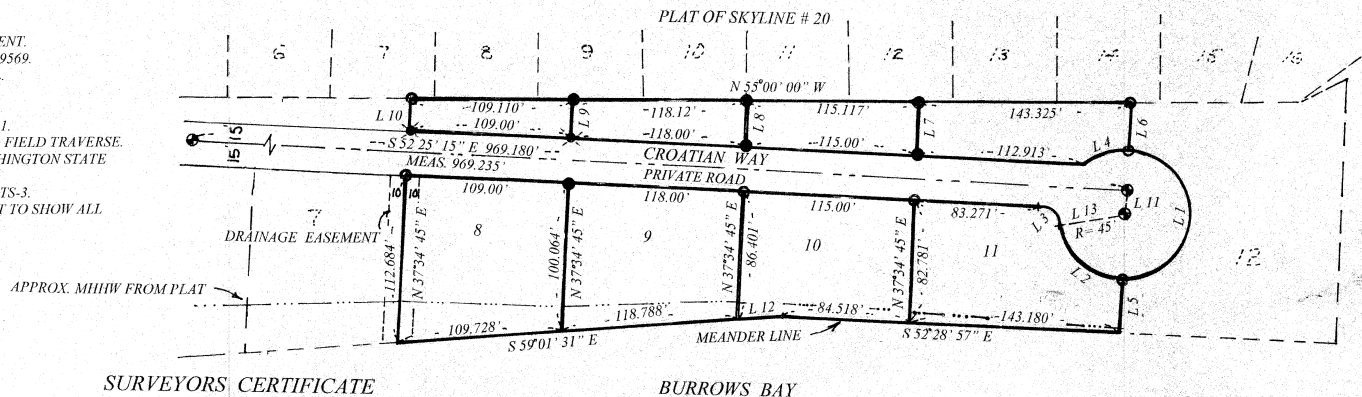
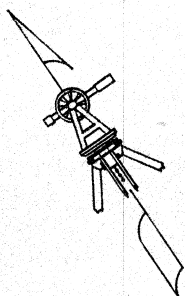
L #	LENGTH	BEARING	DELTA	RADIUS
L 1	141.372'		180°00'00"	45.00'
L 2	61.868'		78°46'24"	45.00'
L 3	21.694'		82°41'15"	15.03'
L 4	33.198'		42°16'07"	45.00'
L 5	34.321'	N 37°34'45" E		
L 6	33.642'	N 37°34'45" E		
L 7	38.893'	N 37°34'45" E		
L 8	33.713'	N 37°34'45" E		
L 9	28.397'	N 37°34'45" E		
L 10	23.490'	N 37°34'45" E		
L 11	18.300'	N 37°34'45" E		
L 12	30.686'	N 59°01'31" E		
L 13	45.00'	S 63°38'51" E		



VICINITY MAP

NOTES:

1. FOUND BRASS SURFACE MONUMENT.
2. SET RE-BAR WITH YELLOW CAP # 9569.
3. SET TACK IN LEAD IN ROCK WALL.
4. FOUND RE-BAR WITH CAP # 9636.
5. BASIS OF BEARINGS: PLAT OF CHEUNG-MAVAR'S SKYLINE NO. 21.
6. SURVEY PROCEDURE: STANDARD FIELD TRAVERSE.
7. ERROR OF CLOSURE MEETS WASHINGTON STATE SURVEY STANDARDS.
8. EQUIPMENT USED: 5" TOPCON GTS-3.
9. THIS SURVEY DOES NOT PURPORT TO SHOW ALL ENCUMBRANCES OR EASEMENTS.



SURVEYORS' CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF NICK MAVAR IN MAY, 2000.

Clair A. Crossman
CERTIFICATE NO: 9569

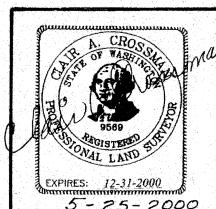
RECORDER'S CERTIFICATE

FILED FOR RECORD THIS 12 DAY OF July, 2000 AT 2:21 P.M.

