



US Army Corps  
of Engineers  
Seattle District



WASHINGTON STATE  
DEPARTMENT OF  
E C O L O G Y

# Joint Public Notice

## Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification and/or Coastal Zone Management Consistency Concurrence

### US Army Corps of Engineers

Regulatory Branch  
Post Office Box 3755  
Seattle, WA 98124-3755  
Telephone: (206) 764-6904  
ATTN: Pamela Sanguinetti,  
Project Manager

### WA Department of Ecology

SEA Program  
Post Office Box 47600  
Olympia, WA 98504-7600  
Telephone: (360) 407-6068  
ATTN: SEA Program,  
Federal Permit Coordinator

**Public Notice Date:** February 29, 2016

**Expiration Date:** March 30, 2016

**Reference No.:** NWS-2015-1063

**Name:** Pacific Northwest National  
Laboratory

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Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the U.S. as described below and shown on the enclosed drawings dated January 20, 2016.

The Corps will review the work in accordance with Section 10 of the Rivers and Harbors Act. Ecology will review the work pursuant to the Coastal Zone Management Act.

**APPLICANT:** Pacific Northwest National Laboratory  
Attention: Mr. Charles Brandt  
1529 West Sequim Bay Road  
Sequim, Washington 98382

Telephone: (360) 681-4594

**AGENT:** Pacific Northwest National Laboratory  
Attention: Ms. Ann Miracle  
P.O. Box 999, MSIN K7-68  
Richland, Washington 99352

Telephone: (509) 372-4327

**LOCATION:** In Sequim Bay, near Sequim, Clallam County, Washington

**WORK:** Conduct in-water research projects to test marine energy technologies over a 5-year period. Research will be located at three specific locations: one location at Battelle Marine Science Laboratory (MSL) pier (dock) and two other locations in Sequim Bay (SB1 and SB2). The MSL research area is about three acres and ranges from 9 to 33 feet in depth. The SB1 area is 6.88 acres with a water depth of 38 to 45 feet. The SB2 area is 2.47 acres with a water depth of 85 feet.

Up to 25 deployments of scientific equipment and cables will occur within the 5-year period, with no more than eight cables and eight scientific equipment devices deployed per year across all three locations. Passive sensors

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such as hydrophones, acoustic Doppler devices, or water quality sensors will be deployed from platforms, docking stations, and buoys. Cables for data and power will only be deployed at the MSL location and will run from a terminal point or scientific device on the seabed within the MSL site to the MSL dock. No surface cable deployments will be installed. A 150 meter long cable will be installed on the seabed within the SB1 site and will be used to tether sensors and buoyant monitoring devices or buoys. This cable will not be used to convey data or power.

Activities can be divided into four categories:

(1) *Scientific Equipment on Seabed.* Scientific devices, instrumentation, cables, and sensors, are representative of equipment that would be placed and anchored on the seabed within the SB1, SB2, and MSL locations. Cables may be used for power/data exchange or as infrastructure for attaching small devices. Cables required for power would be restricted to the MSL location. Divers and/or boats would attach the cable to the substrate, most likely using small helical anchors installed by hand. Cables would avoid areas of eelgrass or underwater vegetation. Installations would be temporary for the duration of the project (days to years) and then removed when the project is over. Anchoring would be by diver-installed screw or helical anchors, or tethered to a heavy concrete on non-corrosive metal mooring that would rest on the bottom. Examples of equipment and instruments that may be placed on the seabed include grid framework for surveys, housings for equipment arrays, and mounts for video, lights, cameras, sensors, or acoustic devices.

(2) *Floating platforms or Moored Buoys.* Floating platforms and buoys would be needed to support or suspend equipment. They would be composed of non-corrosive, non-toxic materials and designed with grating to allow light transmission. Preferred anchoring would be diver-installed helical anchors, but if current and wave action is too great, concrete or non-corrosive metal anchors that rest on the sediment would be used. Mid-line floats would be added as necessary to keep lines from scouring bottom. Surface platforms or buoys would be temporary and deployed for weeks to months and removed when the project is completed. Anchoring would avoid areas of eelgrass and other underwater vegetation.

