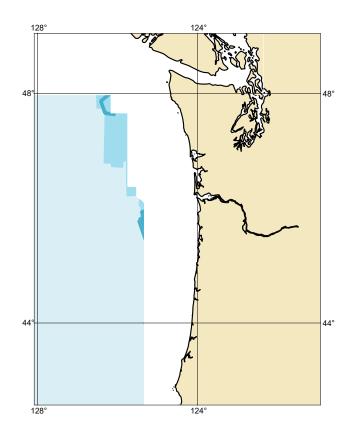
# Zone of Confidence (ZOC) Diagram



# ZOC CATEGORIES

ZOC	COLOR	POSITION ACCURACY	DEPTH ACCURACY	SEAFLOOR COVERAGE
A1		± 5 m + 5% depth ± 16.4 ft + 5% depth	= 0.50 m +1% d = 1.6 ft +1% d = 0.3 fm +1% d	All significant seafloor features detected.
A2		± 20 m ± 65.6 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	All significant seafloor features detected.
В		± 50 m ± 164.0 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	Uncharted features hazardous to surface navigation are not expected but may exist.
С		± 500 m ± 1640.4 ft	= 2.00 m +2% d = 6.6 ft +2% d = 1.1 fm +2% d	Depth anomalies may be expected.
D		Worse than ZOC C	Worse than ZOC C	Large depth anomalies may be expected.
U		Unassessed - The quality of the bathymetric data has yet to be assessed.		

# NOAA CUSTOM CHART NOTES GEOSPATIAL DATABASE VERSION 3.0B - 20 FEBRUARY 2025

The records of the NOAA Custom Chart Notes Geospatial Database are current as of February 20, 2025. Subsequent additions and refinements are to be expected. Please refer to all available navigational publications for complete information about the charted area.

# CAUTION CHART UPDATES

This NOAA Custom Chart contains upto-date information only as of the time of creation, and will become outdated. Mariners are advised to visit https://distribution.charts.noaa.gov/navigation-updates/ to check for critical and routine updates, and to render a new NOAA Custom Chart when the ENC data used to make the chart is updated. Notices to Mariners are not issued for corrections to this NOAA Custom Chart.

# AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard and National Geospatial-Intelligence Agency.

# COMMENTS REQUESTED

NOAA encourages users to submit inquiries, discrepancies, or comments about this chart via NOAA's ASSIST tool at https://nauticalcharts.noaa.gov/customer-service/assist/.

# CAUTION AUTOMATED CHART GENERATION

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#### **HEIGHTS**

Heights of fixed aids to navigation and vertical clearances of overhead obstructions will be shown in feet if the units are set to feet or fathoms. If units are set to meters, heights will be shown in meters. Land elevation values are shown in meters only.

# WATER LEVELS, CURRENTS, AND TIDES

Real-time water levels, tide predictions, and tidal current predictions are available on the internet from NOAA's Center for Operational Oceanographic Products and Services (CO-OPS) at https://tidesandcurrents.noaa.gov/water\_level\_info.html and https://tidesandcurrents.noaa.gov/currents\_info.html.

# **ABBREVIATIONS**

For complete list of Symbols and Abbreviations, see Chart No. 1.

#### POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

#### WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

# SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 10 for important supplemental information.

#### SOUNDING DATUM

In Canadian waters, soundings are referred to Lowest Normal Tide.

# VERTICAL DATUM

Overhead clearances are referred to Mean High Water (MHW).

# VERTICAL DATUM

In Canadian waters, overhead clearances are referred to Higher High Water Large Tides.

#### AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

#### RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

#### ADDITIONAL INFORMATION

Additional information can be obtained at www.nauticalcharts.noaa.gov

#### SOUNDING DATUM

Soundings referred to Mean Lower Low Water (MLLW).

# SOUNDING DATUM

Soundings in the Columbia River east of Harrington Point are referred to Columbia River Datum, or Mean Lower Low Water (MLLW) during lowest river stages.

#### VERTICAL DATUM

Overhead clearances in the Columbia River east of Harrington Point are referred to Columbia River Datum.

#### NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 10. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, WA or at the Office of the District Engineer, Corps of Engineers in San Francisco, CA.

Refer to charted regulation section numbers.

Refer to charted regulation section numbers.

Refer to charted regulation section numbers.

# COLREGS, 80.1390 (SEE NOTE A)

International Regulations for Preventing Collisions at Sea, 1972. The entire area of this chart falls seaward of the COLREGS Demarcation Line.

# CANADIAN AIDS TO NAVIGATION

See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

# VESSEL TRANSITING

The U.S. Coast Guard and the Pacific States/British Columbia Oil Spill Task Force endorse a system of voluntary measures and minimum distances from shore for certain commercial vessels transiting along the coast anywhere between Cook Inlet, Alaska, and San Diego, California. See U.S. Coast Pilot, Chapter 3 for details.

#### NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 10. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, WA or at the Office of the District Engineer, Corps of Engineers in Portland, OR.

Refer to charted regulation section numbers.

#### NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 10. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, WA or at the Office of the District Engineer, Corps of Engineers in Seattle, WA.

Refer to charted regulation section numbers.

# COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

#### JUAN DE FUCA CVTS

A Cooperative Vessel Traffic Services (CVTS) system has been established by the United States and Canada within the adjoining waters in the Juan de Fuca Region. The appropriate Vessel Traffic Center (VTC) (Prince Rupert Traffic, Seattle Traffic, Victoria Traffic) administers the rules issued by both nations, however it will enforce only its own set of rules within its jurisdiction.

