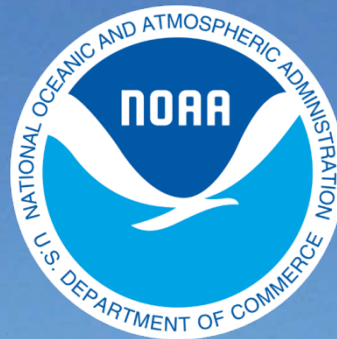


BookletChart™

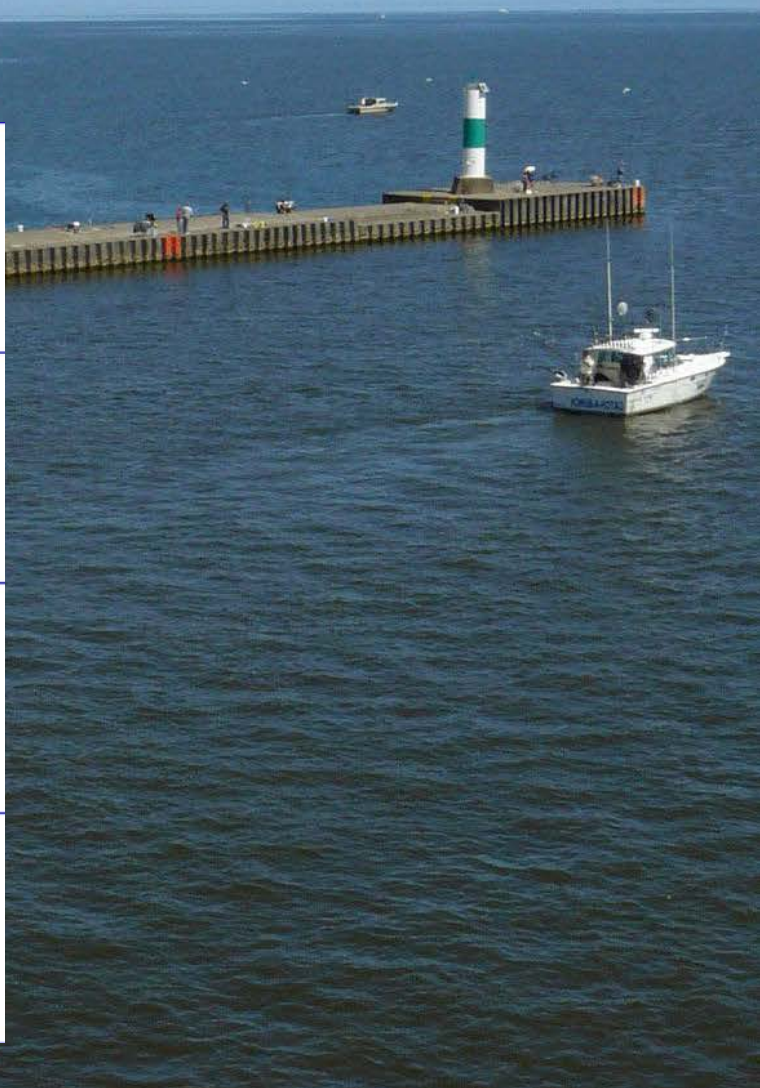
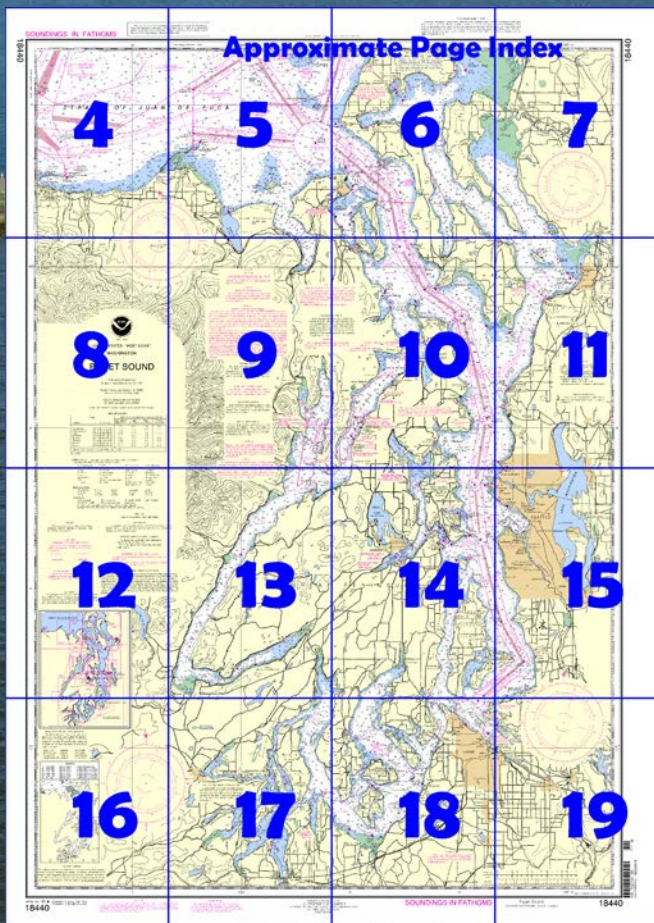
Puget Sound NOAA Chart 18440



*A reduced-scale NOAA nautical chart for small boaters
When possible, use the full-size NOAA chart for navigation.*



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



**Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA**

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18440>.



**(Selected Excerpts from Coast Pilot)
Puget Sound**, a bay with numerous channels and branches, extends about 90 miles S from the Strait of Juan de Fuca to Olympia. The N boundary of the sound is formed, at its main entrance, by a line between Point Wilson on the Quimper Peninsula and Point Partridge on Whidbey Island; at a second entrance between West Point on Whidbey Island, Deception Island, and Sares Head on Fidalgo Island; at a third entrance, at the S end of Swinomish Channel between Fidalgo

Island and McGlinn Island. Puget Sound was named by George

Vancouver for Lieutenant Peter Puget, who explored the S end in May 1792. Deep-draft traffic is considerable in the larger passages, and small craft operate throughout the area. Unusually deep water and strong currents characterize these waters.

Navigation of the area is comparatively easy in clear weather; the outlying dangers are few and marked by aids. The currents follow the general direction of the channels and have considerable velocity. In thick weather, because of the uncertainty of the currents and the great depths which render soundings useless in many places, strangers are advised to take a pilot.

The **Marine Exchange of Puget Sound**, located in Seattle, has a Vessel Monitoring/Vessel Reporting service which tracks the arrival of a vessel from a time prior to arrival at the pilot station to a berth at one of the Puget Sound ports. Constant updates of the ship's position and estimated time of arrival are maintained through a variety of sources. This information is available to and is passed to the vessel's agents and to other interested activities. These services continue until the vessel passes the pilot station on her outbound voyage.

Other services offered by the Marine Exchange include a daily newsletter about future marine traffic in the Puget Sound area, communication services, and a variety of coordinative and statistical information. The office monitors VHF-FM channels 20 for Grays Harbor traffic, 9 for Strait of Juan de Fuca traffic to Protection Island, and 20 for Puget Sound traffic from Protection Island, 24 hours a day. The Marine Exchange may also be contacted by phone, 206-443-3830 or toll free 800-562-2856.

Vessel Traffic Service Puget Sound, operated by the U.S. Coast Guard, has been established in the waters of the Strait of Juan de Fuca, Rosario Strait, Admiralty Inlet, Puget Sound, and the navigable waters adjacent to these areas. (See **161.1 through 161.155**, chapter 2, for regulations, and the beginning of chapter 12 for additional information.)

Regulated navigation area.-Due to heavy vessel concentrations, the waters of the Strait of Juan de Fuca, the San Juan Islands, the Strait of Georgia, and Puget Sound, and all adjacent waters, are a regulated navigation area. (See **165.1 through 165.13 and 165.1301**, chapter 2, for regulations.)

Floating logs and **deadheads** or **sinkers** may be encountered anywhere in Puget Sound; caution should be exercised.

Currents.-In The Narrows current velocities exceed 5 knots at times. At the N end of The Narrows the current sets N most of the time on the E side of the passage and S most of the time on the W side. (See Tidal Current Tables for daily current predictions for a midstream position near the N end of The Narrows and details of the current movement at other locations; these tables and the Tidal Current Charts, Puget Sound, Southern Part, should both be consulted for details of the complicated currents of this area.)