AT THE REQUEST OF: CLAIR A. CROSSMAN
RECORDS OF SKAGIT COUNTY AUDITOR

Kathy Hill
AUDITOR

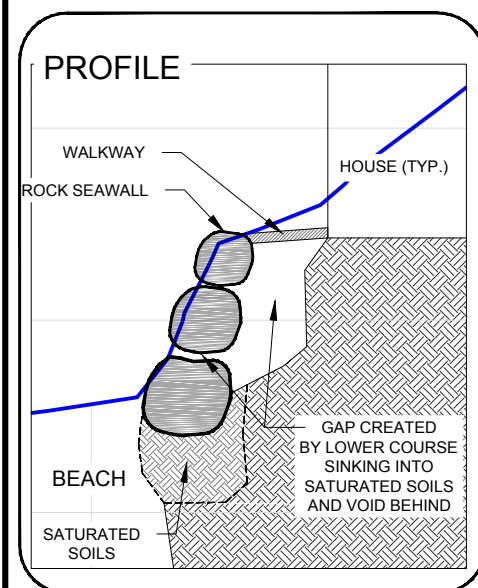
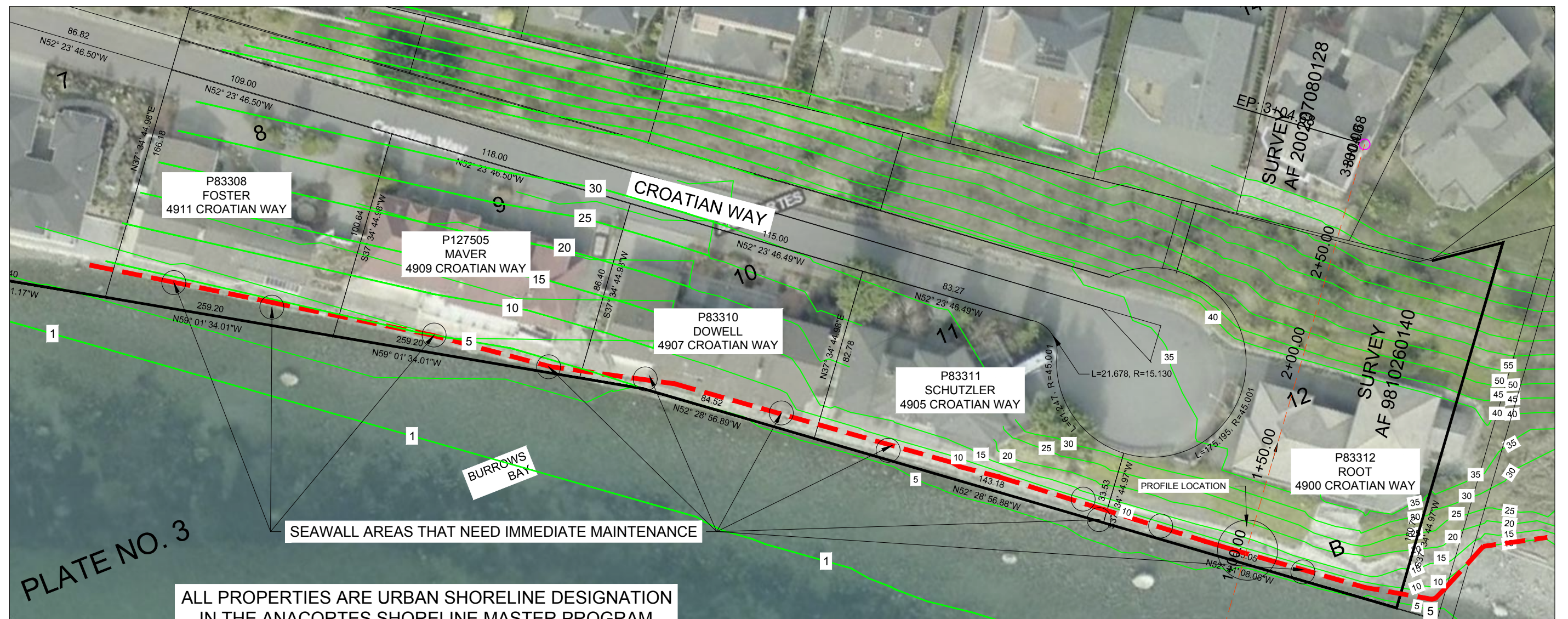
Clough Lewis
DEPUTY AUDITOR



CROSSMAN & ASSOC.
LAND SURVEYORS
16146 MCLEAN RD. MT. VERNON, WA.
PHONE (360) 424-7359

BOUNDARY LINE ADJUSTMENT
FOR
NICK MAVAR

DRAWN BY CHECK BY	SCALE 1"=60'	JN 2000
SHEET	1 OF	2



SCALE 1"=50'

0 25 50

OHWM @ BASE OF EXISTING SEAWALL - - - - -

SG SCHEMMER CONSULTING GROUP PLLC
 ENGINEERING SURVEYING CIVIL-STRUCTURAL-PLANNING
 RESIDENTIAL HOME DESIGN
 301 30th Street, Suite C; Anacortes, WA 98221
 office: 360-293-9006 fax: 360-293-4051

DATUM:
 HOR: NAD 83
 VERT: NAVD 88

DSGN BY: JTS
 DWN BY: JTS
 APPVD BY: JTS

JOB # 16-070

DATE PRINTED: 10/19/16
 SEC: 27
 TWP: 35 N
 RGE: 01 E

MAINTENANCE PLAN

BANK STABILIZATION, DRAINAGE
 IMPROVEMENTS & RE-VEGETATION
 PROJECT AT CROATIAN WAY

SCALE: 1"=50'

PLANNING #
 PUBLIC WORKS #

SHEET:
M1

EXHIBIT #02:

