U.S. Department
of Homeland Security

United States Coast Guard

LOCAL NOTICE TO MARINERS

District: 13 Week: 14/16

ISSUED BY: COMMANDER, THIRTEENTH COAST GUARD DISTRICT (dpw)
915 Second Avenue, 35th Floor, Rm 3510, Seattle, Washington 98174-1067
Telephone: (206) 220-7285; FAX: (206) 220-7265
Email: D13-PF-LNM@uscg.mil
http://www.uscg.mil/d13/dpw/default.asp
http://www.navcen.uscg.gov/?pageName=lnmDistrict&region=13

COMDTPUB P16502.6, Light List Volume VI, 2016 Edition and Coast Pilot Volume 7, 2016.
Coast Pilots, along with corrections, are available at: http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm.

UNITED STATES COAST GUARD NAVIGATION INFORMATION SERVICE (NIS)
The United States Coast Guard Navigation Information Service (NIS), operated by the USCG Navigation Center, is staffed 24 hours a day, 7 days a week. The NIS provides information on the current operational status, effective policies, and general information for GPS and DGPS. The NIS also disseminates Safety Broadcasts / Broadcast Notice to Mariners (BNM), Local Notice to Mariners (LNM), and the latest Notice Advisory to Navstar Users (NANU). NANU notices can also be obtained via e-mail subscription through the USCG Navigation Center website: http://www.navcen.uscg.gov/?pageName=GPS.
In addition, the NIS investigates all reports of degradation or loss of GPS or DGPS service. Mariners are encouraged to report all degradation of radio navigation services to the NIS via any of the following: Phone:703-313-5900, Email: webmaster@navcen.uscg.mil, or on the World Wide Web: http://www.navcen.uscg.gov.

BROADCAST NOTICE TO MARINERS
This section contains a range of all the significant Broadcast Notice to Mariners (BNM's) on the date of this edition.

Originating Unit	Beginning BNM	Ending BNM
CGD THIRTEEN	D13-0280-16	D13-0296-16

ABBREVIATIONS

A through H

ADRIFT - Buoy Adrift
AICW - Atlantic Intracoastal Waterway
Al - Alternating
B - Buoy
BKW - Breakwater
bl - Blast
BNM - Broadcast Notice to Mariner
bu - Blue
C - Canadian
CHAN - Channel
CGD - Coast Guard District
C/O - Cut Off
CONT - Contour
CRK - Creek
CONST - Construction
DAYMK/Daymk - Daymark
DBN/Dbn - Daybeacon
DBD/DAYBD - Dayboard
DEFAC - Defaced
DEST - Destroyed
DISCON - Discontinued
DMGD/DAMGD - Damaged
ec - eclipse
EST - Established Aid
ev - every
EVAL - Evaluation
EXT - Extinguished

I through O

I - Interrupted
ICW - Intracoastal Waterway
IMCH - Improper Characteristic
INL - Inlet
INOP - Not Operating
INT - Intensity
ISL - Islet
Iso - Isophase
kHz - Kilohertz
LAT - Latitude
LB - Lighted Buoy
LBB - Lighted Bell Buoy
LHB - Lighted Horn Buoy
LGB - Lighted Gong Buoy
LONG - Longitude
LNM - Local Notice to Mariners
LT - Light
LT CONT - Light Continuous
LTR - Letter
LWB - Lighted Whistle Buoy
LWP - Left Watching Properly
MHz - Megahertz
MISS/MSNG - Missing
Mo - Morse Code
MRASS - Marine Radio Activated Sound Signal
MSLD - Misleading
N/C - Not Charted

P through Z

PRIV - Private Aid
Q - Quick
R - Red
RACON - Radar Transponder Beacon
Ra ref - Radar reflector
RBN - Radio Beacon
REBUILT - Aid Rebuilt
RECOVERED - Aid Recovered
RED - Red Buoy
REFL - Reflective
RRL - Range Rear Light
RELIGHTED - Aid Relit
RELOC - Relocated
RESET ON STATION - Aid Reset on Station
RFL - Range Front Light
RIV - River
RRASS - Remote Radio Activated Sound Signal
s - seconds
SEC - Section
SHL - Shoaling
si - silent
SIG - Signal
SND - Sound
SPM - Single Point Mooring Buoy
SS - Sound Signal
STA - Station
STRUCT - Structure

F - Fixed
fl - flash
Fl - Flashing
G - Green
GIWW - Gulf Intracoastal Waterway
HAZ - Hazard to Navigation
HBR - Harbor
HOR - Horizontal Clearance
HT - Height
NGA - National Geospatial-Intelligence Agency
NO/NUM - Number
NOS - National Ocean Service
NW - Notice Writer
OBSCU - Obscured
OBST - Obstruction
OBSTR - Obstruction
Oc - Occulting
ODAS - Anchored Oceanographic Data Buoy
St M - Statute Mile
TEMP - Temporary Aid Change
TMK - Topmark
TRLB - Temporarily Replaced by Lighted Buoy
TRLT - Temporarily Replaced by Light
TRUB - Temporarily Replaced by Unlighted Buoy
USACE - Army Corps of Engineers
W - White
Y - Yellow

Additional Abbreviations Specific to this LNM Edition:

AIS - Automatic Identification System
LLNR - Light List Number
NM - Nautical Miles
CPA - Closest Point of Approach
RM - River Mile Marker
V-AIS - Virtual AIS
VTS - Vessel Traffic Service
WSDOT- Washington State Department of Transportation
NUWC – Naval Undersea Warfare Center
RAC - Racon
AtoN - Aids to Navigation
COTP – Captain of the Port
ODOT – Oregon Department of Transportation

SECTION I - SPECIAL NOTICES

This section contains information of special concern to the Mariner.

OREGON – CAPE BLANCO TO YAQUINA HEAD – Submarine cable repair

The C/S Wave Venture will be repairing fiber optic submarine cable approximately two miles off the coast of Oregon at approximate position 43-14.690N 124-25.060W. The repair work will start at 0600 08 Apr 16 and will continue for approximately six days, depending on weather and operational conditions on site. The C/S Wave Venture, while working, will be restricted in its ability to maneuver and requests a 1NM CPA as well as a 1/4NM CPA for any cable buoys in place during the course of the repair. The C/S Wave Venture is a 141 meter white superstructure and blue hull cable ship. Her call sign is MZD07, and VSAT is +1 (954) 672-3769. Enclosure (8) of this LNM shows the geographic location of the cable repair. For additional information contact Mr. Paul Stalley at +44 7769 334768, +44 1245 702210 or email Paul.Stalley@globalmarinesystems.com.

Chart 18580 LNM: 14/16

COLUMBIA RIVER AND APPROACHES – FORT STEVENS DGPS SITE - Proposed DGPS off-air time

The U.S. Coast Guard Navigation Center is proposing off-air time for the Fort Stevens, OR, DGPS site to conduct equipment maintenance from 0900 until 1100 on 10 May 16, with an alternate time of 0900 until 1100 on 12 May 16. There will be a minimal loss of coverage during these times. For additional information or objections, contact the Navigation Center DGPS Operations at (703) 313-5902 or at http://www.navcen.uscg.gov/?pageName=dgpsSiteInfo&currentOutages

Chart 18521 LNM: 14/16

COLUMBIA RIVER – CRIMS ISLAND TO SAINT HELENS – Salvage work at Port of Kalama

Dive operations are ongoing at the Port of Kalama for vessel salvage at the North Port Dock. Vessels transiting the area should use caution and observe a no wake zone in the vicinity of the mouth of the Kalama River from river mile 71-73. Dive operations are estimated to be completed 20 Apr 16. For additional information contact U.S. Coast Guard Sector Columbia River at 503-861-6211.

Chart 18524 LNM: 14/16

COLUMBIA RIVER – MCNARY DAM TO JUNIPER – McNary pool operating at lower end of operating range

McNary pool will operate in the lower end of the operating range beginning 09 Apr 16 through 2359 10 Apr 16. During this time it is possible the pool elevation may drop to 337.0'. For additional information, call the USACE Walla Walla District Operations Division at 509-527-7113 or 509-527-7115.

Chart 18541 LNM: 14/16

COLUMBIA RIVER – PORT OF PORTLAND – Terminal 6 crane in lowered position (Revised from LNM 07/16)

A container crane at the Port of Portland, OR, Terminal 6 at river mile 102.5 will remain in the lowered position until approximately 07 May 16 for maintenance and new equipment installation. The crane extends approximately 104 feet out over the river at a height of approximately 115 feet above Columbia River Datum and is lighted at night. Mariners are advised to transit the area with caution. For additional information, contact Mr. Fred Myer at 503-415-6542 or email Fred.Myer@portofportland.com.

Chart 18526 LNM: 14/16

WASHINGTON – LAKE WASHINGTON SHIP CANAL – LAKE WASHINGTON – SR-520 Special Bridge Notice – Critical Navigation Notice – Part A (Revised from LNM 13/16)

The U.S. Coast Guard has established a temporary safety zone on Lake Washington around the east span of the SR-520 Bridge in Seattle, WA

due to ongoing construction. The safety zone is necessary to ensure the safety of the maritime public and workers involved in the bridge construction when construction barges are located in the navigation channel under the east span of the bridge. The safety zone will prohibit any person or vessel from entering and remaining in the safety zone unless authorized by the Captain of the Port or his Designated Representative. The safety zone established in this rule encompasses all waters within 100 yards of the east span of the SR-520 Bridge. This rule is effective through 30 April 16.

From 0000 to 2400 on 14 March through, 30 April 16, with the exception of 04 Apr 16 through 06 Apr 16, the east navigation channel of the SR-520 Floating Bridge will be temporarily partially blocked by a flat deck spud barge. If additional clearance is required for safe passage of vessels with air draft of greater than 43 feet, mariners can contact tugboat Big Eagle on VHF-FM Ch. 16 and shifting the barge out of the east navigation channel can be arranged. Marine vessels shorter than 43 feet tall can continue to navigate through the west navigation channel. Boaters can contact tugboat Big Eagle on VHF-FM Ch. 16 for further information regarding the temporary blockage.

From 0000 on 04 Apr 16 through 2400 on 06 Apr 16 the West Navigation channel will be closed to all marine traffic. While the west navigation channel is blocked the east navigation channel will be open to mariners. Up to four construction barges may be operating in the navigation channel.

From 0000 on 14 Apr 16 through 2400 on 24 Apr 16 the West Navigation channel will be closed to all marine traffic. While the west navigation channel is blocked the east navigation channel will be open to mariners. Up to four construction barges may be operating in the navigation channel.

Chart 18447 LNM: 14/16

WASHINGTON – LAKE WASHINGTON SHIP CANAL – LAKE WASHINGTON – SR-520 Special Bridge Notice – Critical Navigation Notice – Part B (Revised from LNM 13/16)

1. The center drawspan has been permanently blocked. The new floating bridge does not have a draw span.

2. Navigation channel vertical clearance at the east span is restricted to 58 feet until approximately October 2016 when the full 70 foot vertical clearance will be established. The eastern navigation channel will be marked with red and green navigational buoys as shown in Enclosure (4) of LNM 10/15. The eastern navigation channel varies from 168 feet to 200 feet in width with the majority of it being over 180 feet wide. Exclusion area buoys and signage will mark the four Pontoon Alpha submerged anchor wires.