Caution.-The channel through Balch Passage is only about 100 yards wide between the 10-fathom curves, and the scale of the chart is small. Vessels should stay carefully in midchannel, traffic permitting.

**U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies**

RCC Seattle Commander
13th CG District (206) 220-7001
Seattle, WA

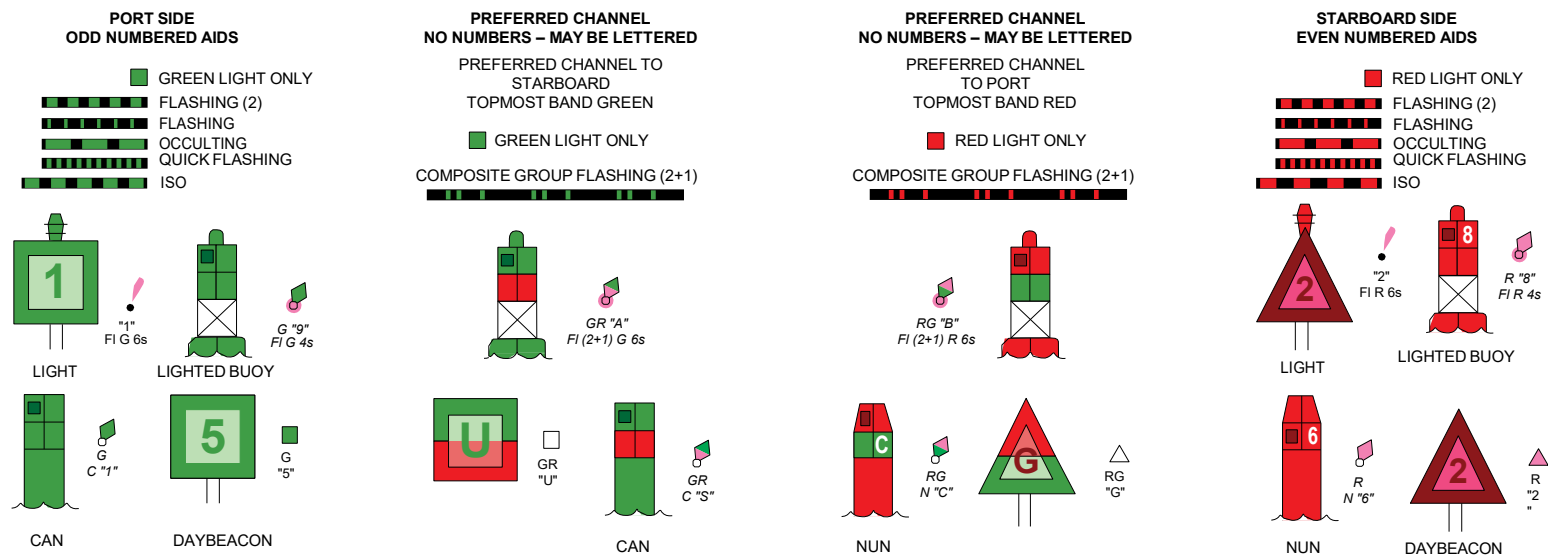
Navigation Manager Regions



To make suggestions, ask questions, or report a problem with a chart, go to <https://www.nauticalcharts.noaa.gov/customer-service/assist/>

Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers

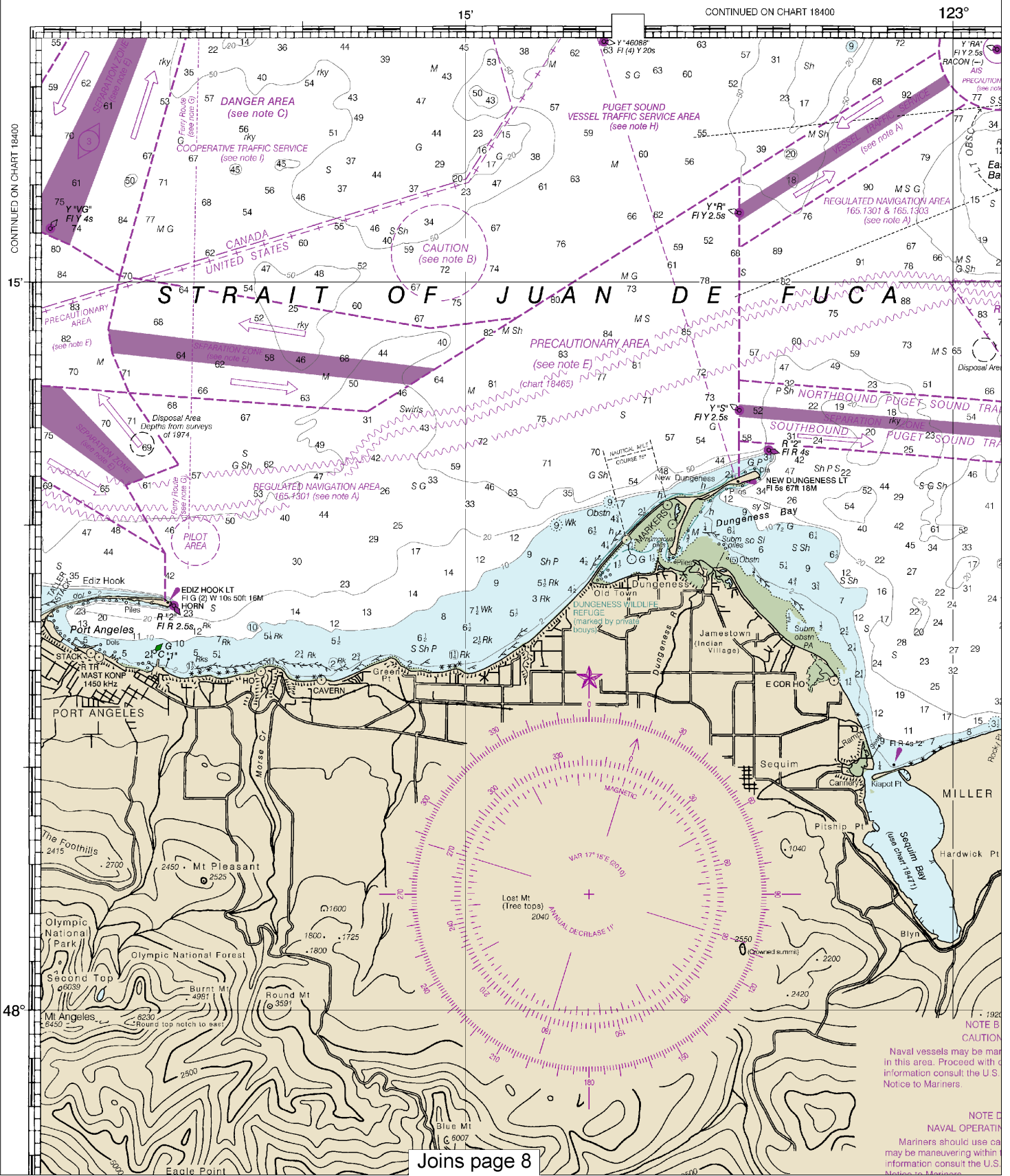


For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at <http://www.navcen.uscg.gov>

SOUNDINGS IN FATHOMS

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.

18440



Joins page 8

**NOTE B
CAUTION**
Naval vessels may be manuevering within this area. Proceed with caution. Consult the U.S. Notice to Mariners.

**NOTE D
NAVAL OPERATIONS**
Mariners should use caution when maneuvering within this area. Consult the U.S. Notice to Mariners.