GIS MAP & ASSESSOR'S INFORMATION



5101

5010

5011

5008

5006

5009

5007

5004

5005

5003

5011

5009

5005

5003

5001

4911

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4915

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4914

4912

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4916

4914

4907

4908

DOON WY

4912

4910

4904

CROATIAN WY (PRIV)

4915

4913

4911

4909

4907

4905

4903

4901

R2

4905

4900

Details for Parcel: P83311



Jurisdiction: ANACORTES

Zoning Designation: Please contact the city of **ANACORTES** for ANACORTES zoning information.[Recorded Documents](#) Documents scanned and recorded by the Auditor's office[Excise Affidavits](#) Document scans of excise affidavits

Parcel Number	XrefID	Quarter	Section	Township	Range
P83311	4486-000-011-0002	SW	27	35	01
Owner Information		Site Address(es)		Map Links	
SCHUTZLER JEROME C & SCHUTZLER JANICE G		4905 CROATIAN WAY		Open in iMap	
4905 CROATIAN WAY		Anacortes, WA (Jurisdiction, State)		Assessor's Parcel Map:	
ANACORTES, WA 98221		Zip Code Lookup Site Address Information		PDF DWF	

Current Legal Description [Abbreviation Definitions](#)

CHEUNG-MAVAR'S SKYLINE 21, LOT 11, TOGETHER WITH THAT PORTION OF THE COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 AS SHOWN ON PLAT OF CHEUNG-MAVAR'S NO. 21, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF SAID COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12; THENCE NORTH 55 DEGREES 00' 00" WEST 143.325 FEET ALONG THE NORTH BOUNDARY OF SAID TRACT; THENCE SOUTH 37 DEGREES 34' 45" WEST 38.893 FEET TO THE SOUTH LINE OF SAID TRACT; THENCE SOUTH 52 DEGREES 25' 15" EAST 112.913 FEET ALONG SAID SOUTH LINE TO A CURVE TO THE RIGHT, THAT HAS A RADIUS OF 45.00 FEET WHICH BEARS SOUTH 4 DEGREES 41' 29" EAST, A DELTA OF 42 DEGREES 16' 07", AND THROUGH AN ARC LENGTH OF 33.198 FEET; THENCE NORTH 37 DEGREES 34' 45" EAST 33.642 FEET TO THE POINT OF BEGINNING. TOGETHER WITH THAT PORTION OF THE COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 AS SHOWN ON PLAT OF CHEUNG-MAVAR'S NO. 21, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF SAID COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12; THENCE NORTH 55 DEGREES 00' 00" WEST 143.325 FEET ALONG THE NORTH BOUNDARY OF SAID TRACT; THENCE SOUTH 37 DEGREES 34' 45" WEST 38.893 FEET TO THE SOUTH LINE OF SAID TRACT; THENCE SOUTH 52 DEGREES 25' 15" EAST 112.913 FEET ALONG SAID SOUTH LINE TO A CURVE TO THE RIGHT, THAT HAS A RADIUS OF 45.00 FEET WHICH BEARS SOUTH 4 DEGREES 41' 29" EAST, A DELTA OF 42 DEGREES 16' 07", AND THROUGH AN ARC LENGTH OF 33.198 FEET; THENCE NORTH 37 DEGREES 34' 45" EAST 33.642 FEET TO THE POINT OF BEGINNING.

2018 Values for 2019 Taxes*

Building Market Value	\$559,300.00
Land Market Value	+\$688,200.00
Total Market Value	\$1,247,500.00
Assessed Value	\$1,247,500.00
Taxable Value	\$1,247,500.00

Sale Information

Deed Type	WARRANTY DEED
Sale Date	2000-03-06
Sale Price	\$285,000.00

2019 Property Tax Summary

2019 Taxable Value	\$1,247,500.00
General Taxes	\$11,772.42
Special Assessments/Fees	
Total Taxes	\$11,772.42

* Effective date of value is January 1 of the assessment year (2018)

Legal Description at time of Assessment

*Land Use	(111) HOUSEHOLD, SFR, INSIDE CITY		WAC 458-53-030	
Neighborhood	(22ASKY) ANACORTES SKYLINE WATERFRONT RESIDENTIAL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions		
Utilities	*SEW, PWR, WTR-P	Acres	0.36	
Improvement 1 Attributes Summary				
Building Style	2 STRY FIN BSMT			
Year Built	2001	Foundation	CONCRETE	
Above Grade Living Area	3,060 Square Feet	Exterior Walls	SIDING	
Finished Basement	935 Square Feet	Roof Covering	COMP	
*Total Living Area	3,995 Square Feet	Heat/Air Conditioning	FORCED AIR	
Unfinished Basement		Fireplace	S1 - STEEL	
*Total Garage Area	540 Square Feet	Bedrooms		
Bathrooms	MASTER BATH(5 FIX), FULL BATH, HALF BATH			
For additional information on individual segments see Improvements tab				

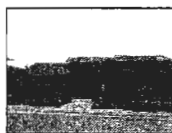
* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P83310



Jurisdiction: ANACORTES

Zoning Designation: Please contact the city of ANACORTES for ANACORTES zoning information.