3. Eight temporary pilings (two groups of four pilings) marked with yellow lights flashing every 4 seconds (Fl Y 4s) have been placed in the southeast part of Union Bay near the west end of the bridge for the temporary mooring of pontoons. Refer to LNM 05/13 chart 18447 for temporary chart corrections.

4. 12 temporary barge mooring pilings have been placed on the north side of the bridge just west of the west navigation channel and marked with quick flashing yellow lights (QY), which may be obscured at times when barges and other equipment are moored at the site.

5. The west navigation channel has been relocated to its final location directly west of the floating bridge pontoons as depicted in enclosure (5) of LNM 12/16. The vertical clearance for the new channel is 43 ft. Vessels with an air draft of greater than 43 feet but less than 58 feet may continue to use the east navigation channel.

6. Temporary Construction Buoys and Lighting; Eight temporary white mooring buoys (six on the north side and two on the south side) marked with white lights flashing every 4 seconds (Fl W 4s) have been deployed near the bridge for the mooring of construction barges and shown as chart corrections in LNM 05/13 for chart 18447.

7. West Approach Project: Complete

For additional information, contact Mr. Matt Steffens at 425-749-6675 or email matt.steffens@kiewit.com.

Chart 18447 LNM: 14/16

WASHINGTON – PUGET SOUND – APPLE COVE TO POINT KEYPORT – Temporary lighted buoy deployed.

NOAA has deployed a temporary research lighted buoy southwest of Spring Beach at approximate position 47-43-21.108N, 122-24-10.854W. The buoy is grey, conical shaped and marked with a flashing yellow four seconds (FL Y 4s) light. This buoy is scheduled to be removed prior to 01 Oct 16. For more information contact Mr. Christian Meinig at (206) 526-6149 or by e-mail at Christian.Meinig@noaa.gov.

Chart 18446 LNM: 14/16

WASHINGTON – PUGET SOUND – NORTHERN PART - EDMONDS MARINA - Edmonds Fishing Pier Rehabilitation

Razz Construction will conduct fishing pier repairs in front of and inside the City of Edmonds marina at approximate position 47-48-40.000N 122-

23-24.000W. Operations will be underway from 0700 until 1700 through 21 Jun 16. Two floating construction platforms and two small work skiffs will be onsite. Mariners are requested to use caution and reduce their wake when transiting the area. There will be four yellow flashing lights installed along the seaward face of the pier while the permanent lights are being replaced. For additional information contact Razz Construction at 360-752-0011.

Chart 18446 LNM: 14/16

WASHINGTON - STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA - Hydrographic survey

Oceaneering Survey Services will be conducting a hydrographic survey of the southern Strait of Georgia from approximately 04 Apr 16 through 30 Apr 16. The survey extends from Birch Point and Cherry Point to Boundary Pass. The survey is to be conducted by the R/V Qualifier 105, a 105' survey vessel, white in color and marked "Research". The R/V Qualifier 105 will be monitoring VHF-FM channels 16, 13, 5A, and 11. Survey operations will be conducted 7 days a week, 24 hours per day and scientific instruments will be towed. Vessels are requested to maintain a minimum distance of at least 500 feet from R/V Qualifier 105. For additional information contact Mr. Richard McGee at 425-408-9191, 206-795-4793, or email rmcgee@oceaneering.com.

Chart 18421 LNM: 14/16

COLUMBIA RIVER – HARRINGTON POINT TO CRIMS ISLAND – Port Westward Dock work

Advanced American Construction will be working at the Port Westward dock on the Columbia River RM 53.5. Two derrick barges, DB 4000 and DB 4100, will remain on station through 15 May 16 working 0700 to 1730 Monday through Saturday. The derrick barges may have anchors deployed near the Port Westward facility. Anchor locations will be marked by yellow crown buoys. The derrick barges and crown buoys will be illuminated in accordance with the Navigation Rules at night. Mariners are requested to stay 250 feet away from the derrick barges and use extreme caution when transiting the area. Mariners are also requested to minimize their wake in the work zone. During operation hours, the derrick barges will be monitoring VHF-FM 13. For more information contact Mr. Scott Sells at 503-484-0575.

Chart 18523 LNM: 13/16

COLUMBIA RIVER – CRIMS ISLAND TO SAINT HELENS - COLUMBIA SLOUGH - Bridge Notice

The Port of Portland is conducting utility upgrades under the Inverness Force Main Bridge on the Columbia Slough at mile 4.8. Scaffolding will be installed and will reduce the vertical clearance from 30 feet to 22 feet. The scaffolding will be lighted with flashing yellow lights. The utility work will continue until 31 May 16. A safety boat will be on site, but will not block the waterway. For more information, contact Peter Hesford at 503-823-2669.

Chart 18524 LNM: 13/16

COLUMBIA RIVER – MCNARY DAM TO JUNIPER – Operating at lower end of operating range

McNary pool will operate in the lower end of the operating range beginning 02 Apr 16 through 1200 04 Apr 16. During this time it is possible the pool elevation may drop to 337.5'. For additional information, call the USACE Walla Walla District Operations Division at 509-527-7113 or 509-527-7115.

Chart 18541 LNM: 13/16

SNAKE RIVER – LAKE SACAJAWEA – LAKE HERBERT G WEST – Additional time to transit locks due to maintenance

Locking through the navigation lock at Lower Monumental Lock and Dam, located at Snake River mile 41.6, and at Little Goose Lock and Dam, located at Snake River mile 70.3 may require additional time through 29 Apr 16. Project personnel are conducting maintenance on the navigation lock tainter valves. One fill or empty valve will be available for lockage during these dates which will lengthen vessel lockage time by approximately 15 to 20 minutes. For additional information, call the USACE Walla Walla District Operations Division at 509-527-7113 or 509-527-7115.

Charts: 18545 18546 LNM: 13/16

OREGON – WILLAMETTE RIVER – PORTLAND TO WALNUT EDDY - Restriction of Willamette River Navigation Channel at Sellwood Bridge

The main navigation channel of the Willamette River at the Sellwood Bridge (river mile 16.5) will be restricted from 0500 18 Apr 16 through 1700 22 April 16 due to demolition work to remove concrete from the old Sellwood Bridge. Two barges will be stationed in the center of the channel during this period to catch any debris from the work above the channel. The barges will block about sixty feet of the channel's width. The barges will be lit at night in accordance with the Navigation Rules. On the weeks of 11 through 15 Apr 16 and 25 through 29 Apr 16, the barges will be stationed at either side of the main channel, allowing space for existing river traffic to pass. The channel will not be restricted on any weekend. Mariners should use caution when transiting the area. The channel will not be restricted on any weekend. Any questions should be directed to Jeff Staton at 541-501-8043.

Chart 18528 LNM: 13/16

WASHINGTON - STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA TO PUGET SOUND - Bottom fish trawling resource survey

The Washington Department of Fish and Wildlife (WDFW) is conducting a resource survey of bottom fish in Puget Sound and adjacent waters 02 May 16 through 26 May 16. The survey will consist of a bottom trawl operated from the 57 foot F/V Chasina, call sign 'WYQ-6987'. These

operations last approximately 30 minutes and fish for a distance of about 0.4 NM at each site, during daylight hours. Some of the survey sites may enter into the vessel traffic separation lanes and naval operating areas, however, due clearance and collision avoidance will be rendered to commercial vessels and naval warships. The F/V Chasina has been chartered by WDFW to conduct the bottom trawls and will be marked 'WDFW RESEARCH' on both sides of the vessel. F/V Chasina will monitor VHF FM Channels 13, 16, and the appropriate VTS frequency, as well as AIS. Mariners are requested to keep a safe distance when in the vicinity of the trawling. For additional information, contact WDFW Biologist Ms. Jennifer Blaine at (425) 379-2313 or email at Jennifer.Blaine@dfw.wa.gov and refer to enclosure (6) of this LNM.

Charts: 18400 18440 LNM: 13/16

WASHINGTON – PUGET SOUND – SEATTLE TO OLYMPIA – ROBINSON POINT DGPS SITE – DGPS off-air time

The U.S. Coast Guard Navigation Center has approved off-air time for the Robinson Point, WA DGPS site to conduct equipment maintenance from 1000 to 1100 on 19 May 16 with an alternate time of 1000 to 1100 on 20 May 16. There will be no significant loss of coverage due to dual coverage in the area. For additional information or objections, contact the Navigation Center DGPS Operations at (703) 313-5902 or at http://www.navcen.uscg.gov/?pageName=dgpsSiteInfo&currentOutages.

Chart 18441 LNM: 13/16

WASHINGTON – LAKE WASHINGTON SHIP CANAL – Bridge Notice

The U.S. Coast Guard has issued a temporary deviation from the operating schedule that governs the University Bridge, mile 4.3, and the Montlake Bridge, mile 5.2, both crossing the Lake Washington Ship Canal, at Seattle, WA, from 0800 to 0930 on 15 May 16. This deviation allows the draw spans to remain in the closed to navigation position, and need not open to marine traffic for the Beat the Bridge foot race. Vessels which do not require bridge openings may continue to transit beneath the bridge during the closure period. The bridge will be able to open for emergencies, and there is no immediate alternate route for vessels to pass. In accordance with 33 CFR 117.35(e), the drawbridges must return to their regular operating schedule immediately at the end of the designated time period. For information, contact Mrs. Mary Brown at: Mary.Brown@seattle.gov.

Chart 18447 LNM: 13/16

WASHINGTON – LAKE WASHINGTON SHIP CANAL – Special bridge notice

The U.S. Coast Guard has issued a temporary deviation from the operating schedule that governs the Fremont Bridge, mile 2.6, and the University Bridge, mile 4.3, both crossing the Lake Washington Ship Canal in Seattle, WA. The deviation is necessary to accommodate the Brooks Trailhead 10K & 15K running event. This deviation allows the bridges to remain in the closed position from 0800 to 1000 on 22 May 16. Vessels which do not require bridge openings may continue to transit beneath these bridges during the closure periods. For information, contact Mrs. Mary Brown at: Mary.Brown@seattle.gov.

Chart 18447 LNM: 13/16

WASHINGTON – STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA – SAN JUAN ISLAND – FRIDAY HARBOR – Sunken vessel

A sunken sailing vessel has been reported in Shipyard Cove in Friday Harbor, WA at approximate position 48-31.825N, 123-00.003W. The center of the sunken vessel is marked with a small white cylindrical buoy. The vessel's mast is approximately six feet from the surface below the surface at low water. Mariners are advised to transit the area with caution. For additional information, contact Mr. Marc Forlenza at 360-472-1644 or email getmarc62Wgmail.com.