# PRECAUTIONARY AREA

Precautionary Area have been established where major lanes merge and cross the traffic separation scheme. It is recommended that vessels proceed with caution in these areas. Where practicable, vessels entering or leaving the system should do so at these precautionary areas. For more information regarding Traffic Separation Scheme procedures and regulations, see 33 CFR 167 and/or chapter 2 of the U.S. Coast Pilot.

# VESSEL TRAFFIC SERVICES (VTS)

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in U.S. waters. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, in the U.S. Coast Pilot, and/or the VTS User's Manual.

#### TRAFFIC SEPARATION SCHEME

One-way traffic lanes are RECOMMENDED for use by all vessels traveling between the points involved. They have been designated to aid in the prevention of collisions in the Strait of Juan De Fuca waters, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones, use extreme caution.

#### TRAFFIC SEPARATION SCHEME

One-way traffic lanes are RECOMMENDED for use by all vessels traveling between the points involved. They have been designated to aid in the prevention of collisions in the Strait of Georgia waters, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones, use extreme caution.

# VESSEL TRAFFIC MANAGEMENT AND INFORMATION SYSTEM

For information governing the VESSEL TRAFFIC MANAGEMENT AND INFORMATION SYSTEM for the coastal waters of southern British Columbia, see National Geospatial-Intelligence Agency Publication 154, Sailing Directions (en route) for British Columbia, and the Sailing Directions British Columbia Coast (South Portion) Volume 1, published by the Canadian Hydrographic Service.

#### RECOMMENDED TWO-WAY ROUTE

The recommended two-way route south of the traffic separation scheme (TSS) formalizes traffic patterns where slower vessels such as tug and barge traffic and fishing vessels pass starboard to starboard. Slower moving traffic transiting eastbound should follow the route established south of the TSS and north of the recommended two-way route line. Slower moving traffic transiting westbound should follow the route established south of the recommended two-way route line.

#### OBSTRUCTION AREA

Scientific equipment rests on the seafloor in this area (44°38'15"N - 124°18'18"W). Mariners should use caution.

#### OBSTRUCTION AREA

Scientific equipment rests on the seafloor in this area (44°22'12"N - 124°57'00"W). Mariners should use caution.

#### OBSTRUCTION AREA

Scientific equipment rests on the seafloor in this area  $(44^{\circ}31'13"N-125^{\circ}23'42"W)$ . Mariners should use caution.

#### NAVAL OPERATING AREAS

Mariners should use caution as naval craft may be maneuvering within the areas. For further information consult Local Notices to Mariners.

#### CAUTTON

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

# CAUTION LIMITATIONS ON THE USE OF RADIO SIGNALS

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

#### **OBSTRUCTION AREA**

Scientific equipment rests on the seafloor in this area (44°34'11"N - 125°09'00"W). Mariners should use caution.

# OBSTRUCTION AREA

Scientific equipment rests on the seafloor in this area (45°45'00"N - 127°16'49"W). Mariners should use caution.

# CAUTION DISPUTED AREA

This area is disputed by United States and Canada. Cette zone est l'objet d'un désaccord entre les États-Unis et le Canada.

#### SMALL ARMS SAFETY ZONE

Naval Air Station small arms range operates 7 days a week. Red flashing light and flags are displayed during live fire exercises. Use caution when transiting near the zone.

# AREA TO BE AVOIDED (ATBA)

In order to reduce the risk of a marine casualty and resulting pollution and damage to the environment of the Olympic Coast National Marine Sanctuary, all ships and barges that carry oil or hazardous materials in bulk as cargo or cargo residue and all ships 400 gross tonnage and above solely in transit should avoid the area. See IMO SN circular 309.

# QUILLAYUTE RIVER AIDS

Buoys in Quillayute River are not charted due to their positions frequently changing.

#### STRONG CURRENTS

Strong tidal current anomalies may exist within the area of Port Townsend Canal. Refer to Coast Pilot 10 and use local knowledge when transiting the area.

# SCIENTIFIC MOORINGS

Acoustic sensors, consisting of a concrete anchor and tethered instrument package floating above the anchor, are positioned approximately 0.5 miles apart along the line. Instruments in water less than 150 meters/492 feet deep are within 5.4 meters/18 feet of the seabed. Instruments in water more than 149.9 meters/492 feet deep are approximately 149.9 meters/492 feet below the surface.

# OLYMPIC COAST NATIONAL MARINE SANCTUARY (PROTECTED AREA: 15 CFR 922)

National Marine Sanctuaries are protected areas, administered by NOAA which contain abundant and diverse natural resources such as marine mammals, seabirds, fishes, and tidepool invertebrates. These areas are particularly sensitive to environmental damage such as spills of oil and other hazardous materials, discharges, and groundings. Exercise particular caution and follow applicable Sanctuary regulations when transiting these areas to avoid environmental impacts. A full description of Sanctuary regulations may be found in 15 CFR Part 922 and in the Coast Pilot.

# STRONG CURRENTS

Boats should plan to traverse Deception Pass at slack water, as the velocity of the stream at other times makes passage extremely hazardous.

# SCIENTIFIC MOORINGS

Acoustic sensors, consisting of a concrete anchor and tethered instrument package floating above the anchor, are positioned approximately 915 meters/1000 yards apart along the line. The depth of the floating portion of the instrument varies with local bottom depth. For instruments anchored at less than 150 meters/492 feet depth (near shore), the floating portion of the instrument is within 5 meters/16 feet of the bottom. For instruments anchored at 150 meters/492 feet depth or greater, the instrument package is tethered approximately 150 meters/492 feet below the water surface.