Recorded Documents Documents scanned and recorded by the Auditor's office

Excise Affidavits Document scans of excise affidavits

Parcel Number

P83310

XrefID

4486-000-010-0003

Quarter Section Township Range

SW 27 35 01

Owner Information

DOWELL FAMILY TRUST
DOWELL LESTER ROBERT TRUSTEE
DOWELL ELAINE MARY TRUSTEE
4907 CROATIAN WAY
ANACORTES, WA 98221

Site Address(es)

4907 CROATIAN WAY
Anacortes, WA (Jurisdiction, State)
[Zip Code Lookup](#) | [Site Address Information](#)

Map Links

[Open in iMap](#)
Assessor's Parcel Map:
[PDF](#) | [DWF](#)

Current Legal Description Abbreviation Definitions

LOT 10 OF BOUNDARY LINE ADJUSTMENT APPROVED JULY 7, 2000, AND RECORDED JULY 12, 2000, UNDER AUDITOR'S FILE NO. 200007120078, MORE ACCURATELY DESCRIBED AS FOLLOWS: LOT 10, CHEUNG-MAVAR'S SKYLINE 21, AS PER PLAT RECORDED IN VOLUME 14 OF PLATS, PAGES 26 AND 27, RECORDS OF SKAGIT COUNTY, WASHINGTON. TOGETHER WITH THAT PORTION OF THE COMMUNITY PROPERTY TRACT FOR LOTS 8 THROUGH 12, INCLUSIVE, AS SHOWN ON PLAT OF CHEUNG-MAVAR'S NO. 21, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF SAID COMMUNITY PROPERTY TRACT FOR LOTS 8 THROUGH 12, INCLUSIVE, THENCE NORTH 55 DEGREES 00' 00" WEST 143.325 FEET ALONG THE NORTH BOUNDARY OF SAID TRACT TO THE POINT OF BEGINNING; THENCE NORTH 55 DEGREES 00' 00" WEST 115.117 FEET; THENCE SOUTH 37 DEGREES 34' 45" WEST 33.713 FEET TO THE SOUTH LINE OF SAID TRACT; THENCE SOUTH 52 DEGREES 25' 15" EAST 115.00 FEET ALONG SAID SOUTH LINE; THENCE NORTH 37 DEGREES 34' 45" EAST 38.893 FEET TO THE POINT OF BEGINNING.

2018 Values for 2019 Taxes*

Building Market Value \$478,800.00
Land Market Value +\$680,500.00
Total Market Value \$1,159,300.00
Assessed Value \$1,159,300.00
Taxable Value \$1,159,300.00

Sale Information

Deed Type WARRANTY DEED
Sale Date
Sale Price \$0.00

2019 Property Tax Summary

2019 Taxable Value \$1,159,300.00
General Taxes \$10,940.09
Special Assessments/Fees
Total Taxes \$10,940.09

* Effective date of value is January 1 of the assessment year (2018)

Legal Description at time of Assessment

*Land Use	(111) HOUSEHOLD, SFR, INSIDE CITY		WAC 458-53-030	
Neighborhood	(22ASKY) ANACORTES SKYLINE WATERFRONT RESIDENTIAL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions		
Utilities	*SEW, PWR, WTR-P	Acres	0.32	
Improvement 1 Attributes Summary				
Building Style	TWO STORY			
Year Built	1991	Foundation	CONCRETE	
Above Grade Living Area	3,996 Square Feet	Exterior Walls	PLYWOOD	
Finished Basement		Roof Covering	COMP	
*Total Living Area	3,996 Square Feet	Heat/Air Conditioning	FORCED AIR	
Unfinished Basement		Fireplace	SINGLE 1 STORY	
*Total Garage Area	462 Square Feet	Bedrooms	3	
Bathrooms	MASTER BATH(5 FIX), FULL BATH, 2 HALF BATHS			
For additional information on individual segments see Improvements tab				

For additional information on individual segments see Improvements tab

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P83308



Jurisdiction: ANACORTES

Zoning Designation: Please contact the city of **ANACORTES** for ANACORTES zoning information.[Recorded Documents](#) Documents scanned and recorded by the Auditor's office[Excise Affidavits](#) Document scans of excise affidavits

Parcel Number

P83308

XrefID

4486-000-008-0007

Quarter Section Township Range

SW 27 35 01

Owner Information

FOSTER THOMAS N III

FOSTER SALLY A

4911 CROATIAN WAY

ANACORTES, WA 98221

Site Address(es)

4911 CROATIAN WAY

Anacortes, WA (Jurisdiction, State)

[Zip Code Lookup](#) | [Site Address Information](#)

Map Links

[Open in iMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)Current Legal Description [Abbreviation Definitions](#)