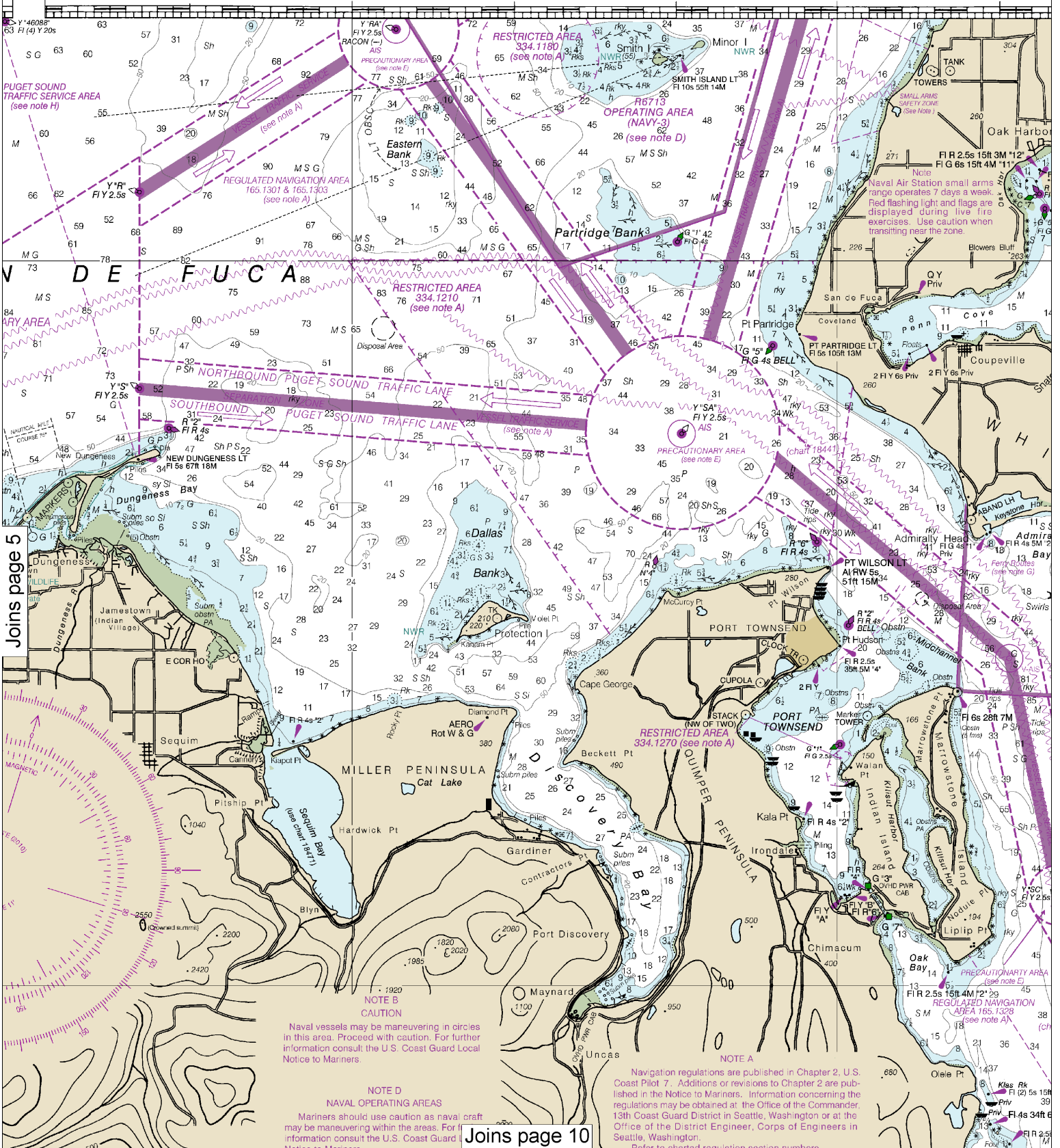
4

Note: Chart grid lines are aligned with true north.

CONTINUED ON CHART 18400

123°

45'



Joins page 5

Joins page 10

6

Note: Chart grid lines are aligned with true north.

Naval vessels may be maneuvering in circles in this area. Proceed with caution. For further information consult the U.S. Coast Guard Local Notice to Mariners.

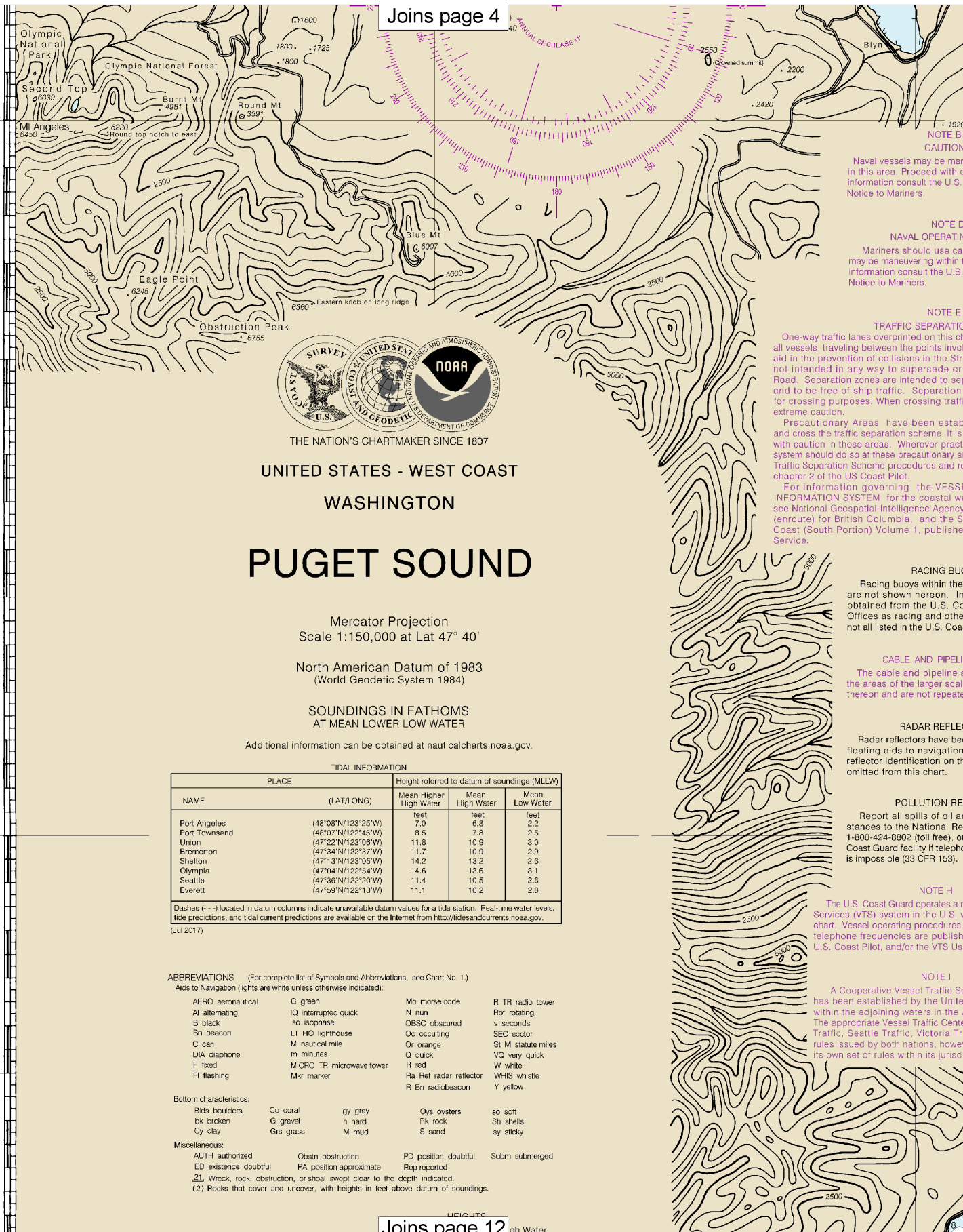
NOTE D
NAVAL OPERATING AREAS
Mariners should use caution as naval craft may be maneuvering within the areas. For further information consult the U.S. Coast Guard Local Notice to Mariners.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.
Refer to charted regulation section numbers.

Note
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.