Chart 18421 LNM: 13/16

OREGON – WASHINGTON- IDAHO - MONTANA – Proposed GPS testing (Revised from LNM 09/16)

US Strategic command has proposed GPS testing, encompassing an area of eastern Oregon, Washington and the majority of the states of Idaho and Montana. The GPS navigation signal may be unreliable due to testing on GPS frequencies used by shipboard navigation and handheld systems. Systems that rely on GPS, such as e-911, AIS and DSC, may be affected. The center point of the test is 40-18-39.9N 113-34-28.4W, with a radius of 345 NM. GPS testing would occur on GPS frequencies L1 and L2 on the following dates:

27 to 30 Apr 16, from 1400Z to 1730Z (0800 to 1130 MST) and 1830Z to 2200Z (1230 to 1600 MST)
01 to 20 May 16, from 1400Z to 1730Z (0800 to 1130 MST) and 1830Z to 2200Z (1230 to 1600 MST)

More information is available at the U.S. Coast Guard Navigation Center web site, www.navcen.uscg.gov. During this period GPS users are encouraged to report any GPS service outages that they may experience to the Navigation Information Service by calling (703) 313-5900 or by using the Navigation Center's web site to submit a GPS problem report.

LNM: 12/16

OREGON - APPROACHES TO YAQUINA AND DEPOE BAY - YAQUINA BAY ENTRANCE – Shoaling reported in the Yaquina Bay Entrance Channel

The US Coast Guard has received a report of shoaling outside the entrance to Yaquina Bay, OR. The shoaling is reported as being 70 yards wide, 315 yards West-Southwest of the Yaquina Bay South Channel Jetty, between 44-36-31.08N 124-05-08.34W and 44-36-28.74N 124-05-06.18W. Depths 12 feet less than the charted depths have been observed. Mariners should exercise extreme caution when entering or

departing Yaquina Bay, and transit on the northern side of the channel. An estimated location of the shoaling is attached as enclosure (4) of LNM 12/16.

Charts: 18561 18581 LNM: 12/16

OREGON – WILLAMETTE RIVER - PORT OF PORTLAND - Debris removal and sand placement (revised from LNM 07/16)

HME Construction, Inc. is conducting debris removal and sand placement at Willamette River RM 13.1. Debris removal operations will begin approximately 27 Feb 16. Sand placement will begin approximately 29 Feb 16 and will continue until 08 Apr 16. These operations will be performed 10 hours per day, 7 days per week. Debris removal and sand placement operations will be conducted with the derrick Sea Horse. Diving operations will also be conducted from the Sea Horse in support of the operation. All required visual dive signals and navigation lights will be displayed as appropriate. The Sea Horse will operate on VHF-FM Ch. 69 and will monitor channels 13 and 16. For additional information contact Mr. Alan Park at (360) 518-1570 or Mr. Darrell Jamieson at (360) 772-4072.

Chart 18526 LNM: 12/16

WASHINGTON - PUGET SOUND - SEATTLE TO BREMERTON - SINCLAIR INLET- Puget Sound Naval Shipyard Harbor Security Exercise

Puget Sound Naval Shipyard Harbor Security will be conducting several exercises in the vicinity of the Puget Sound Naval Shipyard waterfront, from 0700 to 1700 from 05 Apr 16 through 08 Apr 16 and 11 Apr 16 through 15 Apr 16. Using blank ammunition, there will be multiple shots fired from the opposing forces and Navy Security Boats. On 12 Apr 16, from 2000 to 2200 there will additional exercises with blank ammunition fire during low light and the hours of darkness. The surrounding community of the Sinclair Inlet should expect to hear multiple gun shots from the exercise during the specified time frames. There will be an additional safety boat on scene monitoring radar for vessel traffic in the area. Navy security boats HS-26, HS-10, HS-23, and HS-29 will be on site and will be monitoring VHF-FM channels 12, 16 and 65A. The boundaries of the operations area are:

NW Point - 47-33-06N 122-39-25W SW Point - 47-32-29N 122-39-32W NE Point - 47-33-31N 122-37-44W SE Point - 47-32-54N 122-37-44W

Mariners are requested to use caution, reduce speed and keep a safe distance from the exercise. For additional information, contact ENS Michael Hodosky at (360) 340-4023 (Cell), or MAC Michael Reyes (SW/AW/EXW) at (210) 952-0410 (Cell).

Chart 18452 LNM: 12/16

OREGON – PORT OF PORTLAND – WILLAMETTE RIVER – Public notice for the Broadway Bridge

The U. S. Coast Guard has issued a deviation to the operating schedule that governs the Broadway Bridge (LLNR 14955.2) across the Willamette River at RM 11.7. This deviation allows the draw span of the Broadway Bridge across the Willamette River to remain in the closed position and need not open for maritime traffic from 0500 until 1030 on 17 Apr 16. The Broadway Bridge provides 90 feet of vertical clearance above Columbia River Datum 0.0 while in the closed position. Vessels which do not require a bridge opening may continue to transit beneath the bridge during this closure period. The bridge will be required to open, if needed, for vessels engaged in emergency response operations during this closure period. The bridge shall operate in accordance to 33 CFR § 117.897 at all other times. For more information, contact Ms. Barbara Blanchard at Barbara.c.blanchard@multco.us.

Chart 18526 LNM: 10/16

WASHINGTON – ABERDEEN AND WESTHAVEN – Embedded log

A dead head log that has become embedded at an angle in the harbor bottom has been located in the vicinity of the Elliot Slough turning basin at approximate position 46-58-31.447N, 123-46-54.255W. The object is submerged at high water. All mariners use caution when transiting the area. For additional information contact Mr. Craig Morton at (206) 764-3429 or email Craig.D.Morton@usace.army.mil.

Chart 18502 LNM: 10/16

SECTION II - DISCREPANCIES

This section lists all reported and corrected discrepancies related to Aids to Navigation in this edition. A discrepancy is a change in the status of an aid to navigation that differs from what is published or charted.

DISCREPANCIES (FEDERAL AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
765.2	DART Tsunami Warning Lighted Buoy 46407	ADRIFT	18007	0191-16	09/16	
9605	Yaquina Bay South Jetty Light 4	STRUCT DEST	18581	1075-15	50/15	
10585	Eureka Dike Light 77	STRUCT DMGD	18523	0250-14	15/14	
11150	Willow Dike Light 23	STRUCT DEST	18525	0174-14	10/14	

11770	Bonneville Pool Light 4	STRUCT DEST	18531	0905-10	37/10
13735	Little Goose Reservoir Light 9	STRUCT DEST	18547	0056-16	03/16
13750	Little Goose Reservoir Light 12	REDUCED INT	18547	0139-16	07/16
14610	Sand Island Lower Dike Light 1	STRUCT DMGD	18521	1092-15	51/15
14985	Stevens Point Buoy 4	OFF STA	18528	1071-15	50/15
15010	Elk Rock Buoy 12	OFF STA	18528	0061-16	04/16
15585	Point Chehalis Range Front Light	DAYMK MISSING/STRUCT DMGD	18502	1012-09	50/09
15585	Point Chehalis Range Front Light	LT EXT	18502	0067-13	03/13
15610	Grays Harbor South Reach Range A Front Light	LT EXT	18502	0746-15	35/15
16223	Race Rocks East Cautionary Lighted Buoy VG	OFF STA	18465	0116-16	06/16
17090	Browns Point Light	REDUCED INT	18453	0870-15	41/15
18817	**Swinomish Channel South Entrance Daybeacon 14**	**DAYMK MISSING**	**18427**	**0284-16**	**14/16**
18820	Swinomish Channel South Entrance Range Front Light	DAYMK MISSING	18427	0144-16	07/16
19725	Mosquito Pass Daybeacon 2	MISSING/STRUCT DEST	18433	0045-16	03/16

DISCREPANCIES (FEDERAL AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
8860	Empire Range A Rear Light	WATCHING PROPERLY	18587	0283-16	13/16	14/16
8910	Jarvis Lower Range A Front Light	RELIGHTED	18587	None	14/16	14/16
9453	Siuslaw River Channel Buoy 4	RESET ON STATION	18583	0295-16	14/16	14/16
9480	Siuslaw River Channel Buoy 6	RESET ON STATION	18583	0297-16	14/16	14/16
9501	Siuslaw River Channel Buoy 11	RESET ON STATION	18583	0296-16	12/16	15/16

DISCREPANCIES (PRIVATE AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
652	OSU Yaquina Research Lighted Buoy	ADRIFT	18561	0196-16	10/16	
727	OSU Grays Canyon Research Lighted Buoy	MISSING	18500	1039-15	50/15	
17900.5	**Triton Cove Buoy 1**	**MISSING**	**18476**	**0290-16**	**14/16**	
19272	Bellingham Harbor Shoal Buoy A	OFF STA	18424	0278-16	13/16	

DISCREPANCIES (PRIVATE AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
718	Scripps Institute Wave Recorder Lighted Buoy 46211/036	RESET ON STATION	18502	0292-16	04/16	14/16
15533	Scripps Institute Wave Recorder Lighted Buoy 46211/036	RESET ON STATION	18502	0292-16	04/16	14/16

PLATFORM DISCREPANCIES

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

PLATFORM DISCREPANCIES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

SECTION III - TEMPORARY CHANGES and TEMPORARY CHANGES CORRECTED

This section contains temporary changes and corrections to Aids to Navigation for this edition. When charted aids are temporarily relocated for dredging, testing, evaluation, or marking an obstruction, a temporary correction shall be listed in Section IV giving the new position.

TEMPORARY CHANGES

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
10585	Eureka Dike Light 77	RELOCATED	18523	0250-14	15/14	
11150	Willow Dike Light 23	TRLB	18525	0177-14	10/14	
11770	Bonneville Pool Light 4	TRLB	18531	0909-10	38/10	
15595	Grays Harbor Channel Lighted Whistle Buoy 11	RELOCATED FOR DREDGING	18502	0218-16	11/16	
15655	Grays Harbor South Reach Lighted Gong Buoy 21	RELOCATED FOR DREDGING	18502	0219-16	11/16	
19725	Mosquito Pass Daybeacon 2	TRUB	18433	0045-16	04/16	

TEMPORARY CHANGES CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End

None

PLATFORM TEMPORARY CHANGES

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

PLATFORM TEMPORARY CHANGES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

SECTION IV - CHART CORRECTIONS

This section contains corrections to federally and privately maintained Aids to Navigation, as well as NOS corrections.

This section contains corrective actions affecting chart(s). Corrections appear numerically by chart number, and pertain to that chart only.
It is up to the mariner to decide which chart(s) are to be corrected. The following example explains individual elements of a typical chart correction.

Chart Number | Chart Edition | Edition Date | Last Local Notice to Mariners | Horizontal Datum Reference | Source of Correction | Current Local Notice to Mariners

12327 91st Ed. 19-APR-97 Last LNM: 26/97 NAD 83 27/97

Chart Title: NY-NJ-NEW YORK HARBOR - RARITAN RIVER

Main Panel 2245 NEW YORK HARBOR CGD01

(Temp) ADD NATIONAL DOCK CHANNEL BUOY 3 at 40-41-09.001N 074-02-48.001W

Green can

Corrective Action | Object of Corrective Action | Position

(Temp) indicates that the chart correction action is temporary in nature. Courses and bearings are given in degrees clockwise from 000 true.
Bearings of light sectors are toward the light from seaward. The nominal range of lights is expressed in nautical miles (NM) unless otherwise noted.