(3) *Installation of Scientific Equipment on MSL Pier.* Scientific equipment (e.g., light sensors, water quality sensors) may be suspended from the MSL pier or floating dock or attached to the pilings. Cabling to the pier may also be required. Installation and operation of the equipment would be temporary (days to months) and the equipment would be removed when the project is completed.

(4) *Surveys and Sediment Sampling.* Sampling may be completed at the SB1, SB2, and MSL locations by diver surveys, underwater video, or sonar. Sediment sampling will entail removal of volumetric limit of sediment per year, per site, of 200 gallons using a grab sampler, small coring device, or trowel. Surveys and sampling may be one-time or occur at a location over a period of time in a monitoring capacity.

**PURPOSE:** To provide capabilities for future energy research.

**ADDITIONAL INFORMATION:** At least 30 days prior to deployment, the U.S. Coast Guard (USCG) will be notified of exact locations in order to file a Notice to Mariners. Marker buoys will be installed per USCG requirements to identify areas under the Notice. The proposed research activities will be completed over a 5-year period.

**ENDANGERED SPECIES:** The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. The U.S. Department of Energy (DOE), as the lead agency for ESA consultation, will consult with the NMFS and/or the USFWS as required under Section 7 of the ESA. The DOE

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has determined that the project is not likely to adversely affect proposed and/or listed species and their designated critical habitat. NMFS issued a concurrence with this determination on January 27, 2016. USFWS issued a concurrence with this determination on February 18, 2016.

**ESSENTIAL FISH HABITAT:** The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area. The DOE, as the lead agency for a determination regarding EFH, will consult with the National Marine Fisheries Services if necessary. They have determined that the project will have no adverse effects on EFH species.

**CULTURAL RESOURCES:** The DOE, as the lead agency for determining compliance with Section 106 of the National Historic Preservation Act, will consult with the State Historic Preservation Officer and Native American Tribes as appropriate.

**PUBLIC HEARING:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

**EVALUATION – CORPS:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

**EVALUATION – ECOLOGY:** Ecology is soliciting comments from the public; Federal, Native American Nations or tribal governments, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Ecology will be considering all comments to determine whether to certify or deny certification for the proposed project.

**ADDITIONAL EVALUATION:** Clallam County has issued an exemption from the requirement of obtaining a Shorelines Substantial Development permit for this project.

**COMMENT AND REVIEW PERIOD:** Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether authorizing the work would not be contrary to the public interest. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and

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reference number as shown below. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commenter's name, address, and phone number. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

Copies of this public notice which have been mailed or otherwise physically distributed feature project drawings in black and white. The electronic version features those drawings in color, which we think more accurately communicates the scope of project impacts. To access the electronic version of this public notice, go to the Seattle District's web page at <http://www.nws.usace.army.mil/> and under the heading Open Public Comment Periods select Regulatory Public Notices. Recently-issued public notices are listed in chronological order of the date of issuance. Select and view the listing for this project.

**CORPS COMMENTS:** All e-mail comments should be sent to [pamela.sanguinetti@usace.army.mil](mailto:pamela.sanguinetti@usace.army.mil). Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Pamela Sanguinetti, P.O. Box 3755, Seattle, Washington 98124-3755. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses.

**ECOLOGY COMMENTS:** Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA and/or Coastal Zone Management consistency concurrence, may do so by submitting written comments to the following address: Washington State Department of Ecology, Attention: Federal Permit Coordinator, Post Office Box 47600, Olympia, Washington 98504-7600, or e-mail to [ecyrefedpermits@ecy.wa.gov](mailto:ecyrefedpermits@ecy.wa.gov).

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Pacific Northwest National Laboratory, NWS-2015-1063.