CHEUNG-MAVAR'S SKYLINE 21, LOT 8, TOGETHER WITH THAT PORTION OF THE COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12 AS SHOWN ON PLAT OF CHEUNG-MAVAR'S NO. 21, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID COMMUNITY PROPERTY TRACT FOR LOTS 8 THRU 12; THENCE NORTH 55 DEGREES 00' 00" WEST 376.563 FEET ALONG THE NORTH BOUNDARY OF SAID TRACT TO THE POINT OF BEGINNING; THENCE NORTH 55 DEGREES 00' 00" WEST 109.110 FEET TO THE NORTHWEST CORNER OF SAID COMMUNITY TRACT; THENCE SOUTH 37 DEGREES 34' 45" WEST 23.49 FEET ALONG THE WEST BOUNDARY OF SAID TRACT TO THE SOUTH LINE OF SAID TRACT; THENCE SOUTH 52 DEGREES 25' 15" EAST 109.00 FEET ALONG SAID SOUTH LINE; THENCE NORTH 37 DEGREES 34' 45" EAST 28.397 FEET TO THE POINT OF BEGINNING. RECORDED UNDER SURVEY RECORDED [AF# 200007120078](#).

2018 Values for 2019 Taxes*

Building Market Value \$361,000.00
 Land Market Value +\$673,500.00
 Total Market Value \$1,034,500.00
 Assessed Value \$1,034,500.00
 Taxable Value \$1,034,500.00

Sale Information

Deed Type WARRANTY DEED
 Sale Date 2012-02-07
 Sale Price \$.00

2019 Property Tax Summary

2019 Taxable Value \$1,034,500.00
 General Taxes \$9,762.36
 Special Assessments/Fees
 Total Taxes \$9,762.36

* Effective date of value is January 1 of the assessment year (2018)

[Legal Description at time of Assessment](#)

*Land Use	(111) HOUSEHOLD, SFR, INSIDE CITY		WAC 458-53-030	
Neighborhood	(22ASKY) ANACORTES SKYLINE WATERFRONT RESIDENTIAL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions		
Utilities	*SEW, PWR, WTR-P	Acres	0.33	
Improvement 1 Attributes Summary				
Building Style	2 STRY UNDEV BSMT			
Year Built	1988	Foundation	CONCRETE	
Above Grade Living Area	2,866 Square Feet	Exterior Walls	PLYWOOD	
Finished Basement		Roof Covering	COMP	
*Total Living Area	2,866 Square Feet	Heat/Air Conditioning	HEAT PUMP	
Unfinished Basement		Fireplace	SINGLE 2 STORY	
*Total Garage Area	418 Square Feet	Bedrooms	4	
Bathrooms	MASTER BATH(5 FIX), 2 3/4 BATHS			
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

EXHIBIT #03:

NEIGHBORHOOD MEETING NOTICE, NOTICE OF APPLICATION & HEARING



NEIGHBORHOOD MEETING:

A neighborhood meeting will be held at **6:00 PM on Thursday, July 25, 2019, in the City of Anacortes' Senior Activity Center located at 1701 22nd Street, Anacortes, Washington**, concerning the applicant's proposed development. The applicants are proposing constructing a reinforced concrete bulkhead in front of the existing rock wall along the bay side of each of the subject properties located along Burrows Bay in Skyline. Work will be conducted during low tide cycles and will take approximately 1 month to complete. The subject properties and proposed development are located in R2 Zoning District and Shoreline Residential /Aquatic shoreline environments.

Applicants & Landowners:

Jerome & Janice Schutzler, 4905 Croatian Way, Anacortes, WA 98221; Phone: (360) 293-9216

Robert & Mary Dowell, 4907 Croatian Way, Anacortes, WA 98221; Phone: (360) 333-8044

Thomas & Sally Foster, 4911 Croatian Way, Anacortes, WA 98221; Phone: (541) 390-3278

Project Location: The subject properties are located at 4905, 4907, & 4911 Croatian Way, Anacortes, WA within a portion of Section 27; Township 35 North; Range 01 East; Willamette Meridian.

Parcel(s) Numbers Involved: P83311, P83310, P83308

Required Project Permits/Approvals: The following permits /approvals may be required as part of the proposed development: Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, & Building Permit. At this time however, this just concerns a neighborhood meeting as no permit application submittal has occurred to date.

For Project Information: Kevin Cricchio, AICP, ISA, WPIT, Senior Planner; Phone: (360) 293-1937; Email: kevinc@cityofanacortes.org; City of Anacortes, P.O. Box 547, Anacortes, WA 98221

Date Issued: July 10, 2019

Publish: July 10, 2019



NOTICE OF APPLICATION & HEARING USING OPTIONAL SEPA DNS:

Notice Is Hereby Given That An Application Was Made For The Following Proposal:

Request: The applicant have applied for a shoreline substantial development permit, shoreline conditional use permit, and SEPA environmental review to permit the construction of a reinforced concrete bulkhead in front of the existing rock wall along the bay side of each of the subject properties located along Burrows Bay in Skyline. Work will be conducted during low tide cycles and will take approximately 1 month to complete. The subject properties and proposed development are located in R2 Zoning District and Shoreline Residential /Aquatic shoreline environments.