18440 30th Ed. 01-OCT-10 Last LNM: 13/16 NAD 83 14/16

ChartTitle: **Puget Sound**

Main Panel 1688 PUGET SOUND. Page/Side: N/A

CGD13

RELOCATE Totten Inlet Aquaculture Light A from 47-07-39.780N 123-01-00.960W
Change to Totten Inlet Aquaculture Light A to 47-07-41.322N 123-00-59.789W

CGD13

RELOCATE Totten Inlet Mussel Raft Light B from 47-08-48.000N 122-58-30.000W
Change to Totten Inlet Mussel Raft Light B to 47-08-51.238N 122-58-32.023W

CGD13

ADD Totten Inlet Aquaculture Light B at 47-07-39.504N 123-01-00.264W
Priv
Fl Y 6s

CGD13

ADD	Totten Inlet Mussel Raft Light A Priv Fl Y 4s	at 47-08-55.993N	122-58-31.238W

18445 **34th Ed.** **01-APR-12** **Last LNM: 13/16** **NAD 83** **14/16**

ChartTitle: **Puget Sound-Possession Sound to Olympia including Hood Canal**

CHART WA - PUGET SOUND - POSSESSION SOUND TO OLYMPIA INCLUDING HOOD CANAL. Page/Side: N/A

		CGD13	
RELOCATE	Totten Inlet Mussel Raft Light B	from 47-08-48.000N	122-58-30.000W
	Change to Totten Inlet Mussel Raft Light B	to 47-08-51.238N	122-58-32.023W

18448 **36th Ed.** **01-DEC-15** **Last LNM: 08/16** **NAD 83** **14/16**

ChartTitle: **Puget Sound-southern part**

CHART WA - PUGET SOUND - SOUTHERN PART. Page/Side: N/A

		CGD13	
RELOCATE	Totten Inlet Aquaculture Light A	from 47-07-39.780N	123-01-00.960W
	Change to Totten Inlet Aquaculture Light A	to 47-07-41.322N	123-00-59.789W
		CGD13	
RELOCATE	Totten Inlet Mussel Raft Light B	from 47-08-48.000N	122-58-30.000W
	Change to Totten Inlet Mussel Raft Light B	to 47-08-51.238N	122-58-32.023W
		CGD13	
ADD	Totten Inlet Aquaculture Light B Priv Fl Y 6s	at 47-07-39.504N	123-01-00.264W
		CGD13	
ADD	Totten Inlet Mussel Raft Light A Priv Fl Y 4s	at 47-08-55.993N	122-58-31.238W

18473 **9th Ed.** **01-APR-16** **Last LNM: 13/16** **NAD 83** **14/16**

ChartTitle: **Puget Sound-Oak Bay to Shilshole Bay**

Main Panel 1937 OAK BAY TO SHILSHOLE BAY PUGET SOUND. Page/Side: A

		NOS	
NEW EDITION	Scale 1: 40,000; New Edition (9 ed, 04/01/16) due to hydrographic changes This NOAA chart is now available in both the Print-on Demand and digital raster formats. See http://nauticalcharts.noaa.gov/mcd/dole.htm for details.	--	--

18502 **87th Ed.** **01-SEP-11** **Last LNM: 12/16** **NAD 83** **14/16**

ChartTitle: **Grays Harbor;Westhaven Cove**

CHART WA - GRAYS HARBOR. Page/Side: N/A

		CGD13	
ADD	Hoquiam River Obstruction Buoy W Or, C	at 46-58-41.035N	123-52-56.606W

SECTION V - ADVANCE NOTICES

This section contains advance notice of approved projects, changes to aids to navigation, or upcoming temporary changes such as dredging, etc. Mariners are advised to use caution while transiting these areas.

SUMMARY OF ADVANCED APPROVED PROJECTS

Approved Project(s)	Project Date	Ref. LNM
None		

Advance Notice(s)

WASHINGTON - GRAYS HARBOR - Aberdeen Reach Range L disestablishment

The U.S. Coast Guard will be disestablishing Aberdeen Reach Range "L" Front Light (LLNR 15890) and Aberdeen Reach Range "L" Rear Light (LLNR 15895) during the spring of 2016. The structure for Aberdeen Reach Range "L" Rear has deteriorated, and is in danger of collapse. Aberdeen Rear Range "L" Front Light will be changed to Aberdeen Harbor Light 1A (LLNR 15889) displaying a green light flashing every 2.5 seconds (Fl G 2.5s) with a nominal range of 4 NM.

Chart 18502 LNM: 12/16

WASHINGTON – STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA – SWINOMISH CHANNEL– Swinomish Channel South Entrance Range Front Light reduction in dayboard size

The U.S. Coast Guard will be reducing the dayboard size of Swinomish Channel South Entrance Range Front Light (LLNR 18820) from a 8KRW (8' wide by 16' tall red dayboard with a white vertical stripe) to a 6KRW (6' wide by 12' tall red dayboard with a white vertical stripe). Tidal and wave action has destroyed the current 8KRW dayboard, and the 6KRW will be installed as a temporary measure until its effectiveness can be determined. The U.S. Coast Guard is soliciting comments on this change, which may be submitted to email address d13-PF-LNM@uscg.mil or (206) 220-7276.

Chart 18427 LNM: 10/16

WASHINGTON – STRAIT OF JUAN DE FUCA – EASTERN PORTION – Relocation of Smith Island Light and the disestablishment of Minor Island Light (Revised from LNM 03/16)

The U.S. Coast Guard has rebuilt Smith Island Light (LLNR 16375) between Smith Island and Minor Island in the eastern Strait of Juan de Fuca in approximate position 48-19-14.368N 122-49-51.449W. The U.S. Coast Guard will be discontinuing Minor Island Light (LLNR16380) due to the loss of land mass from erosion at that location. A revised notice will be published when the date of removal has been scheduled.

Chart 18465 LNM: 09/16

SECTION VI - PROPOSED CHANGES

Periodically, the Coast Guard evaluates its system of aids to navigation to determine whether the conditions for which the aids to navigation were established have changed. When changes occur, the feasibility of improving, relocating, replacing, or discontinuing aids are considered. This section contains notice(s) of non-approved, proposed projects open for comment. SPECIAL NOTE: Mariners are requested to respond in writing to the District office unless otherwise noted (see banner page for address).

PROPOSED WATERWAY PROJECTS OPEN FOR PUBLIC COMMENT

Proposed Project(s)	Closing	Docket No.	Ref. LNM
None			

Proposed Change Notice(s)

None

SECTION VII - GENERAL

This section contains information of general concern to the Mariners. Mariners are advised to use caution while transiting these areas.

SUMMARY OF BRIDGE LIGHTING DISCREPANCIES AND CORRECTIONS

The summary of Bridge Lighting Discrepancies and Corrections is listed in Enclosure (1) of this Local Notice to Mariners.

LNM: 14/16

SUMMARY OF DREDGING OPERATIONS

The summary of Dredging Operations is listed in Enclosure (2) of this Local Notice to Mariners.

LNM: 14/16

SUMMARY OF MARINE EVENTS

The summary of Marine Events is listed in Enclosure (3) of this Local Notice to Mariners.

LNM: 14/16

OREGON – COOS BAY – McCullough (US101) Bridge repair

ODOT is conducting a repair project on the McCullough Bridge (LLNR 9009) at mile 9.5 over Coos Bay on Hwy. US 101. The project will be completed sometime in 2017. The repairs are on the north side of Jarvis Upper Range 'B' Front Light (LLNR 8960) outside the main navigation channel. Two 2000 foot temporary work bridges have been constructed for the project, but will not encroach into the navigation channel. The temporary bridges will be built on steel piles placed 45 feet apart. Enclosure (5) of LNM 44/13 shows the diagram and aerial view of the project.

Chart 18587 LNM: 44/13

OREGON - SIUSLAW RIVER - Bridge Notice

Repairs are being conducted on the US 101 bridge (LLNR 9558) across the Siuslaw River, mile 5.0, through 31 Mar 18. Repairs include a containment system with scaffolding that reduces the bridge's vertical clearance up to 10 feet. Signs have been installed to warn mariners of the reduced clearance. Scaffolding will be installed as work progresses from north to south. The US 101 Bridge draw will not have containment installed so maritime navigation will not be impacted. Service barge(s) will be moored at the adjacent span supporting the maintenance work. Barge and work crews may be contacted using VHF-FM Channel 16. Mariners are requested to transit the construction area at minimum safe speed with no wake. For more information, contact Mr. Wade Campbell at (541) 260-3345.

Chart 18583 LNM: 09/16

COLUMBIA RIVER – ASTORIA – Old Youngs Bay Bridge Construction

Bridge improvements on the Old Youngs Bay Bridge (LLNR 14582) in Astoria will be from 0700 on 15 Feb 16 through 2300 on 15 Jun 16. During construction, the double bascule span will operate in a single leaf mode only, and vessels need to contact the bridge operator at least three hours prior to an opening. Containment will be installed beneath the bridge that will reduce the vertical clearance from 19 feet to 14 feet at high tide.

COLUMBIA RIVER – ASTORIA – Old Youngs Bay Bridge Construction

Vessels able to pass through the bridge in the closed positions may do so at anytime. The Old Youngs Bay Bridge can open for emergencies, however, the work crew will need at least a three hour notice from the bridge operator. In accordance with 33 CFR 117.35(e), the drawbridge must return to its regular operating schedule immediately at the end of the effective period of this temporary deviation.

Chart 18521 LNM: 05/16

COLUMBIA RIVER - BONNEVILLE TO THE DALLES - Hood River Highway Bridge notice (Revised from LNM 48/15)

The Hood River Bridge (LLNR 11933), at Columbia River mile 169.8, continues to be unable to open for marine traffic due to emergent mechanical repairs. The bridge provides 68 feet of vertical clearance in the closed position. The bridge draw is scheduled to be tested for an opening in April 2016. The LNM will be updated as more information is made available. For additional information, contact Mr. Michael S. McElwee at (541) 386-1138.

Chart 18532 LNM: 09/15

SNAKE RIVER - LAKE SACAJAWEA - BURBANK - Bridge inspection notice

Washington State Department of Transportation will be inspecting the SR-12 bridges, east (LLNR 13113) and west (LLNR 13113.5), that span the Snake River, RM 2.2, at Burbank, WA. The inspection will take place between 0800 and 1600, 04 through 08 Apr 16. The bridges will be inspected using an under-bridge inspection truck (UBIT) that occupies a portion of the roadway. The UBIT will give way to all mariners and any vessel may transit under the bridge at any time. The vertical clearance of the bridges will be reduced from 61 feet to 50 feet while the UBIT is deployed. Marine vessels may contact UBIT crew via VHF-Fm Ch. 16. For additional information, call Mr. Richard Dahl at (360) 570-2549 or email SharpD@wsdot.wa.gov.