Encl: Figures (5)

Reference: NWS-2015-1063

Location: Sequim Bay

Proposed Project: Five Year Research Plan

Applicant: Pacific Northwest National Laboratory (PNNL)

Near: Sequim, WA Clallam County

Coordinates:

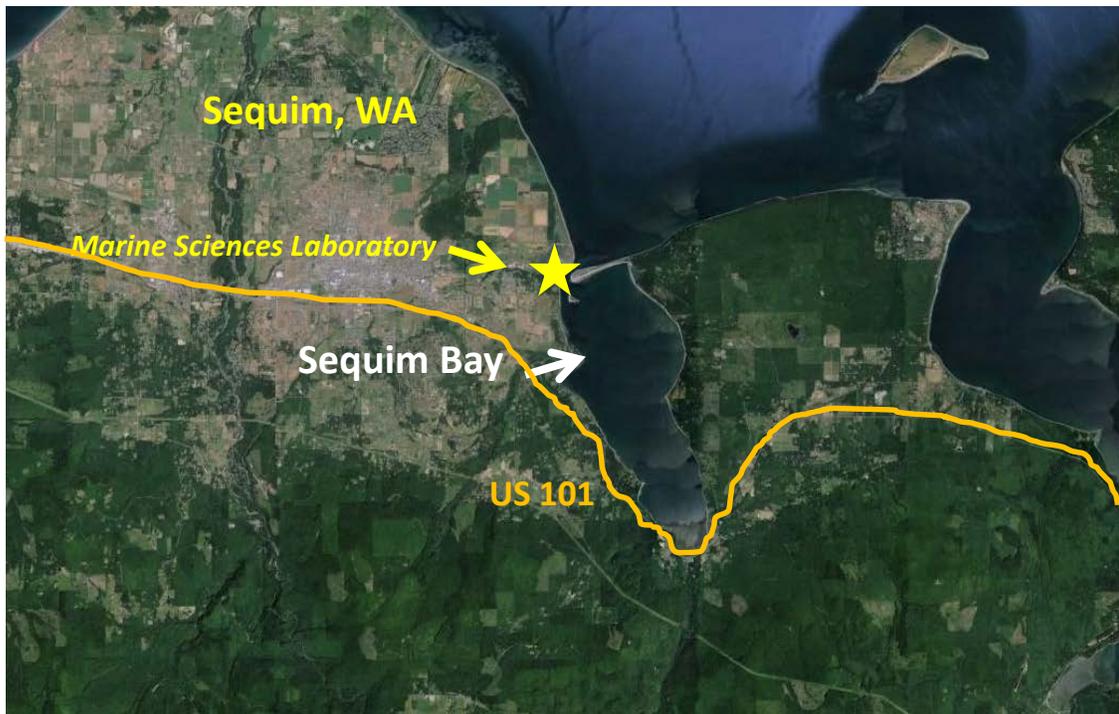
SB1: NW corner 48.080972, -123.029583  
NE corner 48.081944, -123.025556  
SW corner 48.080139, -123.029167  
SE corner 48.081111, -123.025139

SB2: NW corner 48.0591194, -123.02400  
NE corner 48.0591194, -123.02300  
SW corner 48.0582194, -123.02400  
SE corner 48.0582194, -123.02300

MSL: NW corner 48.07962, -123.0455  
NE corner 48.07992, -123.0440  
SW corner 48.07854, -123.0450  
SE corner 48.07902, -123.0430