File Number: SDP-2019-0004, 0005, & 0006

Subject Parcels #: P83311, P83310, P83308

Date of Application: July 31, 2019

Date of Completeness: August 7, 2019

Applicant & Landowner: Jerome & Janice Schutzler, 4905 Croatian Way, Anacortes, WA 98221; Robert & Mary Dowell, 4907 Croatian Way, Anacortes, WA 98221; & Thomas & Sally Foster, 4911 Croatian Way, Anacortes, WA 98221

Project Location: The subject properties are located at 4905, 4907, & 4911 Croatian Way, Anacortes, WA within a portion of Section 27; Township 35 North; Range 01 East; Willamette Meridian.

Public Comment Period: Any person may comment on this application by writing to the address below and/or by testifying at the public hearing. Staff will issue a recommendation on the project after the **comment period ends at 5:00 PM on September 6, 2019**. Written comments on the proposal should be submitted before the end of the comment period but will be accepted until the close of the Pre-Decision Open-Record Public Hearing.

Required Project Permits/Approvals: The following may be required in addition to the above: DOE shoreline permit approval, building permit, WDFW HPA, ACE approval

Preliminary Determination of Consistency: At this time, no determination of consistency with City of Anacortes plans, regulations, or standards has been made. At a minimum, this project will be subject to the following plans and regulations: 2010 Shoreline Master Program; 2016 Anacortes Comprehensive Plan; Municipal Code (Zoning, etc.); & Engineering Design and Building Standards.

SEPA Review: Based on the submitted application and available information, the City anticipates issuing an MDNS for this proposal and the optional DNS process as specified in WAC § 197.11.355 is being utilized. Consequently, this may be the only opportunity to comment on the environmental impacts of this proposal. This proposal may include mitigation measures under applicable codes, and the project review process may incorporate or require mitigation measures regardless of whether an EIS is prepared. A copy of the subsequent SEPA threshold determination for the proposal may be obtained upon request.

Existing Environmental Documents: JARPA; SEPA environmental checklist; Compensatory Mitigation Plan; Alternative Analysis; Biological Evaluation

Pre-Decision Open-Record Public Hearing: A pre-decision open-record public hearing to make a decision on the application will be held by the **Planning Commission at 6:00 PM on September 25, 2019**. The Planning Commission will conduct a **site visit onsite at 3:00 PM prior to the hearing**. The hearing will be held at city hall's council chambers located at 904 6th Street, Anacortes, WA.

How to become a party of record: You may become a party of record by submitting written comments, including a (USPS) mailing address, to the City of Anacortes PCED at the address listed below. E-mailed comments must include a return (USPS) mailing address in order for the sender to be considered a party of record. Questions about this proposal, requests to receive future notices of hearings and/or the decision, once made, and/or appeal procedures should be directed to the contact person listed below. The application and complete case file are available for review at the City of Anacortes PCED located at 904 6th Street, Anacortes, WA 98221. A decision on this application will be made within 120 days from the date of completeness.

For Project Information: Kevin Cricchio, AICP, ISA, WPIT, Senior Planner; Phone: (360) 293-1937; Email: kevinc@cityofanacortes.org; City of Anacortes, P.O. Box 547, Anacortes, WA 98221

Date Issued: August 7, 2019

Date Published: August 7, 2019

EXHIBIT #04:

PUBLIC COMMENTS RECEIVED

From: [Netting](#)
To: [Cricchio, Kevin](#)
Subject: Re: File #SDP-2019-0004, 0005, & 0006 - Bulkhead Construction
Date: Monday, August 12, 2019 11:34:38 AM

To Whom it May Concern,

For the record, I am in favor of the subject application for the construction of a reinforced concrete bulkhead intended to protect the residences of the applicants.

Thank you.

Regards,

Robert Holbrook

Mailing address:

4915 Doon Way

Anacortes, WA 98221

Phone: 360-293-6107

Email: netting@comcast.net



Virus-free. www.avast.com

EXHIBIT #05:

AGENCY & DEPARTMENT COMMENTS RECEIVED



Anacortes Planning, Community & Economic Development Dept.

Permit Center

P.O. Box 547, Anacortes, WA 98221-0547

Don Measamer, *Director of Planning, Community and Economic Development*

PH (360) 299-1984

FAX (360) 293-1938

DEPARTMENT / AGENCY COMMENT FORM:

August 5, 2019

RE: SDP-2019-0004, SDP-2019-0005, SDP-2019-0006; Proposed bulkhead /sea-wall at 4905, 4907, & 4911 Croatian Way; P83311, P83310, & P83308

From: Kevin Cricchio, Senior Planner; City of Anacortes; 904 6th Street, P.O. Box 547, Anacortes, WA 98221; Phone: (360) 293-1937; Email: kevinc@cityofanacortes.org

**Description
of Subject
Proposal:**

The applicant(s) have submitted a shoreline substantial development permit, shoreline conditional use permit, and SEPA environmental review to construct a bulkhead /sea-wall in front of the existing rock wall that abuts the shoreline. The project site is located in the R2 Zoning District. Please provide me with any comments or requirements by September 6, 2019.