Chart 18545 LNM: 09/16

OREGON - WILLAMETTE RIVER - PORTLAND TO WALNUT EDDY - Sellwood Bridge construction (Revised from LNM 39/15)

The Sellwood Bridge (LLNR 14995) at RM 16.6 on the Willamette River is under construction until November 2016. A no wake zone is in effect within 500 feet of the bridge. The marked navigable channel at the bridge has been relocated as shown in Enclosure (4) of LNM 01/16. Two debris booms have been added to the construction site on the upstream side of the project, as shown in enclosure (5) of LNM 28/14. Each boom is held in place by multiple pilings, which are marked with flashing yellow lights and yellow reflective tape. Mariners are cautioned to observe the temporary navigation buoys and bridge navigation lighting and comply with the exclusion area established by both the buoys and signage. For additional information, contact Mr. Chad Yount at (520) 468-9550 or email cayount@sundt.com.

Chart 18528 LNM: 50/15

OREGON - WILLAMETTE SLOUGH - MINTO ISLAND PEDESTRIAN & BICYCLE BRIDGE - Special bridge notice

Legacy Contracting, Inc. is constructing the Minto Island Pedestrian/Bicycle Bridge in Salem, OR, in the vicinity of Riverfront Park Playground at 44-56-19.000N, 123-02-43.000W. The construction work will be Monday through Sunday 24 hours per day until 15 Oct 16. Mariners can expect overhead cranes and pile driving while constructing temporary trestles with overhead hazards of a vertical clearance of 10 feet. A temporary 40 foot wide channel will be marked with signs for passage under the bridge and through the construction zone. Regulatory orange and white buoys will also be placed marking the construction area requesting no wake and bridge construction. For additional information, contact Mr. Monte Nunnelly at (503) 510-7624 or Mr. Todd Ross at (503) 749-1818, or email: ToddR@LegacyContractingInc.com.

LNM: 22/15

WASHINGTON – EVERETT – SNOHOMISH RIVER – SR 529 Bridge Special Notice

The U. S. Coast Guard has approved a temporary bridge deviation from the operating schedule that governs the SR-529 bridge from 0730 until 1100 on 10 Apr 16. This deviation allows the swing span of the SR 529 Bridge (north and south bound) across the Snohomish River, mile 3.6, near Everett, WA, and the SR 529 Bridge (north and south bound) across Steamboat Slough, mile 1.1, near Marysville, WA, to remain in the closed position. This request supports the Everett Half Marathon event. Vessels able to pass through the bridge in the closed position may do so at anytime. In accordance with 33 CFR 117.35(e), the drawbridges must return to its regular operating schedule immediately at the end of the effective period of this temporary deviation. For more info, contact Barbara J. Rasaie at rasaieb@wsdot.wa.gov.

Chart 18443 LNM: 07/16

COLUMBIA AND SNAKE RIVERS – Winter seasonal recreational vessel lockage

Winter recreational vessel lockage will be made during daylight hours only, on request at each of the USACE Walla Walla District locks through 14 May 16. Vessels can contact the lock operator via VHF-FM Ch. 14 or commercial telephone.

McNary Lock and Dam at Columbia River Mile 292, 541-922-2231
Ice Harbor Lock and Dam at Snake River Mile 9.7, 509-543-3253 x231
Lower Monumental Lock and Dam at Snake River Mile 41.6, 509-282-7231
Little Goose Lock and Dam at Snake River Mile 70.3, 509-399-2233 x231
Lower Granite Lock and Dam at Snake River Mile 107.5, 509-843-1493 x231

Commercial vessels continue to have lockage precedence over recreational vessels. At the discretion of the lock operator, recreational vessels may be allowed to lock through with commercial vessels. All vessel owner/operators lock through at their own risk. All persons in the vessel must be wearing a personal flotation device (PFD) during lockage. Follow the directions of the lock operator when using locks or operating in the vicinity of the locks. The lock operator has final authority on the suitability of a craft for lockage. Please refer to U.S. Army Corps of Engineers Safe Lockage Policy for Recreational Craft on the Columbia and Snake Rivers, published separately, for safety requirements. Public notices and other navigation lock information are available on the Internet at: http://www.nww.usace.army.mil/Missions/Navigation.aspx. For additional information on this matter or copies of our Safe Lockage policy, call USACE Walla Walla Operations Division at (509) 527-7113 or (509) 527-7115.

COLUMBIA AND SNAKE RIVERS – Winter seasonal recreational vessel lockage

Charts: 18541 18545 18546 18547 LNM: 36/15

OREGON - CAPE BLANCO TO YAQUINA HEAD AND OFFSHORE – Cable Laying Operations off the Oregon Coast (Revised from 40/14)

The University of Washington, as part of the Ocean Observatories Initiative (OOI), has installed underwater equipment and high voltage cable in the Pacific Ocean offshore of Pacific City and Newport, OR. This equipment is locally exposed at the seabed and/or in the water column. It is not marked by surface buoys.

Mariners are advised to avoid fishing, towing gear or anchoring in the safety areas centered on the coordinates provided in enclosure (5) of LNM 44/14. The avoidance radius is given in nautical miles and varies for each safety zone.

Positions for the OOI safety zones and submarine cable routes can be provided upon request in various formats including Nobeltec, Olex, Coastal Explorer, kml and GIS. The locations of the OOI underwater infrastructure will be charted in the near future.

For additional information or if you become entangled on the OOI infrastructure, please contact the RSN Hotline at (855) 665-1424 or OFCC cell (503) 440-3569 or email ooi-ofcc@uw.edu or 911@ofcc.com .

Charts: 18003 18580 18600 LNM: 41/14

OREGON - CAPE BLANCO TO YAQUINA HEAD – Deployment of Subsurface to Surface Buoy on the Oregon Coast

Oregon State University deployed a subsurface to surface research buoy at position 44-39-30.540N 124-05-53.400W in 82 feet of water. The buoy is yellow and displays a yellow light flashing every 4 seconds (Fl Y 4s) when on the surface. This buoy is designed to submerge for the collection of data and then surface to transmit its data. When the buoy is not on the surface it will be near the seafloor. Vessels are asked to not pass closer than 500 yards to the buoy's position. For additional information contact Oregon State University Assistant Professor Michael Vardaro at (541) 737-9350 or at mvardaro@coas.oregonstate.edu.

Charts: 18520 18580 LNM: 16/14

COLUMBIA RIVER – PACIFIC OCEAN TO HARRINGTON POINT – Deterioration of the North and South Jetties at the Columbia River Entrance

The North and South Jetties at the Columbia River Entrance have suffered severe deterioration and may no longer be correctly represented upon the nautical charts of the area. Mariners should use caution when transiting in the vicinity of the jetties and the river entrance. The USACE has scheduled critical repairs of the North Jetty from June 2015 through October 2016, and rehabilitation of the South and North Jetties scheduled for the years 2016 through 2019. More information may be found at the USACE Portland District web site: http://www.nwp.usace.army.mil/Locations/OregonCoast/MouthoftheColumbia.aspx.

Charts: 18500 18520 18521 LNM: 04/15

COLUMBIA RIVER - HARRINGTON POINT TO CRIMS ISLAND - CATHLAMET CHANNEL - Shoaling

Extensive shoaling has been reported on the west side of the Elochoman Slough entrance near Cathlamet, WA. Mariners should exercise caution when transiting this waterway, and keep to the east side of the channel. Mariners unfamiliar with the area should transit with extreme caution and not rely solely on aids to navigation while in the channel.

Chart 18523 LNM: 19/15

COLUMBIA RIVER PACIFIC OCEAN TO HARRINGTON POINT; ILWACO HARBOR – Baker Bay West Channel shoaling

Extensive shoaling has been reported on the northern edge of Baker Bay West Channel, northwest of Baker Bay West Channel Light 11 (LLNR 14455). Mariners should exercise caution when transiting this waterway. Mariners unfamiliar with the area should transit with extreme caution and not rely solely on aids to navigation while in the channel. For additional information contact Mr. Jarod Norton at 503-808-4348.

Chart 18521 LNM: 02/16

WASHINGTON – GRAYS HARBOR – Hazard to navigation (Revised from LNM 05/16)

A 20 foot by 20 foot section of dock has sunk in the Hoquiam River in approximate position 46-58.679N 123-52.950W causing a hazard to navigation. The hazard is marked by a white spherical buoy with a blue horizontal stripe that is lighted. Vessels are advised to use extreme caution while transiting the area, especially at low tide. For additional information mariners are advised to contact U. S. Coast Guard Sector Columbia River at 503-861-6211.

Chart 18502 LNM: 07/16

WASHINGTON – COLUMBIA RIVER TO DESTRUCTION ISLAND – Subsurface moorings

NOAA has deployed subsurface acoustic recorder moorings for research at the locations listed in Enclosure (4) of LNM 07/16. The moorings are on station and will begin to be retrieved in July 2016. They are set at various depths up to 500 meters and as shallow as 40 meters. NOAA is requesting that mariners maintain a distance of 500 yards from the positions noted. For additional information contact Dr. M. Bradley Hanson at (206) 860-3220 or email brad.hanson#noaa.gov.

Charts: 18480 18500 LNM: 07/16

WASHINGTON – AREA TO BE AVOIDED - OLYMPIC COAST NATIONAL MARINE SANCTUARY - Temporary surface buoy deployment

NOAA has recovered most of its Olympic Coast National Marine Sanctuary scientific moorings and deployed one scientific mooring for the winter.

WASHINGTON – AREA TO BE AVOIDED - OLYMPIC COAST NATIONAL MARINE SANCTUARY - Temporary surface buoy deployment

The mooring is marked with a bright orange surface float. The mooring is located off Teahwhit Head at a depth of 42 meters at approximate position 47-52.560N 124-44.000W and will be in place until approximately June 2016. Two of the moorings previously set during the summer were not present on their assigned stations and are consider missing or adrift. Mariners are advised to use caution while transiting the area. For additional information contact LTJG Justin Ellis at voc.ocnms@noaa.gov or (360) 457-6622 x 14.

Charts: 18480 18500 LNM: 06/16

WASHINGTON - APPROACHES TO ADMIRALTY INLET – SEQUIM BAY – Temporary Equipment Deployment (Revised from LNM 39/15)

The Pacific Northwest National Laboratory has temporarily deployed submerged scientific equipment in the entrance to Sequim Bay in approximate position 48-04-45.412N, 123-02-41.280W. The submerged equipment will be in place until approximately 30 Jun 16. Cables run from the equipment to the dock just west of its position on the seafloor and will be marked by two white warning buoys, one to the north and one to the south. Vessels are asked to not pass between the buoys and keep a minimum of 20 yards to from both buoys. For additional information contact Ms. Susan Southard, (360) 681-3615 or sue.southard@pnnl.gov.