48°

45°



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

WASHINGTON

PUGET SOUND

Mercator Projection
Scale 1:150,000 at Lat 47° 40'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

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

TIDAL INFORMATION

PLACE	NAME	(LAT/LONG)	Height referred to datum of soundings (MLLW)		
			Mean Higher High Water	Mean High Water	Mean Low Water
Port Angeles		(48°08'N/123°25'W)	7.0	6.3	2.2
Port Townsend		(48°07'N/122°45'W)	8.5	7.8	2.5
Union		(47°22'N/123°06'W)	11.8	10.9	3.0
Bremerton		(47°34'N/122°37'W)	11.7	10.9	2.9
Shelton		(47°13'N/123°03'W)	14.2	13.2	2.6
Olympia		(47°04'N/122°54'W)	14.6	13.6	3.1
Seattle		(47°36'N/122°20'W)	11.4	10.5	2.8
Everett		(47°59'N/122°13'W)	11.1	10.2	2.8

Dashes (- -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>. (Jul 2017)

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

- Aids to Navigation (lights are white unless otherwise indicated):
- AERO aeronautical
 - Al alternating
 - B black
 - Bn beacon
 - C can
 - DIA diaphane
 - F fixed
 - Fl flashing
 - G green
 - IQ interrupted quick
 - ISO isophase
 - LT HC lighthouse
 - M nautical mile
 - m minutes
 - MICRO TR microwave tower
 - Mkr marker
 - Mo Morse code
 - N nun
 - OBSC obscured
 - Oc occulting
 - Or orange
 - Q quick
 - R red
 - Ra Ref radar reflector
 - R Bn radiobeacon
 - R TR radio tower
 - Ror rotating
 - s seconds
 - SEC sector
 - St M statute miles
 - QY very quick
 - W white
 - WHIS whistle
 - Y yellow
- Bottom characteristics:
- Bds boulders
 - bk broken
 - Cy clay
 - Co coral
 - G gravel
 - Gr grass
 - gy gray
 - h hard
 - M mud
 - Oys oysters
 - Rk rock
 - S sand
 - so soft
 - Sh shells
 - sy sticky
- Miscellaneous:
- AUTH authorized
 - ED existence doubtful
 - ∟ Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
 - (2) Rocks that cover and uncover, with heights in feet above datum of soundings.
 - Obstn obstruction
 - PA position approximate
 - PD position doubtful
 - Rep reported
 - Subm submerged

NOTE B CAUTION
Naval vessels may be man in this area. Proceed with information consult the U.S. Notice to Mariners.

NOTE D NAVAL OPERATIN
Mariners should use ca may be maneuvering with information consult the U.S. Notice to Mariners.

NOTE E TRAFFIC SEPARATI
One-way traffic lanes overprinted on this of all vessels traveling between the points invol aid in the prevention of collisions in the Str not intended in any way to supersede or Road. Separation zones are intended to se and to be free of ship traffic. Separation for crossing purposes. When crossing traffi extreme caution.
Precautionary Areas have been estab and cross the traffic separation scheme. It is with caution in these areas. Wherever pract system should do so at these precautionary a Traffic Separation Scheme procedures and re chapter 2 of the US Coast Pilot.

For information governing the VESSI INFORMATION SYSTEM for the coastal w see National Geospatial-Intelligence Agency (enroute) for British Columbia, and the S Coast (South Portion) Volume 1, publishe Service.

RACING BU
Racing buoys within the are not shown hereon. In obtained from the U.S. Cd Offices as racing and othe not all listed in the U.S. Coa

CABLE AND PIPELI
The cable and pipeline a the areas of the larger sca thereon and are not repea

RADAR REFLE
Radar reflectors have be floating aids to navigati reflector identification on th omitted from this chart.

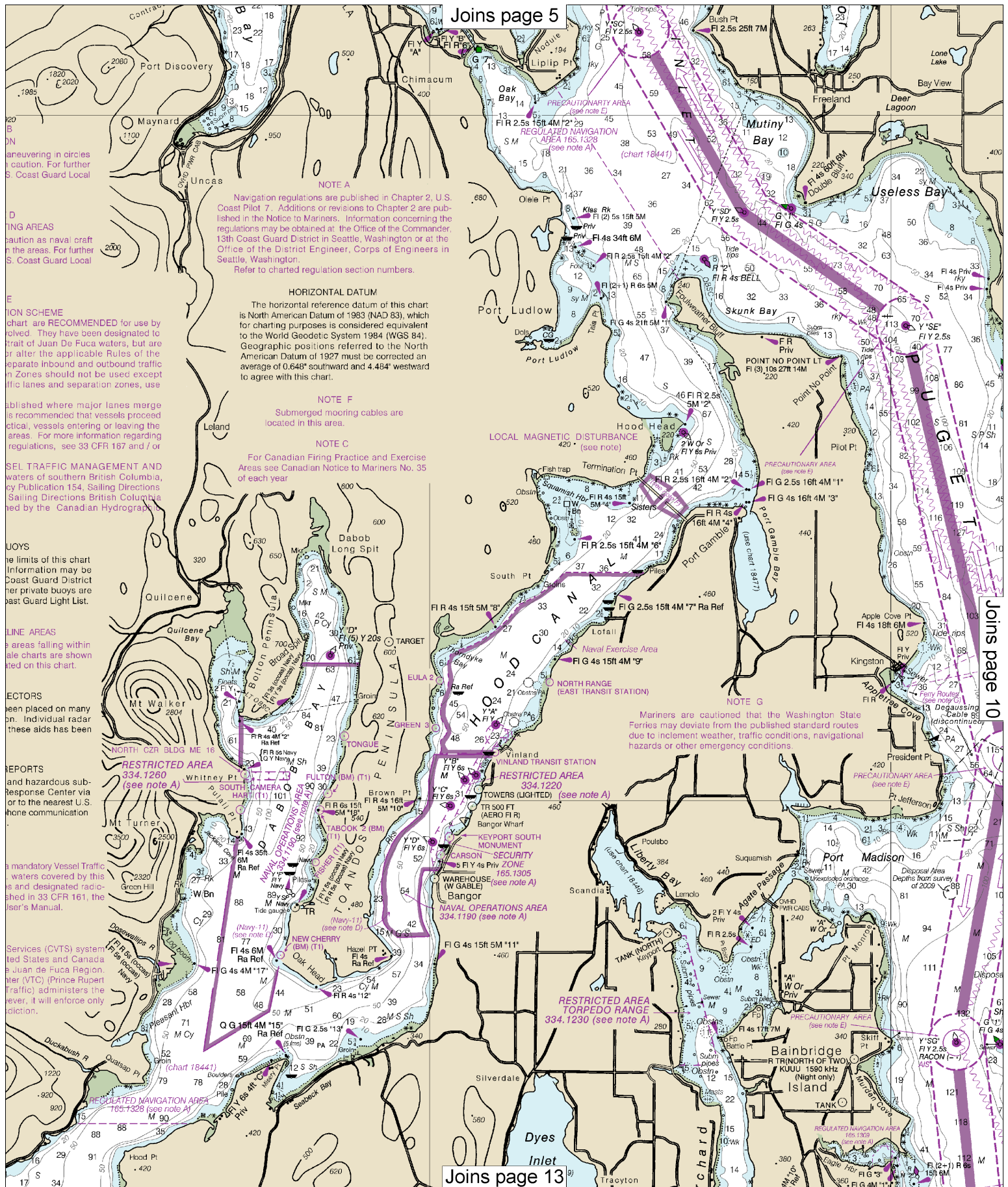
POLLUTION RE
Report all spills of oil at stances to the National Re 1-800-424-8802 (toll free), of Coast Guard facility if teleph is impossible (33 CFR 153).

NOTE H
The U.S. Coast Guard operates a Services (VTS) system in the U.S. chart. Vessel operating procedures telephone frequencies are publish U.S. Coast Pilot, and/or the VTS U

NOTE I
A Cooperative Vessel Traffic S has been established by the Unite within the adjoining waters in the. The appropriate Vessel Traffic Cent Traffic, Seattle Traffic, Victoria Tr rules issued by both nations, howe its own set of rules within its juris



Note: Chart grid lines are aligned with true north.



Joins page 5

Joins page 10

Joins page 13

maneuvering in circles
caution. For further
S. Coast Guard Local

CAUTION AREAS
caution as naval craft
in the areas. For further
S. Coast Guard Local

CHARTING SCHEME
charts are RECOMMENDED for use by
vessels. They have been designated to
traffit of Juan De Fuca waters, but are
prior to the applicable Rules of the
separate inbound and outbound traffic
Zones should not be used except
for traffic lanes and separation zones, use

Established where major lanes merge
is recommended that vessels proceed
cautious, vessels entering or leaving the
areas. For more information regarding
regulations, see 33 CFR 167 and / or

SELECTED TRAFFIC MANAGEMENT AND
waters of southern British Columbia,
by Publication 154, Sailing Directions
Sailing Directions British Columbia
published by the Canadian Hydrographic

BOUOYS
The limits of this chart
Information may be
Coast Guard District
or private buoys are
Coast Guard Light List.

CAUTION AREAS
Areas falling within
charts are shown
on this chart.