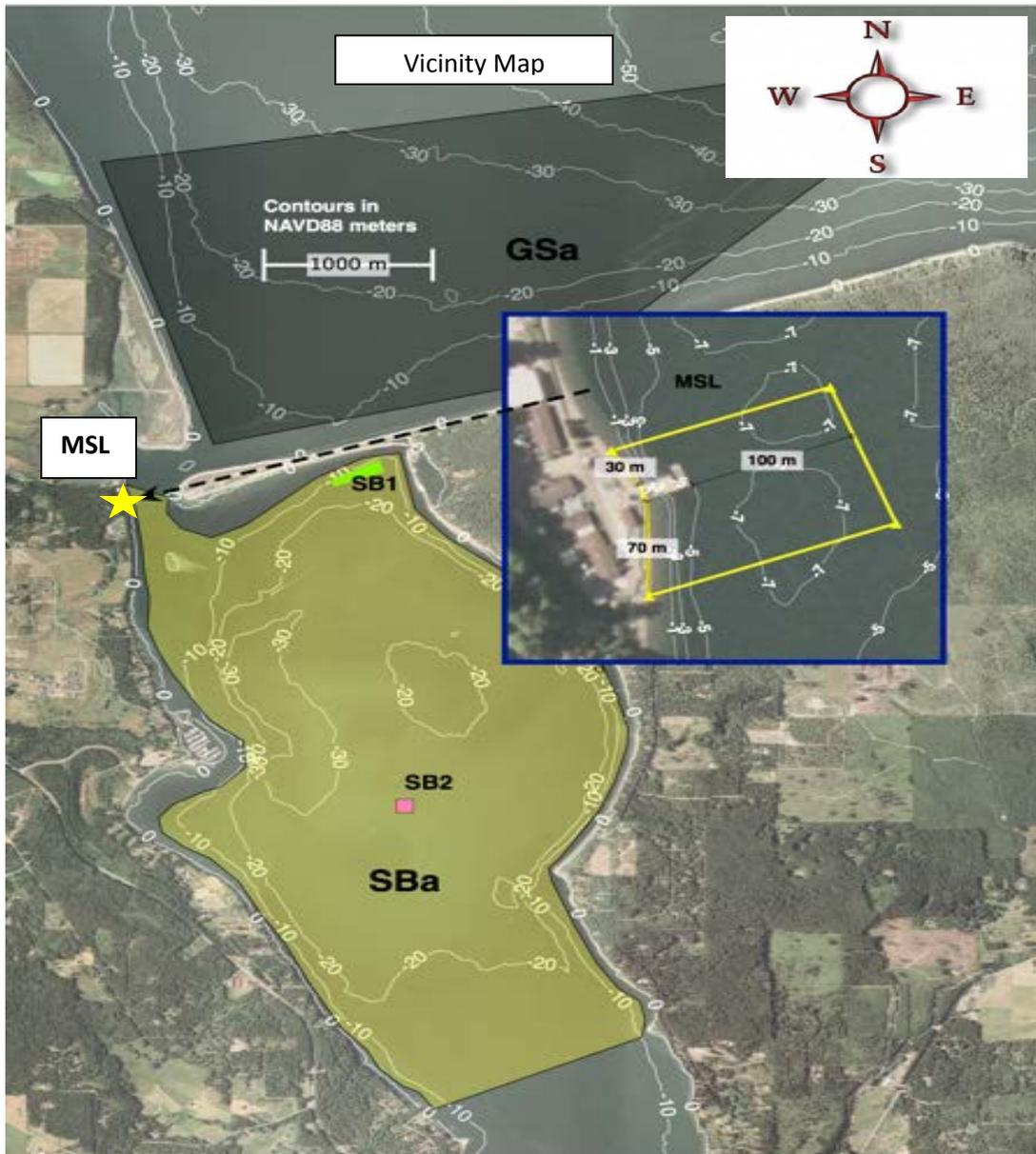
Adjoining Property Owners: Burrowes Properties, LLC; James and Patricia M H Graft; Battelle, Sequim Bay Point Association

Page 1 of 5 Date: 01/20/2016



Driving Directions:

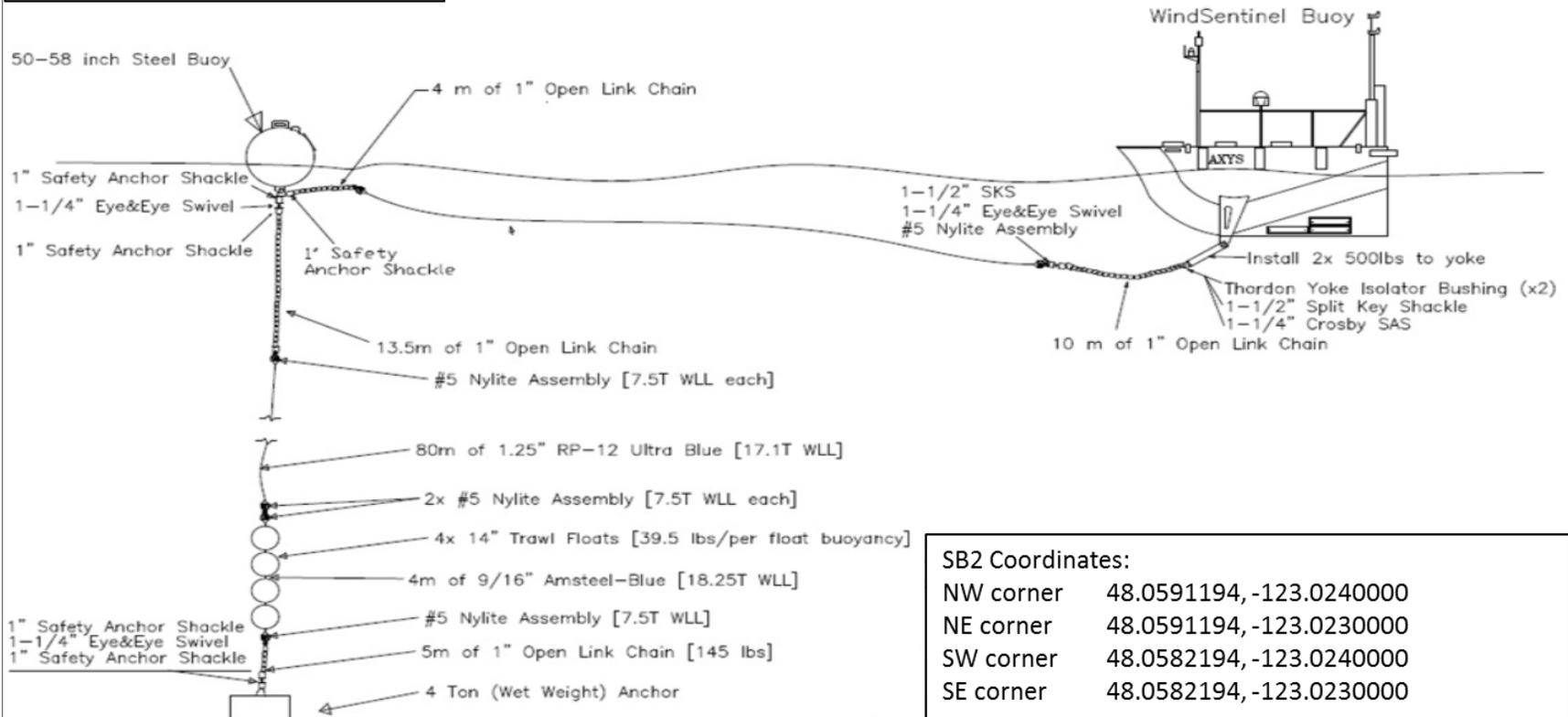
Take Sindars Road exit from US Highway 101 at east end of Sequim. Proceed west on E Washington Street to W Sequim Bay Road. Turn right on W Sequim Bay Road proceed approximately ¾ mile to Washington Harbor Road, turn left, follow Washington Harbor Road approximately 1.5 mile to the MSL facilities and dock.



This five year research plan will conduct research activities as part of a DOE research center to test marine energy technologies in any one of three defined areas in Sequim Bay. These marine energy projects may require surface platforms, buoys, or research docking stations for underwater sensors. Three areas within Sequim Bay are selected for general and discrete research activities. These are Sequim Bay 1 (SB1), south of Travis Spit, Sequim Bay 2 (SB2), an area in the middle of Sequim Bay, and the MSL dock (MSL). There will be no land associated construction or project interaction. The MSL area provides access to boat operations associated with these projects. SBa and GSa are areas associated with boat traffic only.