Applicant:

4905 Croatian Way
4907 Croatian Way
4911 Croatian Way
Anacortes, WA 98221

Conditions &/or Requirements:

NO PUBLIC WORKS ENGINEERING ISSUES.

Signature:

[Handwritten Signature]

Date:

08-09-19

Dept. / Agency Name:

PW ENG - COA

From: [Kennedy, Jack](#)
To: [Cricchio, Kevin](#)
Subject: RE: comments -croatian way shoreline permits
Date: Tuesday, September 17, 2019 2:10:57 PM

No concerns or comments.

Jack Kennedy
Assistant Chief/Fire Marshal
Anacortes Fire Department
360-293-1932 Office
360-661-3437 Cell

From: Cricchio, Kevin
Sent: Tuesday, September 17, 2019 1:29 PM
To: Kennedy, Jack
Subject: comments -croatian way shoreline permits

Jack, do you have any comments regarding the 4905, 4907, and 4911 Croatian Way shoreline permits to construct a bulkhead waterward of existing rock seawall?

Kevin Cricchio, AICP, ISA, WPIT | Senior Planner | Certified Arborist
Planning, Community & Economic Development Dept.

City of Anacortes | P.O. Box 547 | 904 6th Street | Anacortes, WA 98221
360.293.1937 (work) | kevinc@cityofanacortes.org | www.cityofanacortes.org

My incoming and outgoing email messages are subject to public disclosure requirements per RCW 42.56.



Development Review Group (DRG)

Name of Applicant: 4905, 4907, 4911 Croatian Way

Brief Description: Proposed Bulkhead/Sea-Wall at 4905, 4907 & 4911 Croatian Way

Please initial if approved and/or include your comments:

Street Department: B.L.

Comments:

OK

Water Department: TSN

Comments:

OK

Solid Waste: MK

Comments:

OK

Sandi Andersen: SA

Comments:



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

*Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000
711 for Washington Relay Service • Persons with a speech disability can call (877) 833-6341*

September 6, 2019

Kevin Cricchio
Planning, Community, & Economic Development Department
P.O. Box 547
Anacortes, WA 98221-0547

Re: Schutzler, Dowell, & Foster Bulkhead Repair
File# SDP-2001-0004/-0005/-0006, Ecology SEPA# 201904429

Dear Kevin Cricchio:

Thank you for the opportunity to provide comments on the **Schutzler, Dowell, & Foster Bulkhead Repair**. Based on review of the State Environmental Policy Act (SEPA) checklist associated with this Project, the Department of Ecology (Ecology) has the following comments:

There is one contaminated site listed on Ecology's database within a 1-mile radius of this location. Skyline Marina (Facility Site ID No. 85847599; Cleanup Site ID No.: 6773) located at 2011 Skyline Drive in Anacortes (~0.75 mile to the northwest), received a No Further Action determination in 2006. Total petroleum hydrocarbons in the gasoline and diesel ranges and benzene were confirmed at concentrations exceeding cleanup levels in soil and ground water. This site is not hydrogeologically upgradient of this location.

Thank you for considering these comments from Ecology. If you have any questions or would like to respond to these comments, please contact Heather Vick from the Toxics Cleanup Program at (425) 649-7064 or by email at heather.vick@ecy.wa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Katelynn Piazza".

Katelynn Piazza
SEPA Coordinator

Sent by email: Kevin Cricchio, kevinc@cityofanacortes.org

ecc: Heather Vick, Ecology

EXHIBIT #06:

ISSUED SEPA MDNS



Anacortes Planning, Community & Economic Development Dept.

Permit Center

P.O. Box 547, Anacortes, WA 98221-0547

Don Measamer, *Director of Planning, Community and Economic Development*

PH (360) 293-1907

FAX (360) 293-1938

STATE ENVIRONMENTAL POLICY ACT (SEPA)

Mitigated Determination of Non-Significance (MDNS)

FILE NUMBER:

SDP-2019-0004, SDP-2019-0005, & SDP-2019-0006

APPLICANTS & LANDOWNERS:

Jerome & Janice Schutzler
4905 Croatian Way
Anacortes, Washington 98221

Robert & Mary Dowell
4907 Croatian Way
Anacortes, Washington 98221

Thomas & Sally Foster
4911 Croatian Way
Anacortes, Washington 98221

PROJECT LOCATION:

The subject proposal involves three (3) properties that are addressed as 4905 Croatian Way, 4907 Croatian Way, and 4911 Croatian Way, Anacortes, WA. The subject properties are located in a portion of Section 27; Township 35 North; Range 01 East, Willamette Meridian

SUBJECT PARCELS INVOLVED:

P83311, P83310, & P83308

SUBJECT PROPOSAL:

The applicants have applied for a shoreline substantial development permit, shoreline conditional use permit, and SEPA environmental review to permit the construction of a reinforced concrete bulkhead in front of the existing rock (riprap) sea-wall along the bay side of each of the subject properties located along Burrows Bay in Skyline. Work will be conducted during low tide cycles and will take approximately 1 month to complete once started.