FACTORS
are placed on many
buoys. Individual radar
returns has been

REPORTS
and hazardous sub-
Response Center via
or to the nearest U.S.
phone communication

A mandatory Vessel Traffic
waters covered by this
is designated radio-
in 33 CFR 161, the
Vessel's Manual.

Services (CVTS) system
United States and Canada
Juan de Fuca Region
Traffic) (Prince Rupert
Traffic) administers the
ever, it will enforce only
direction.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.
Refer to charted regulation section numbers.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.648" southward and 4.464" westward to agree with this chart.

NOTE F
Submerged mooring cables are located in this area.

NOTE C
For Canadian Firing Practice and Exercise Areas see Canadian Notice to Mariners No. 35 of each year

LOCAL MAGNETIC DISTURBANCE
(see note)

NOTE G
Mariners are cautioned that the Washington State Ferries may deviate from the published standard routes due to inclement weather, traffic conditions, navigational hazards or other emergency conditions.

RESTRICTED AREA 334.1260
(see note A)

RESTRICTED AREA 334.1220
(see note A)

RESTRICTED AREA 334.1230
(see note A)

RESTRICTED AREA TORPEDO AREA 334.1230
(see note A)

REGULATED NAVIGATION AREA 165.1328
(see note A)

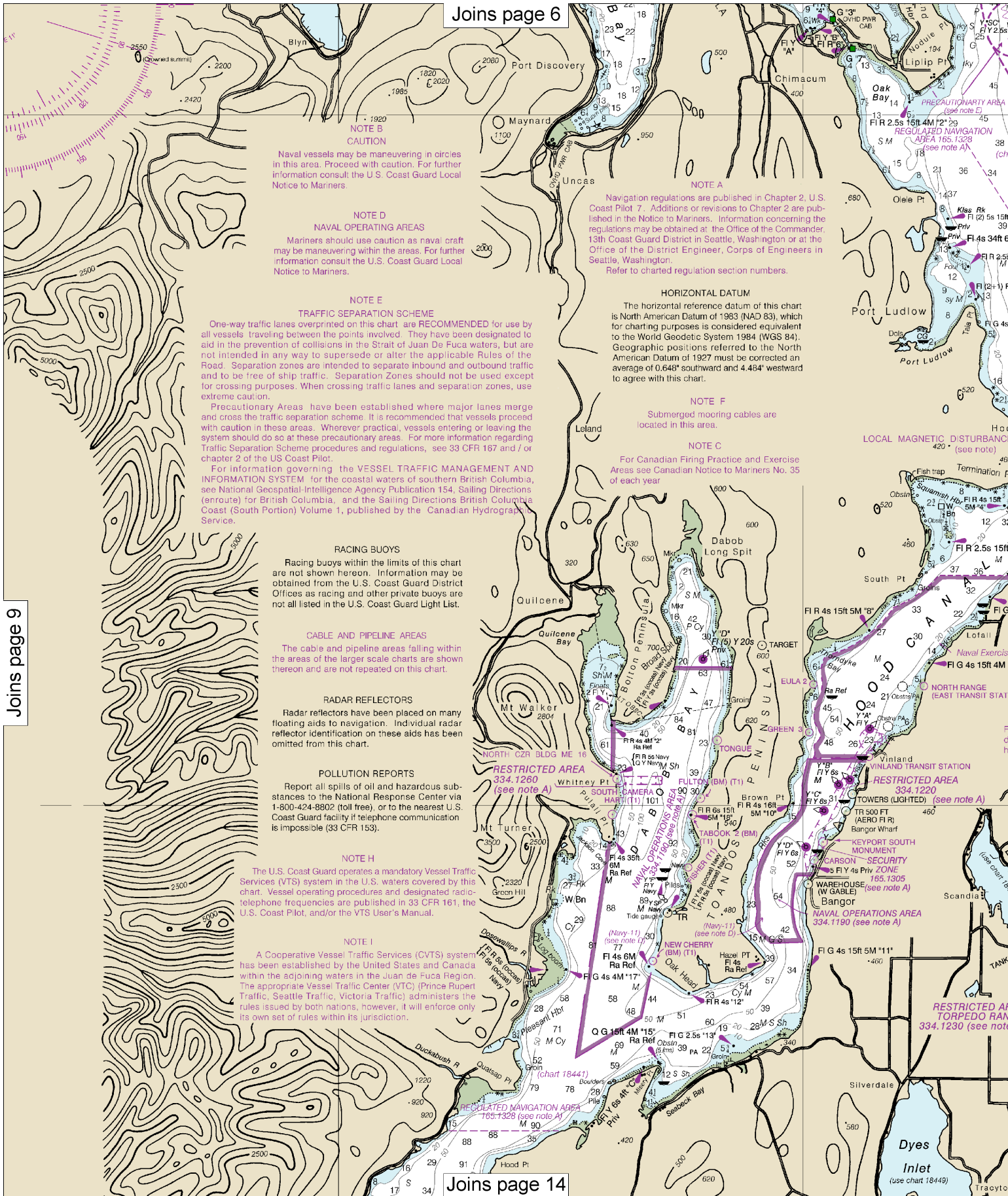
REGULATED NAVIGATION AREA 165.1328
(see note A)

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(see note A)

REGULATED NAVIGATION AREA 165.1328
(see note A)

REGULATED NAVIGATION AREA 165.1328
(see note A)

REGULATED NAVIGATION AREA 165.1328
(see note A)



NOTE B CAUTION
Naval vessels may be maneuvering in circles in this area. Proceed with caution. For further information consult the U.S. Coast Guard Local Notice to Mariners.

NOTE D NAVAL OPERATING AREAS
Mariners should use caution as naval craft may be maneuvering within the areas. For further information consult the U.S. Coast Guard Local Notice to Mariners.

NOTE E TRAFFIC SEPARATION SCHEME
One-way traffic lanes overlaid on this chart 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.

Precautionary Areas have been established where major lanes merge and cross the traffic separation scheme. It is recommended that vessels proceed with caution in these areas. Wherever practical, 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 US Coast Pilot.

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 (enroute) for British Columbia, and the Sailing Directions British Columbia Coast (South Portion) Volume 1, published by the Canadian Hydrographic Service.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

CABLE AND PIPELINE AREAS
The cable and pipeline areas falling within the areas of the larger scale charts are shown thereon and are not repeated on this chart.

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.

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).

NOTE H
The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the U.S. waters covered by this chart. Vessel operating procedures and designated radio-telephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual.

NOTE I
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.