Chart 18471 LNM: 47/15

WASHINGTON – TACOMA HARBOR – PUYALLUP RIVER - Tacoma/Fife- I-5 Bridge Construction

Hamilton Construction Company is constructing the new I-5 bridge north of the existing northbound bridge over the Puyallup River. Operating hours are from 0700 to 1800, Monday through Saturday, subject to change. Two work trestles have been constructed in the river. One work trestle has been constructed along and parallel to the north bank and one along and parallel to the south bank with an 80' wide navigable channel between the 12" yellow floating booms that are anchored around the trestles at approximate position 47-14-25.700N 122-23-58.000W. The work trestle structures will remain in place until November 2017. No barges will be used on the project. There will be three yellow floating water quality monitoring stations anchored in the river that are marked with amber flashing lights. The stations' positions will move as the work progresses. There will be one station secured upriver, one downriver and one adjacent to the work area as shown in enclosure (6) of LNM 25/15. The monitoring stations are tethered to mooring buoys. Mariners are requested to not transit between the mooring buoys and the monitoring stations, remain in the 80' navigation channel, and reduce wake when transiting the area. For additional information contact Mr. Jeff Phillips at (541) 953-9179.

Chart 18453 LNM: 45/15

WASHINGTON – LAKE WASHINGTON – Annual summer refill

The USACE will begin the annual summer refill of Lake Washington on 18 Feb 16. The final refill target is 22.0 feet by 01 May 16 measured at the locks. Owners of vessels, docks, slips and other structures are advised to monitor the rise in lake elevations. For more information, review the Corp's web site at: http://www.nwd-wc.usace.army.mil/nws/hh/www/index.html#, or call (206) 764-3750.

Chart 18447 LNM: 08/16

WASHINGTON – STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA AND PUGET SOUND – WHIDBEY ISLAND DGPS SITE – DGPS off-air time

The U.S. Coast Guard Navigation Center has approved off-air time for the Whidbey Island, WA DGPS site for scheduled maintenance from 1000 to 1400 on 17 May 16, with an alternate time of 1000 to 1400 on 18 May 16. There will be no significant loss of coverage due to dual coverage in the area. For additional information or objections, contact the Navigation Center DGPS Operations at (703) 313-5902 or at http://www.navcen.uscg.gov/?pageName=dgpsSiteInfo&currentOutages.

Charts: 18421 18440 18465 LNM: 09/16

WASHINGTON – STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA – FRIDAY HARBOR – Scientific Seafloor Equipment Deployment

Cornell University has deployed scientific seafloor equipment near the University of Washington Friday Harbor Labs dock. The equipment consists of four hydrophone mounts that extend four feet above the seafloor with a series of cables connecting them to a shore side facility. All associated equipment is scheduled to be removed by 15 Feb 18. Details of locations for the equipment and cables are shown in enclosure (4) of LNM 45/14. Mariners are advised to avoid dragging or deploying gear near these locations. For additional information, contact Mr. Charles H. Greene at (607) 275-1662 or email chg2@cornell.edu.

Chart 18434 LNM: 38/14

WASHINGTON – STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA – HARO STRAIT – Acoustic Recorder Deployed

Acoustic recorders have been set at three locations in Haro Strait, and will be in place until further notice. Mariners are advised to avoid dragging or deploying gear near these locations. The recorders are at the following positions:

48-30-51.73N 123-09-00.36W, 6 feet above the bottom
48-30-27.63N 123-11-54.35W, 50 meters below the surface
48-30-26.72N 123-11-50.69W, 40 meters above the bottom

Chart 18433 LNM: 23/13

WASHINGTON – STRAIT OF JUAN DE FUCA AND BOUNDARY PASS – Temporary Subsurface Buoy Deployment

Subsurface oceanographic mooring buoys extending 10 meters above the ocean floor have been temporarily set at the following positions until further notice. Mariners are advised to avoid dragging or deploying gear near these locations:

48-21.639N, 124-13.813W

WASHINGTON – STRAIT OF JUAN DE FUCA AND BOUNDARY PASS – Temporary Subsurface Buoy Deployment

48-30.499N, 124-45.027W
48-45.978N, 123-02.413W

Charts: 18431 18432 18460 18480 LNM: 18/13

STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA – BOUNDARY PASS AND HARO STRAIT - Placement of underwater equipment

Subsurface research buoys have been placed in Boundary Pass and Haro Strait at approximate positions 48-41-07.32N 123-16-26.10W and 48-30-23.68N 123-12-37.92W. The buoys are set to float approximately eight meters above the seabed. Additional subsea research buoys are located in Canadian waters. For additional information contact Mr. Marc LeBlanc at (250) 363-2034.

Chart 18421 LNM: 08/16

MONTANA – BILLINGS DGPS SITE – DGPS Off-Air time

The U.S. Coast Guard Navigation Center has approved off-air time for the Billings, MT, DGPS broadcast site to conduct maintenance from 0900 to 1100 Mountain Daylight Time (MDT) on 11 Apr 16, with an alternate time of 0900 to 1100 on 12 Apr 16. For additional information or objections, contact the USCG Navigation Center DGPS Operations at (703) 313-5902 or http://www.navcen.uscg.gov/?pageName=dgpsSiteInfo&currentOutages.

LNM: 07/16

SECTION VIII - LIGHT LIST CORRECTIONS

An Asterisk *, indicates the column in which a correction has been made to new information

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
16071.25	Hoquiam River Obstruction Buoy Marks submerged obstruction.	46-58-41.035N 123-52-56.606W				White can with orange bands.		14/16
*	*	*	*	*	*	*	*	
18410	TOTTEN INLET AQUACULTURE LIGHT A	47-07-41.322N 123-00-59.789W	Fl Y 6s			On floating pen.	Private Aid.	14/16
	*	*				*		
18411	TOTTEN INLET AQUACULTURE LIGHT B	47-07-39.504N 123-01-00.264W	Fl Y 6s			On floating pen.	Private Aid.	14/16
*	*	*	*	*	*	*	*	
18413	TOTTEN INLET MUSSEL RAFT LIGHT A	47-08-55.993N 122-58-31.238W	Fl Y 4s			On floating raft.	Private Aid.	14/16
*	*	*	*	*	*	*	*	
18414	TOTTEN INLET MUSSEL RAFT LIGHT B	47-08-51.238N 122-58-32.023W	Fl Y 4s			On floating raft.	Private Aid.	14/16
	*	*						
18550	SNOHOMISH RIVER RANGE FRONT LIGHT	48-00-54.981N 122-13-27.803W	Q G	20		KRB on skeleton tower.	Visible all around.	14/16
							*	
18555	SNOHOMISH RIVER RANGE REAR LIGHT 339 yards, 002.7° from front light.	48-01-05.017N 122-13-27.092W	Iso G 6s	41		KRB on skeleton tower. On same structure as Snohomish River Range C Rear Daybeacon.	Visible 5.5° each side of rangeline.	14/16
							*	

ENCLOSURES

Enclosure 1

OREGON - WASHINGTON - IDAHO - MONTANA - Summary of Bridge Lighting Discrepancies and Corrections

LNM: 14/16

Enclosure 2

OREGON - WASHINGTON - COLUMBIA RIVER - Summary of Dredging Operations

LNM: 14/16

Enclosure 3

OREGON - WASHINGTON - COLUMBIA RIVER - Summary of Marine Events

LNM: 14/16

Enclosure 4

Yaquina Bay Entrance Shoaling Survey

Charts: 18561 18581 LNM: 12/16

Enclosure 5

Navigation changes on Lake Washington at SR-520

Chart 18447 LNM: 12/16

Enclosure 6

WDFW 2016 Trawl Survey Announcement

Charts: 18400 18440 LNM: 13/16

Enclosure 7

Safety and Security Zones

LNM: 14/16

Enclosure 8

Oregon Coast fiber optic cable repair

LNM: 14/16

If you have any questions, comments, or need additional information concerning this or other LNMs (e.g. additions, deletions, corrections) contact the address or phone number on the front page.

CDR Michele L. Schallip
Chief, Waterways Management Branch
Thirteenth Coast Guard District

BRIDGE LIGHTING DISCREPANCIES AND CORRECTIONS

Enclosure (1)

BRIDGE LIGHTING DISCREPANCIES

Waterway	Light List #	Bridge Name	Location	Status	Date Reported	BNM
OREGON COAST						
Alsea River	9627	Alsea Bay Bridge	Waldport, OR	Northeast red lights extinguished	03/28/2016	0268-16
COLUMBIA RIVER						
Columbia River	11933	Hood River Bridge	Hood River, OR	Draw span damaged, unable to open ETR unknown	10/21/2015	0909-15
Columbia River	11801	Bridge of the Gods	Cascade Locks, OR	Aero red lights extinguished	03/28/2016	0265-16
SNAKE RIVER						
None						
WILLAMETTE RIVER						
None						
WASHINGTON COAST						
None						
PUGET SOUND						
Snohomish River	18594.12	I-5 Hiway Twin Bridge	Everett, WA	All lights extinguished	03/28/2016	0267-16
IDAHO						
None						
** Updated report*						

BRIDGE LIGHTING CORRECTIONS

Waterway		Bridge Name	Location	Status	Date Reported	BNM
OREGON COAST						
None						
COLUMBIA RIVER						
None						
SNAKE RIVER						
None						
WILLAMETTE RIVER						
None						
WASHINGTON COAST						
None						
PUGET SOUND						
None						
IDAHO						
None						

Dredging operations are scheduled or in progress at the following locations:

Start Date	End Date	Times	Location	Dredge Vessel	Assist Vessel	Channels Monitored	Disposal Area	LNM
11-Apr-16	13-Apr-16	24 Hrs, 7 Days	Columbia River; Westport - Eureka Lower Channel (RM 47+40 to 48+30)	M/V Yaquina	None	VHF-FM 13 &16	RM 46	13/16
9-Apr-16	10-Apr-16	24 Hrs, 7 Days	Columbia River; Gull Island Channel (RM 53+35 to 54+40)	M/V Yaquina	None	VHF-FM 13 &16	RM 53	13/16
7-Apr-16	8-Apr-17	24 Hrs, 7 Days	Columbia River; Stella Range (RM 57+00 to 57+30)	M/V Yaquina	None	VHF-FM 13 &16	RM 57	13/16
5-Apr-16	6-Apr-16	24 Hrs, 7 Days	Columbia River; Walker Island (RM 60+20 to 60+30)	M/V Yaquina	None	VHF-FM 13 &16	RM 59	13/16
8-Apr-16	8-May-16	24 Hrs, 7 Days	Grays Harbor: Bar Channel, Entrance Channel & Pt. Chehalis Reach	M/V Bayport	M/V John M & M/V Panther	VHF-FM 13,16 & 66	South Beach & Pt Chehalis	13/16
1-Aug-15	8-Jun-16	24 Hrs, 7 Days	Whatcom Waterway, Bellingham; BST Dock, Log Pond, GP Dock & Inner Waterway	M/V Paliouse M/V Mulketio	MV Skagit & M/V Dungeness	VHF-FM 13 &16	Upland	31/15

Dredging Sites are subject to change dependant upon weather conditions and Gill Net Fisheries. Any Location listed may be used during the time period of November, although operations at each site may be limited to only a few days.