PERMITS REQUIRED:

The following may be required in addition to the above: DOE shoreline permit approval, building permit, WDFW HPA, USACE approval.

EXISTING ENVIRONMENTAL DOCUMENTS:

JARPA; SEPA environmental checklist; Compensatory Mitigation Plan; Alternative Analysis; Biological Evaluation

ZONING DISTRICT:

The subject property is located in the Residential Low Density 2 (R2) Zoning District of the City of Anacortes.

CRITICAL AREAS:

The marine shoreline is a fish and wildlife habitat conservation area and regulated by the City of Anacortes' 2010 Shoreline Master Program (SMP) & shoreline specific critical area regulations. The applicant submitted a "Biological Evaluation" (BE) prepared by their consultant, Marine Surveys & Assessments dated July 23, 2019. The BE evaluated direct and indirect impacts and effects that the project may have on endangered and threatened aquatic species and critical habitat. According to the biological evaluation, a determination of effect on endangered and threatened species listed therein was made resulting in either "no effect" or "may affect, not likely to adversely affect."

The biological evaluation also evaluated "no net loss" to the ecological functions of the shoreline. Avoiding the impact to the shoreline by not taking the action [construction of a bulkhead] was not feasible in this case as the existing rock seawall protecting the residences upland from erosion, dissipation of wave energy, and ground subsidence is in disrepair. The existing rock seawall and a few feet of land above it is the only thing that separates itself from the three (3) single-family residences and the waters of Burrows Bay. The proposed bulkhead would help shore-up the land upland behind the existing rock seawall while stabilizing the subject properties that abut Burrows Bay while protecting the three (3) single-family residences that are part of the subject application(s). Recommendations of the biological evaluation have been made as recommended conditions of approval /mitigation measures. Project compliance with WDFW HPA and USACE authorizations are expected further to mitigate project impacts to critical areas /shoreline functions.

LEAD AGENCY:

City of Anacortes' Department of Planning, Community & Economic Development. The lead agency for this proposal has determined that this project does not have a probable adverse impact on the environment provided that the conditions set out below are satisfied. An environmental impact statement (EIS) is not required under RCW § 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

MITIGATION MEASURES:

1. Prior to work beginning, the applicant/landowner shall obtain all required local, state, and federal permits.

2. If any artifacts or human remains are found upon excavation, the Samish Indian Nation; the Swinomish Indian Tribal Community; the City of Anacortes' Department of Planning, Community, & Economic Development; the City of Anacortes' Police Department; and the State of Washington's Department of Archaeology and Historic Preservation (DAHP) shall be immediately notified and all work in the immediate area cease. Pursuant to RCW § 27.53.060 it is unlawful to destroy any historic or prehistoric archaeological resources. RCW 27.44 and § 27.53.060 require that a person obtain a permit from the Washington State Department of Archaeology and Historic Preservations before excavating, removing, or altering Native American human remains or archaeological resources in Washington.
3. Best Management Practices (BMPs) shall be implemented at all times during construction activities.
4. All applicable local, state and federal permits and authorizations shall be secured prior to work beginning on the site. Copies shall be provided to the city.

The conditions listed above along with the City of Anacortes' code governing noise, land use, traffic, drainage, fire protection, and building will provide substantial mitigation of the aforementioned environmental impacts. The City of Anacortes' derives the authority to require mitigation from Chapter 18.04 of the Anacortes Municipal Code and the State Environmental Policy Act. This MDNS is issued after using the optional MDNS process in WAC § 197.11.355. There is no further comment period on this MDNS.

Responsible Official: Don Measamer
Position & Title: Director of Planning, Community & Economic Development
Phone: (360)-299-1942
Email: don@cityofanacortes.org
Address: P.O. Box 547, Anacortes, Washington 98221

Signature:  _____

Date of Issuance: September 19, 2019

For further information, contact the City of Anacortes' Department of Planning, Community, & Economic Development at (360) 299-1984. The issuance of this Mitigated Determination of Non-significance should not be interpreted as acceptance or approval of the proposal as presented. The City of Anacortes reserves the right to deny or approve said proposal subject to conditions if it is determined to be in the best interests of the city and/or necessary for the general health, safety and welfare of the public to do so.

SEPA APPEAL PROCEDURE:

Appeals of this environmental determination may be made per the procedures outlines in AMC Chapter 18.04 and 19.20. Additional information regarding the appeal process may be obtained from the City of Anacortes Planning, Community, and Economic Development Department, (360) 299-1984.