Reference Number: NWS-2015-1063  
 Applicant Name: PNNL  
 Proposed Project: Five Yr Research Plan  
 Location: Vicinity Map  
 Sheet 2 of 5 Date: 01/20/2016

Reference Number: NWS-2015-1063  
 Applicant Name: PNNL  
 Proposed Project: Five Yr Research Plan  
 Location: SB2, Sequim Bay  
 Sheet 3 of 5 Date: 01/20/2016



Wind Sentinel Buoy has 60 m<sup>2</sup> surface area (10m x 6 m)  
 Scope (Float): 1.28:1    Excursion Radius (Float): 64 m  
 Scope (Buoy): 2.3:1    Excursion Radius (Buoy): 50 m

SB2 Coordinates:  
 NW corner    48.0591194, -123.0240000  
 NE corner    48.0591194, -123.0230000  
 SW corner    48.0582194, -123.0240000  
 SE corner    48.0582194, -123.0230000

SB2 Deployment – Depth 25.9 m MLLW  
 Mud substrate

iAMP with docking station

MSL Dock Area Coordinates:

NW corner 48.07962, -123.0455

NE corner 48.07992, -123.0440

SW corner 48.07854, -123.0450

SE corner 48.07902, -123.0430

11 m (33 ft) MLLW

2.7 m (8 ft)



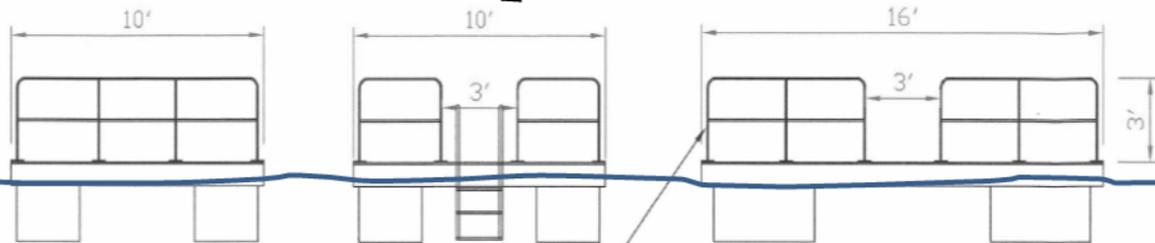
4.5 m (13.5 ft)

Reference Number: NWS-2015-1063  
Applicant Name: PNNL  
Proposed Project: Five Yr Research Plan  
Location: MSL Dock Area  
Sheet 4 of 5 Date: 01/20/2016

# Floating Platform

Side Views

Front/Back View

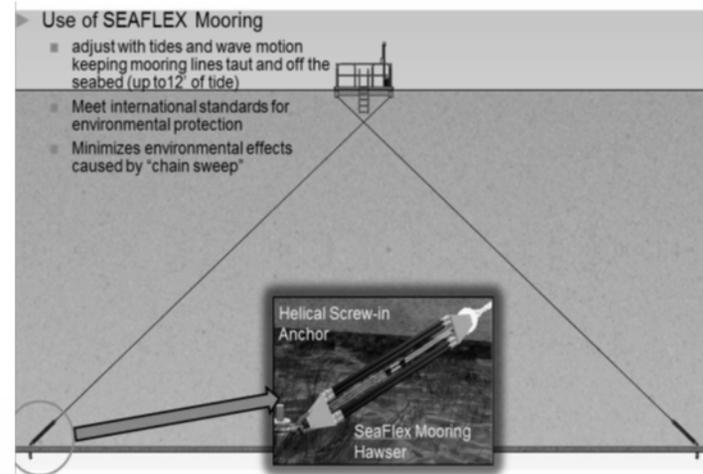


11.5 – 13.7 (38-45 ft) MLLW

**SB1 Coordinates:**

NW corner 48.080972, -123.029583  
 NE corner 48.081944, -123.025556  
 SW corner 48.080139, -123.029167  
 SE corner 48.081111, -123.025139

SB1 Deployment – Depth 25.9 m MLLW  
 Sand/mud substrate



  
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 CORPORATION

Reference Number: NWS-2015-1063  
 Applicant Name: PNNL  
 Proposed Project: Five Yr Research Plan  
 Location: SB1  
 Sheet 5 of 6 Date: 01/20/2016