Mariners are advised that the start and ending dates for dredging activities may vary due to unforseen on-site conditions, weather and other factors.

The US Army Corps of Engineer dredges request mariners transit at their slowest safe speed to minimize wake when in the vicinity of a dredge and proceed after passing arrangements have been made. Vessel (s) and/or equipment may encroach into the channel.

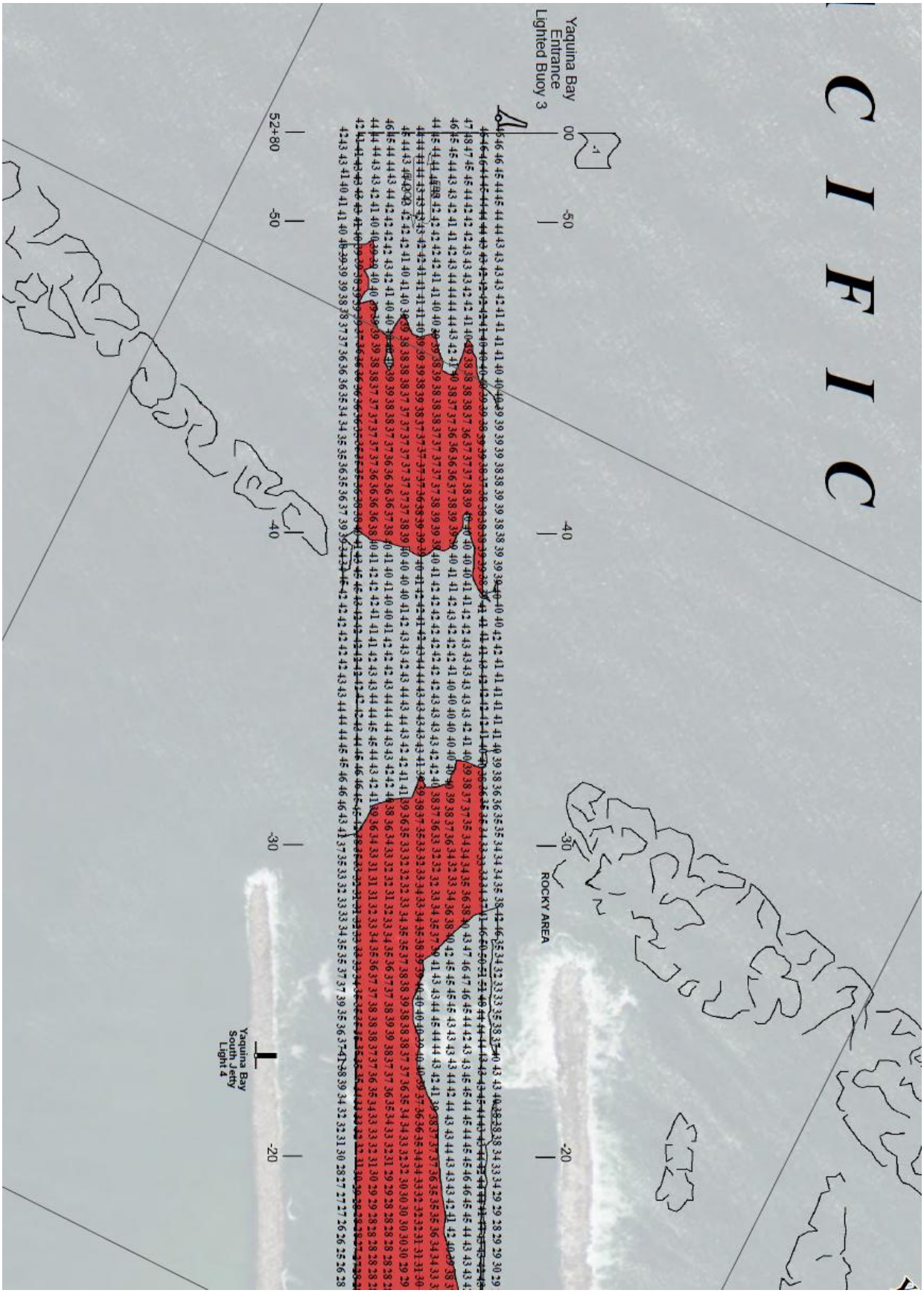
MARINE EVENTS

Enclosure (3)

SECTOR COLUMBIA RIVER MARINE EVENTS			
EVENT DATE	TIME	EVENT NAME	EVENT LOCATION
9-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
10-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
16-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
17-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
17-Apr-16	0800-1300	Annual Willamette SUP Cup	Willamette River; Lake Oswego
19-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
21-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
23-Apr-16	1000-1500	Rusty Iron, Canoe Race	Columbia River, Vancouver, WA
26-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
28-Apr-16	1300-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges

SECTOR PUGET SOUND MARINE EVENTS			
EVENT DATE	TIME	EVENT NAME	EVENT LOCATION
07-Apr-16	1825-2130	Spring Series	East Passage
09-Apr-16	1100-2400	Patos Island Classic Race	Haro strait/Boundary Pass
10-Apr-16	0000-1100	Patos Island Classic Race	Haro strait/Boundary Pass
13-Apr-16	1900-2100	Windseeker	Commencement Bay
14-Apr-16	1825-2130	Spring Series	East Passage
16-Apr-16	1000-2000	Rich Passage Ramble	Port Orchard to Blake Island
16-Apr-16	1000-1605	Spring Singlehand Doublehand	Commencement Bay
20-Apr-16	1900-2100	Windseeker	Commencement Bay
21-Apr-16	1700-2000	Sound Evening Series- Thursday Night	Shilshole Bay
23-Apr-16	1000-1700	Circumlocution of Bainbridge Island	Bainbridge Island
23-Apr-16	1025-1800	Spring Regatta	East Passage
24-Apr-16	1000-1205	Dan Harris challenge	Bellingham Bay
24-Apr-16	1025-1800	Spring Regatta	East Passage
27-Apr-16	1900-2100	Windseeker	Commencement Bay
28-Apr-16	1700-2000	Sound Evening Series- Thursday Night	Shilshole Bay
28-Apr-16	1825-2130	Spring Series	East Passage
30-Apr-16	1000-2000	Smith Island / Double Bluff Race	Admiralty Inlet
30-Apr-16	0700-1800	St Martins 11th Annual Dragon Boat Event	Budd Inlet

NOT TO BE USED FOR NAVIGATION



NOT TO BE USED FOR NAVIGATION

Washington State Department of Transportation

SR 520 Bridge Replacement and HOV Program

I-5 to Medina: Bridge Replacement and HOV Project

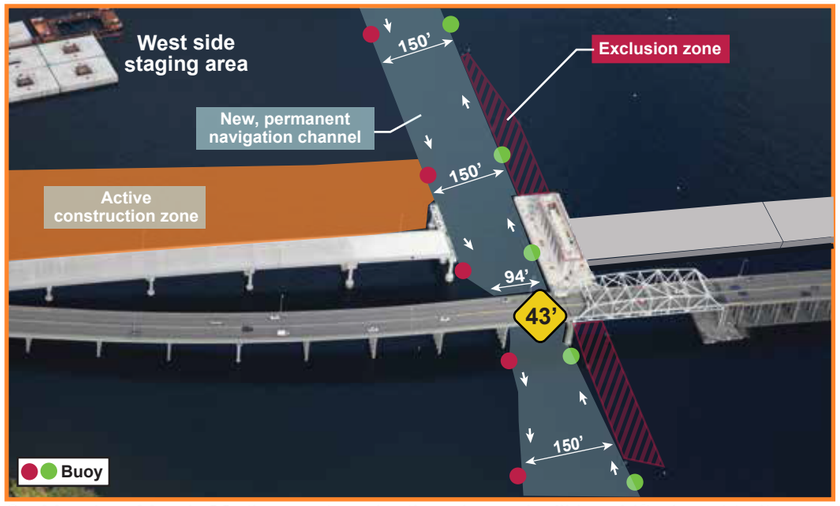
STATE ROUTE 520

Navigation changes on Lake Washington at SR 520

March 2016

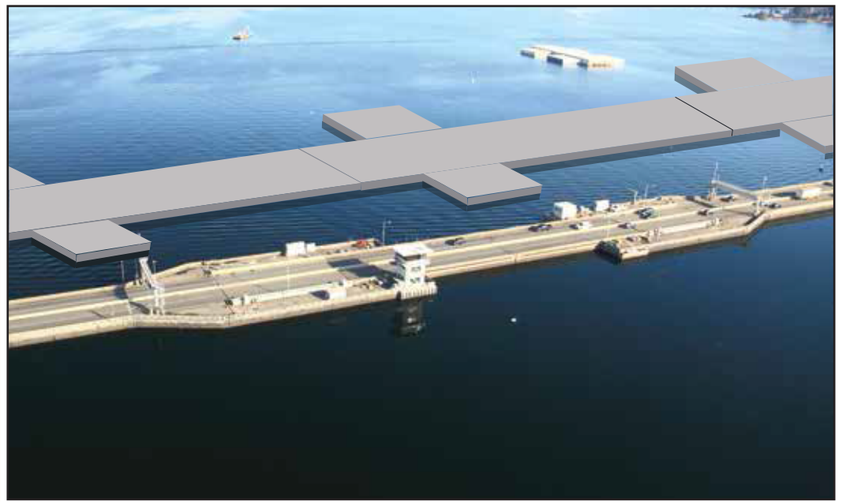
UPDATE: West navigation channel shifted east to new, permanent location on Monday, March 28

A West navigation channel



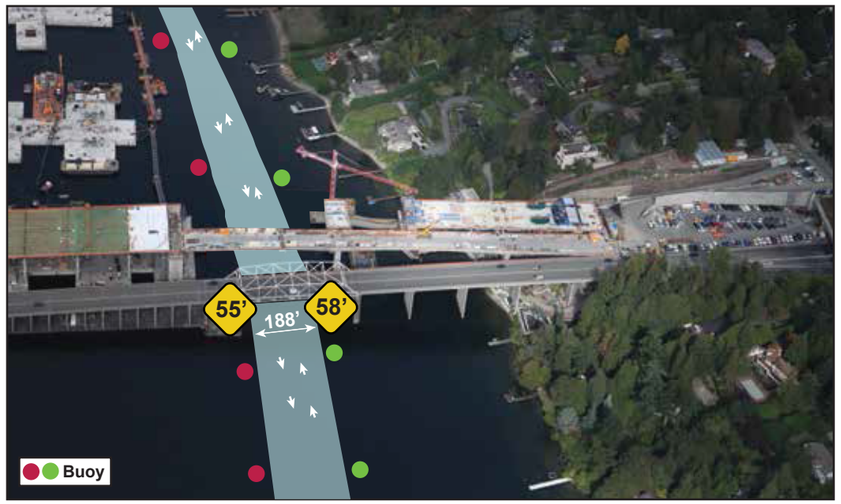
On Monday, March 28, the west navigation channel will be shifted east to its new, permanent location.

