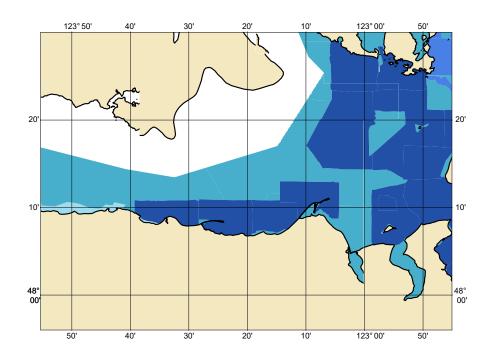
# Zone of Confidence (ZOC) Diagram



# 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This NOAA Custom Chart contains upto-date information only as of the time of creation, and will become outdated.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

This NOAA Custom Chart has been automatically rendered from NOAA Electronic Navigational Chart (NOAA ENC®) data. Mariners using this NOAA Custom Chart are advised that this is a static reproduction of the NOAA ENC®. This NOAA Custom Chart has not been individually quality checked or adjusted for optimal use for navigation. The portrayal may be at a different scale from that of the original NOAA ENC®. Mariners are advised to use caution when using this NOAA Custom Chart for navigation and are encouraged to use the latest NOAA ENC® to access the most up-todate information. Mariners must also comply with all applicable regulatory requirements.

#### **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

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

# 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.

# COLREGS, 80.1385 (SEE NOTE A)

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

#### 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).

# VERTICAL DATUM

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

#### 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.

# COLREGS, 80.1395 (SEE NOTE A)

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

#### 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.

# 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.

#### FLOATING SECURITY BARRIERS

Floating security barriers have been installed at various U.S. Naval installations throughout Puget Sound. The barriers are marked by numerous flashing yellow (FI Y 2s) Navy maintained lighted buoys and approximately mark the Restricted Areas surrounding the facility.

#### 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.

# 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.

# 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.

# VESSEL TRAFFIC SERVICES (VTS)

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

### CAUTION

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.

#### 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 Admiralty Inlet and Puget Sound 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.

#### 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.

# CAUTION FERRY ROUTES

Mariners are cautioned that ferries may deviate from their published standard routes due to inclement weather, traffic conditions, navigational hazards, or other emergency situations.

# CAUTION SUBMERGED CABLES AND PIPELINES

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging or trawling.

Covered wells may be marked by lighted or unlighted buoys.

#### NAVAL OPERATING AREAS

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

### 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.

#### CAUTION

Naval vessels may be maneuvering in circles in this area (48°15'36"N - 123°15'50"W)- proceed with caution. For further information consult Coast Guard Local Notice to Mariners.

# SUBMARINE OPERATIONS

Submerged submarine operations are conducted at various times in the waters contained on this chart. Proceed with caution.

#### CAUTION

USACE conducts hydrographic surveys to monitor navigation conditions. These surveys are not intended to detect underwater features. Uncharted features hazardous to surface navigation are not expected but may exist in federal channels. For more information visit https://navigation.usace.army.mil/Survey/Hydro.

# MILITARY PRACTICE AREA

For Canadian Firing Practice and Exercise Areas, see Canadian Notice to Mariners No. 35 of each year. Lighted and unlighted buoys are randomly located within these areas. These buoys are not charted.

## PUGET SOUND HARBOR SAFETY PLAN

The US Coast Guard and the Puget Sound Harbor Safety Committee have developed and adopted a Harbor Safety Plan that formally established a set of Standards of Care for Puget Sound surrounding waters. These Standards of Care are intended to supplement existing regulations by documenting good marine practices for a variety of operations including tug pilotage, anchoring, lightering, and provides additional information on required charts, Aids to Navigation and Emergency Response. If your vessel does not already have a copy of the Puget Sound Harbor Safety Plan, visit https:// marexps.com/membership/puget-soundharbor-safety-committee/ or contact the Marine Exchange of Puget Sound at (206) 443-3830.

#### DUNGENESS NATIONAL WILDLIFE REFUGE

Marked by private buoys. The area is closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 183 meters/200 yards away from these islands to avoid disturbance to these animals.

# NATIONAL WILDLIFE REFUGE SAN JUAN AND LOPEZ ISLANDS

The areas are closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 183 meters/200 yards away from these islands to avoid disturbance to these animals.

#### NATIONAL WILDLIFE REFUGE

The islands in the vicinity of Georgia, Haro, and Rosario Straits are part of a National Wildlife Refuge and are closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 200 yards / 182.8 meters away from these islands to avoid disturbance of these animals.

#### NATIONAL WILDLIFE REFUGE

Smith and Minor islands are closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 183 meters/200 yards away from these islands to avoid disturbance to these animals.

# PROTECTION ISLAND

The area is closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 183 meters/200 yards away from the island to avoid disturbance to these animals.

## LOG BOOMING GROUNDS

Log booming grounds are found in the northwest portion of Port Angeles.

#### 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.

#### NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Seattle, WA KHB-60 162.550 MHz

#### NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Neah Bay, WA KIH-36 162.550 MHz

#### NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Puget Sound Marine, WA WWG-24 162.425 MHz