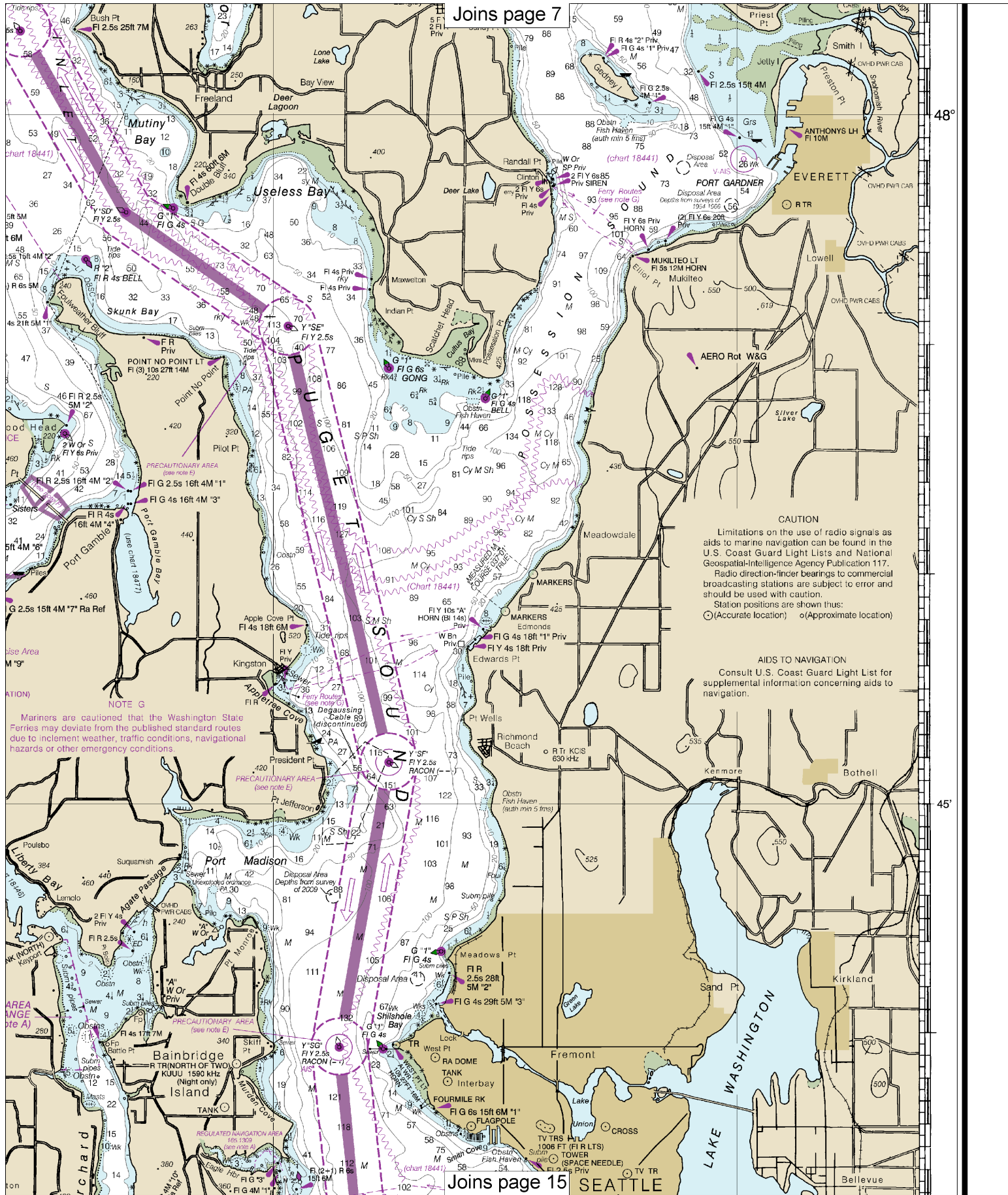
NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.
Refer to charted regulation section numbers.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAO 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.643" southward and 4.484" westward to agree with this chart.

NOTE F
Submerged mooring cables are located in this area.

NOTE C
For Canadian Firing Practice and Exercise Areas see Canadian Notice to Mariners No. 35 of each year.

LOCAL MAGNETIC DISTURBANCE
420° (see note)



48°

45°

CAUTION

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. Station positions are shown thus: ○ (Accurate location) ◦ (Approximate location)

AIDS TO NAVIGATION

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

NOTE G

Mariners are cautioned that the Washington State Ferries may deviate from the published standard routes due to inclement weather, traffic conditions, navigational hazards or other emergency conditions.

REGULATED NAVIGATION AREA

(see note A)

ABBREVIATIONS (For complete list of Symbols and Abbreviations see the complete list of Symbols and Abbreviations in the Introduction to this series of charts.)

AERC aeronautical	G green	Mo more code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Ror rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT LC lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M stature miles
DIA diaphone	m minutes	Qc quick	VC very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:			
Blds boulders	Co coral	gy gray	Oys oysters
bk broken	G gravel	h hard	so soft
Cy clay	Grs grass	M mud	Sh shells
			sy sticky

Miscellaneous:			
AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
① Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
② Rocks that cover and uncover, with heights in feet above datum of soundings.			

HEIGHTS
Heights in feet above Mean High Water.

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

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



LOCAL MAGNETIC DISTURBANCE
Differences of more than 2° from the normal variation have been observed in Hood Canal at Hood Head and along Henderson Inlet.

BRIDGES AND OVERHEAD CABLES
The bridge and overhead cable clearances are not shown on this chart. For more detailed information use the larger scale charts.

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

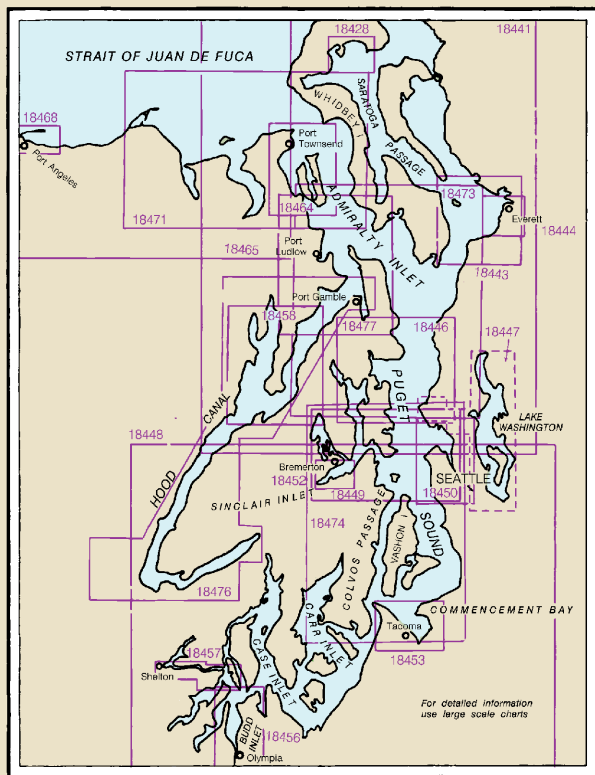
COPYRIGHT
No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

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.

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 and surrounding waters. These Standards of Care are intended to supplement existing regulations by documenting good marine practices for a variety of operations including tug escorts, 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, log on to http://pshsc.org/about/harbor_safety_plan or contact the Seattle Marine Exchange at (206) 443-3830.

NOTE 1
A Cooperative Vessel Traffic System has been established by the United States and Canada within the adjoining waters in the Strait of Juan de Fuca. The appropriate Vessel Traffic Center is Seattle Traffic, Victoria Traffic. Rules issued by both nations, however, its own set of rules within its jurisdiction.

30'

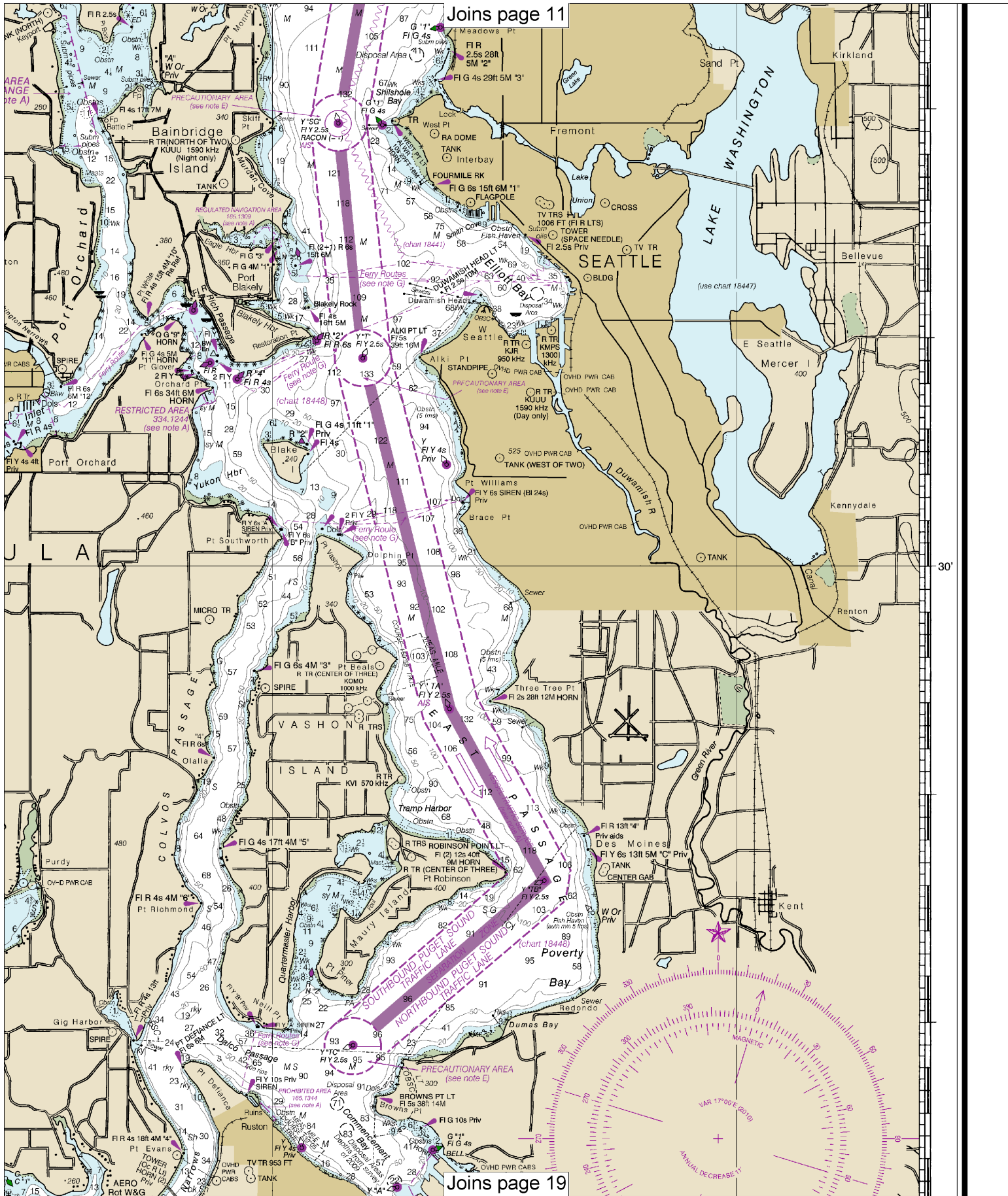


NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed

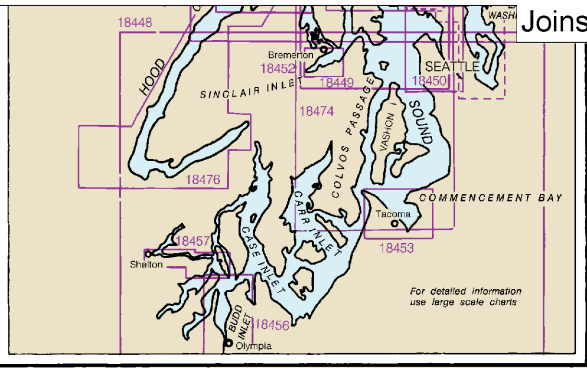
Joins page 16

Note: Chart grid lines are aligned with true north.

Joins page 11



Joins page 19



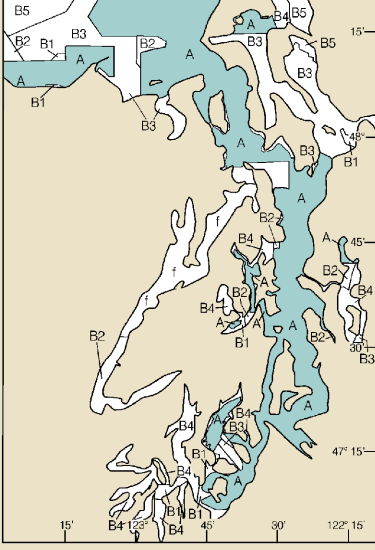
NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide 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
Neah Bay, WA	KIH-36	162.550 MHz
Olympia, WA	WXM-62	162.475 MHz
Puget Sound, WA	WWG-24	162.425 MHz

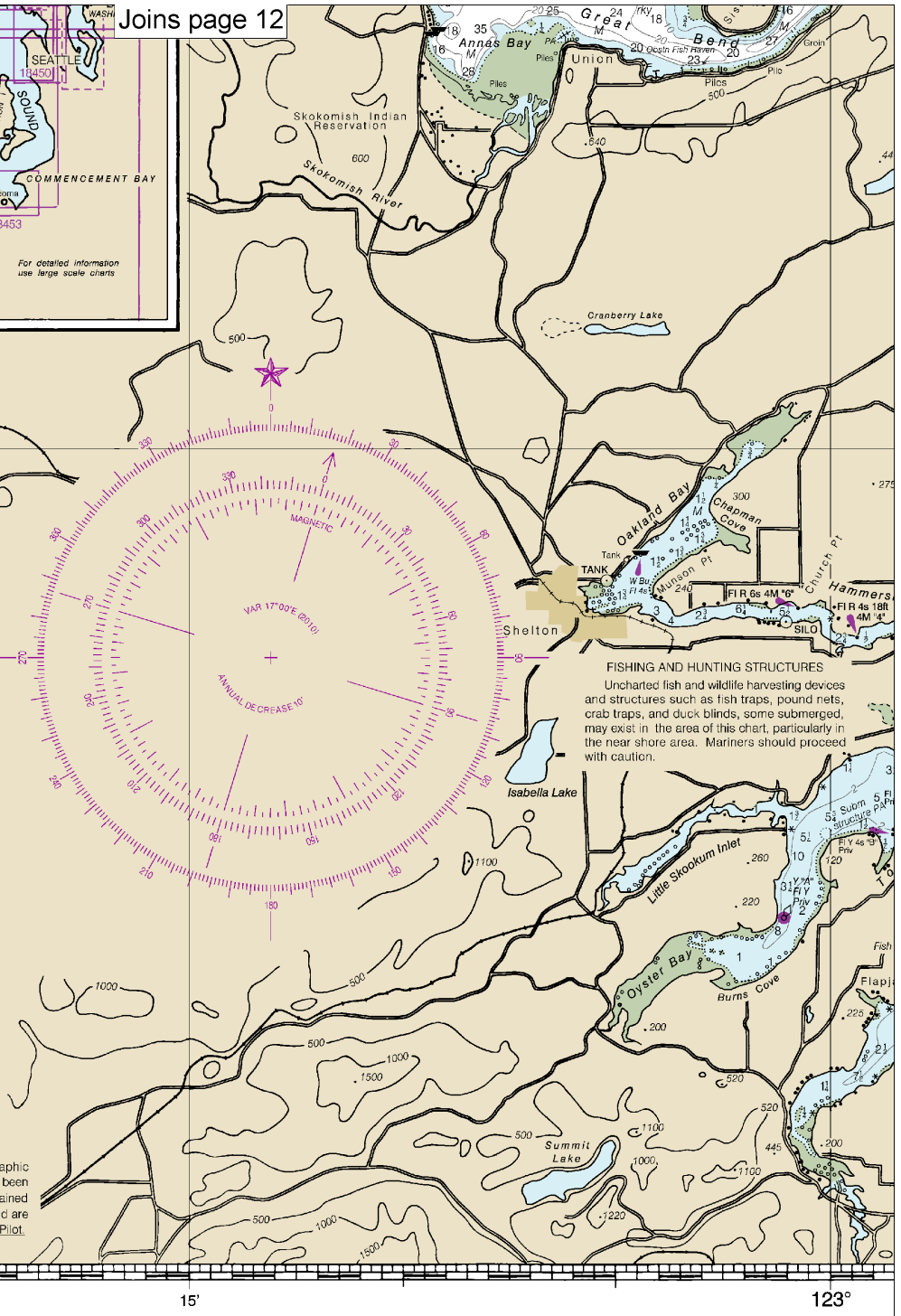
SOURCE

A	1990-2014	NOS Surveys	full bottom coverage
B1	1990-2001	NOS Surveys	partial bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
B5	Pre-1900	NOS Surveys	partial bottom coverage
f		US Government Surveys	



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.



FISHING AND HUNTING STRUCTURES

Uncharted fish and wildlife harvesting devices and structures such as fish traps, pound nets, crab traps, and duck blinds, some submerged, may exist in the area of this chart, particularly in the near shore area. Mariners should proceed with caution.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

WARNING

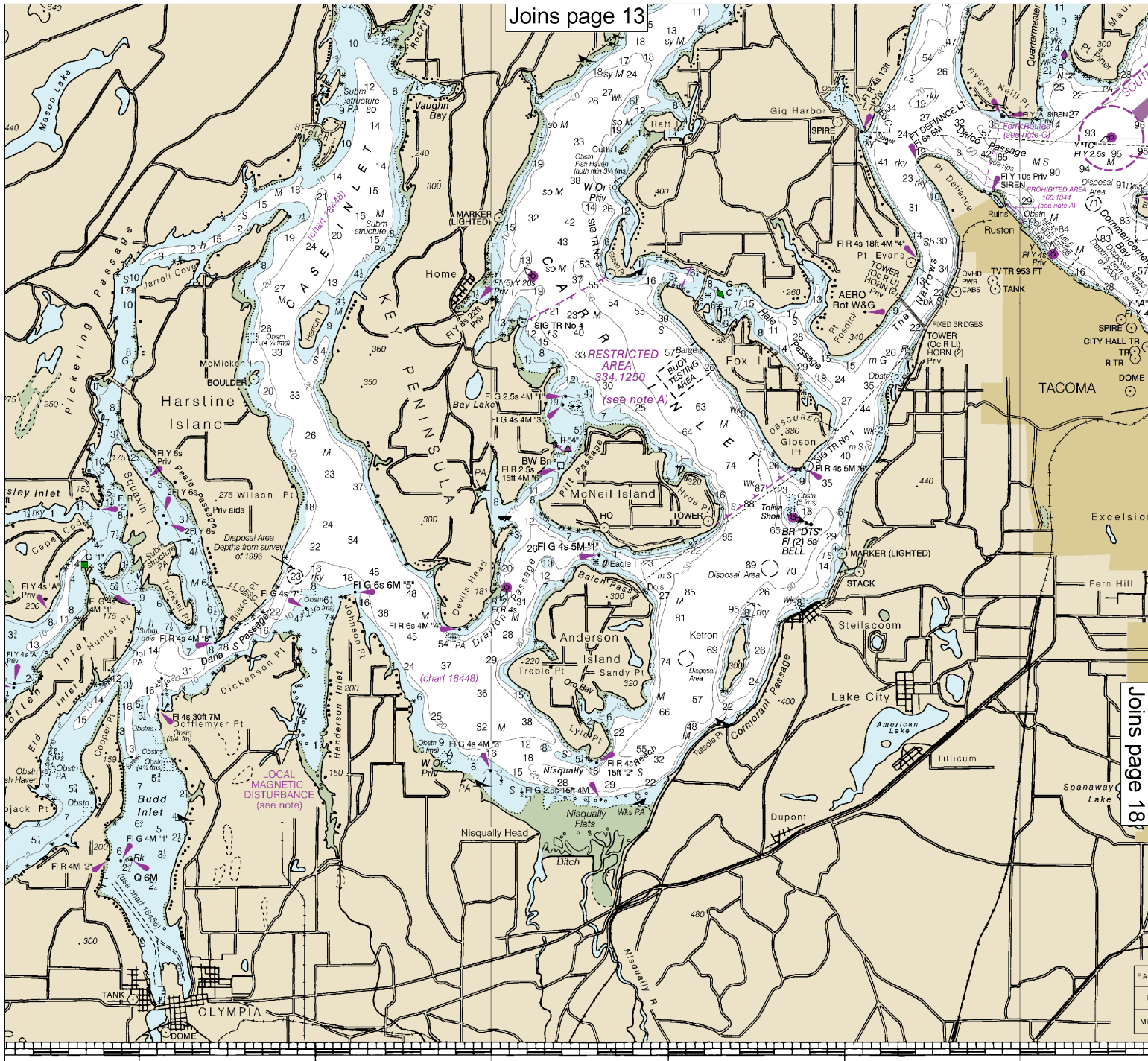
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

18440

Use ENC charts for the most up to date information. References to other charts may no longer be applicable.
 31st Ed., Apr. 2017, Last Correction: 11/9/2022, Cleared through:
 LNM: 4622 (11/15/2022), NM: 4822 (11/26/2022), CHS: 1022 (10/28/2022)

16

Note: Chart grid lines are aligned with true north.

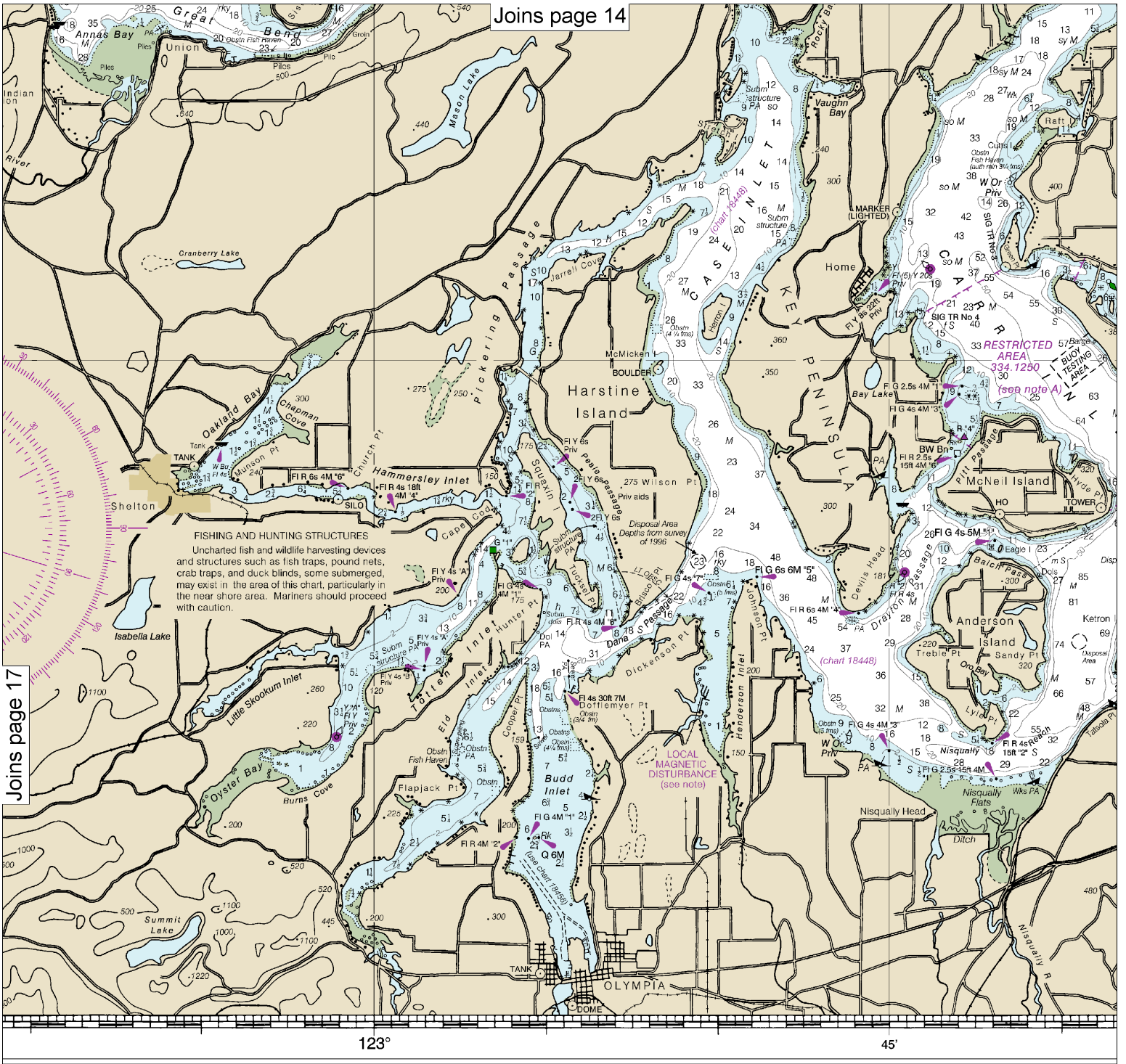


45'

30'

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 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY

SOUNDINGS IN FATHOMS



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.

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EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

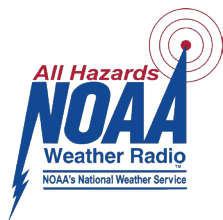
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

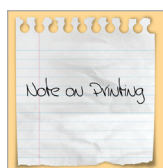
<http://www.nws.noaa.gov/nwr/>

Quick References

- Nautical chart related products and information — <http://www.nauticalcharts.noaa.gov>
- Interactive chart catalog — <http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml>
- Report a chart discrepancy — <http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx>
- Chart and chart related inquiries and comments — <http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs>
- Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
- Coast Pilot online — <http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm>
- Tides and Currents — <http://tidesandcurrents.noaa.gov>
- Marine Forecasts — <http://www.nws.noaa.gov/om/marine/home.htm>
- National Data Buoy Center — <http://www.ndbc.noaa.gov/>
- NowCoast web portal for coastal conditions — <http://www.nowcoast.noaa.gov/>
- National Weather Service — <http://www.weather.gov/>
- National Hurricane Center — <http://www.nhc.noaa.gov/>
- Pacific Tsunami Warning Center — <http://ptwc.weather.gov/>
- Contact Us — <http://www.nauticalcharts.noaa.gov/staff/contact.htm>



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