B Drawspan blocked

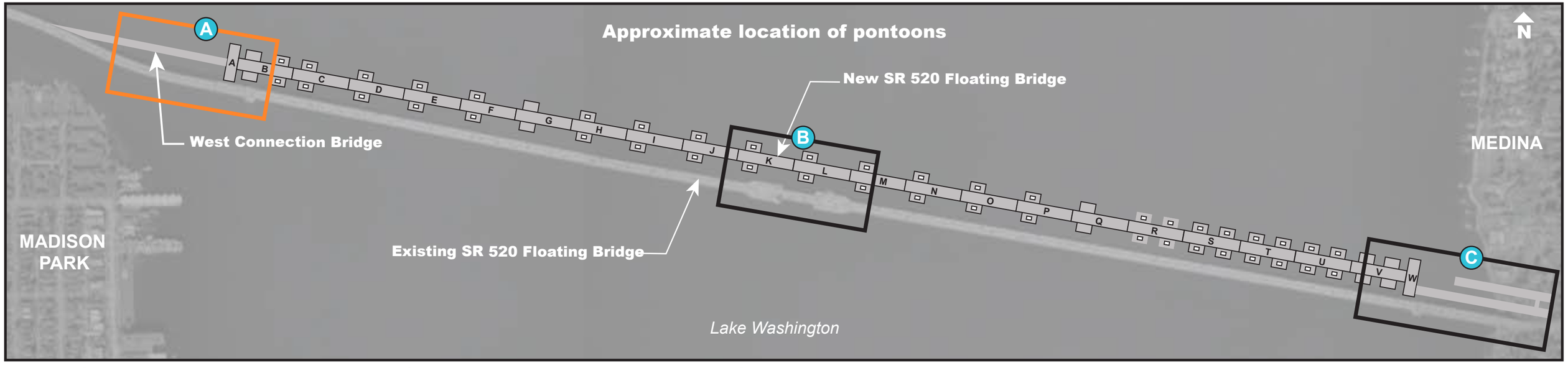


Drawspan blocked as of Feb. 17, 2015.

C East navigation channel



East navigation channel remains open.



For more information, visit: **www.wsdot.wa.gov/projects/SR520bridge/bridgeandlandings/drawspaninfo**

Enclosure (6)

Announcement of the 2016 WDFW Puget Sound Bottom Trawl Survey

1 March 2016

From 2 May through 26 May 2016, the Washington Department of Fish and Wildlife (WDFW) Marine Fish Science Unit will conduct a bottom trawl survey to assess marine bottomfish living in the waters of Puget Sound, including the Strait of Juan de Fuca, Strait of Georgia, San Juan Archipelago, Hood Canal, Central Sound, and South Sound regions. The vessel chartered by WDFW for the survey is the *F/V Chasina*, a 57-foot seiner/trawler (call sign WYQ-6987; USCG No. 623-734), which will be fishing with a 400-mesh Eastern bottom trawl fitted with 4-inch cookie-gear on the footrope and a 1.25-inch cod-end liner. Signs indicating the research status of the vessel (ie: WDFW RESEARCH) will be posted on both sides of the upper deck throughout the survey.

The Marine Fish Science Unit of WDFW has been conducting this trawl survey annually since 1987 and sampling a series of fixed index stations since 2008. The goals of the survey are to detect long-term changes in fish abundance and to collect biological samples for examining fish age, growth, size distribution, sex ratio, and genetic diversity. At each station, the net will be towed a fixed distance of 0.40 nm at a speed of 1-3 knots. All catches will be sorted and identified to the lowest taxonomic level, weighed, and enumerated, and most of the catch (>95%) will be returned to the sea. A limited amount of the catch will be retained for biological samples—including age structures (otoliths, dorsal spines, opercula), genetic tissue (muscle tissue or fin clip), stomachs, gonads, and whole specimens—that will be preserved and further processed for laboratory analysis. Key species of interest include Pacific Cod, Walleye Pollock, Pacific Whiting (Hake), English Sole, Starry Flounder, Spiny Dogfish, and any species of rockfish, skates, and sharks, but all species of fishes and invertebrates will be identified and recorded.

Limited opportunities are available for non-WDFW scientists to obtain specimens and other biological material that make use of this sampling opportunity. Due to budget and time constraints, WDFW staff will have limited ability to collect specimens or samples from any submitted request, thus each request will be evaluated on a case-by-case basis to determine the impacts of the request on scheduled activities. If time and space permits, requesting parties may have the opportunity to place a staff member on board the trawl vessel on a daily basis (i.e., no overnight stays). Agencies or individuals submitting a sampling request will be required to provide their own transportation for staff and materials to and from the survey vessel, which may require the use of a small boat as the survey vessel does not come into port every night. Note that a WDFW scientific collection permit may be required for documenting the possession or transportation of any biological materials.

A map of the planned stations (Figure 1), a list of planned station coordinates (Table 1), a picture of the *F/V Chasina* (Figure 2), and a tentative schedule (Table 2) are enclosed. For further information regarding the WDFW bottom trawl survey, please contact Jennifer Blaine, Robert Pacunski, or Dayv Lowry. Contact information is below.

Best Regards,

Jennifer Blaine
Puget Sound Groundfish Biologist
WDFW, Marine Fish Science Unit

WDFW Marine Fish Science Unit Contacts:

Jennifer Blaine, M.S. (Primary)
Washington Department of Fish and Wildlife
16018 Mill Creek Blvd.
Mill Creek, WA 98012
425-379-2313 (office)
425-231-9476 (work cell)
Jennifer.Blaine@dfw.wa.gov

Dayv Lowry, Ph.D.
Washington Department of Fish and Wildlife
600 Capitol Way North
Olympia, WA 98501
360-902-2558 (office)
360-359-0713 (work cell)
Dayv.Lowry@dfw.wa.gov

Robert Pacunski, M.S.
Washington Department of Fish and Wildlife
16018 Mill Creek Blvd.
Mill Creek, WA 98012
425-379-2314 (office)
206-619-5312 (work cell)
Robert.Pacunski@dfw.wa.gov

Website:

http://wdfw.wa.gov/fishing/bottomfish/

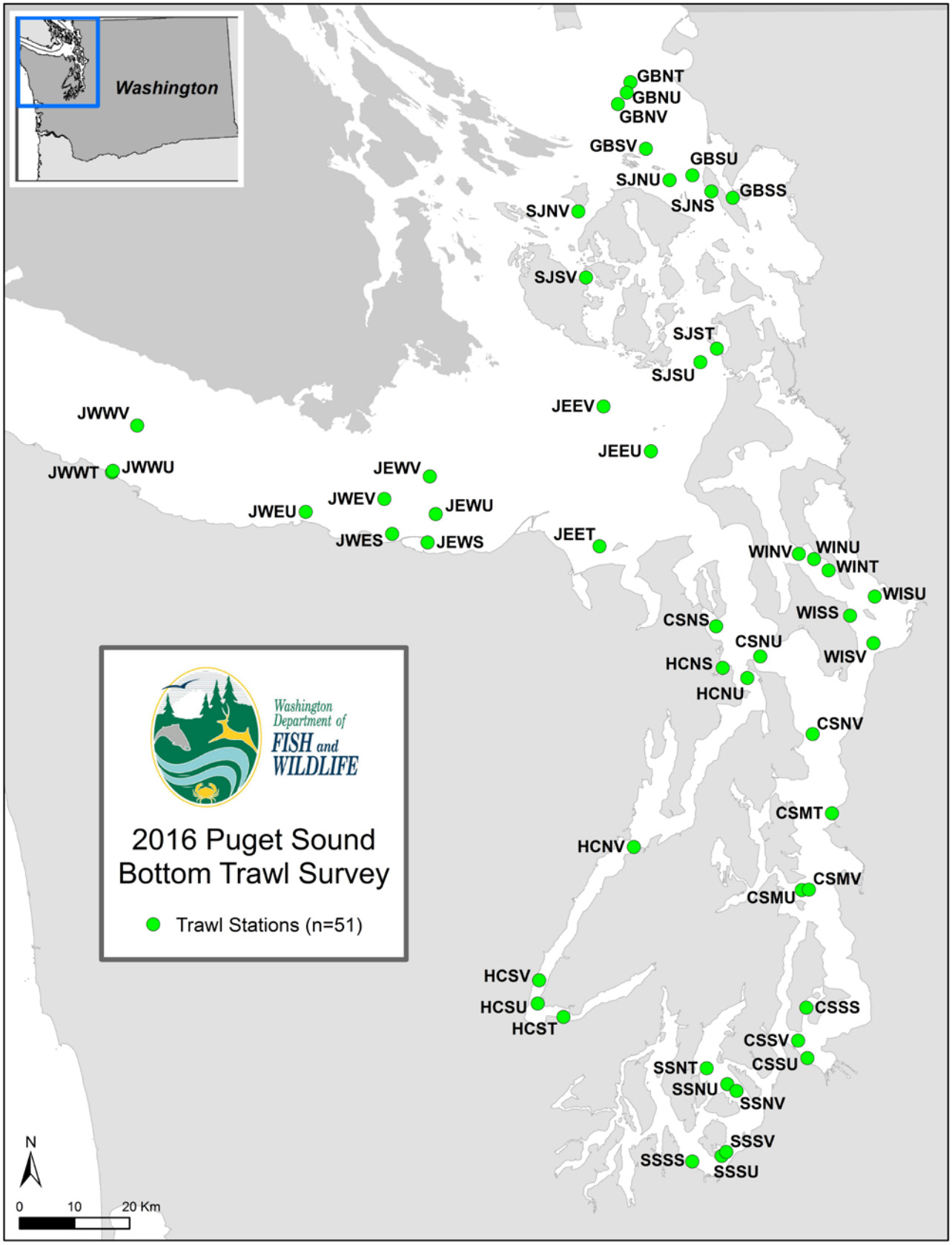


Figure 1. Map of the WDFW bottom trawl survey stations.

Table 1. WDFW bottom trawl sampling stations and target coordinates.

Region	Depth Zone (fa)	Station Identifier	Latitude	Longitude	Survey Type
East Juan de Fuca	20-40	JEET	48.12683	-122.97767	Groundfish Index
East Juan de Fuca	40-60	JEEU	48.28233	-122.85167	Groundfish Index
East Juan de Fuca	>60	JEEV	48.35600	-122.96783	Groundfish Index
East Juan de Fuca	5-20	JEWS	48.13250	-123.39783	Groundfish Index
East Juan de Fuca	40-60	JEWU	48.17891	-123.37833	Groundfish Index
East Juan de Fuca	>60	JEWV	48.24067	-123.39317	Groundfish Index
West Juan de Fuca	5-20	JWES	48.14600	-123.48467	Groundfish Index
West Juan de Fuca	40-60	JWEU	48.18100	-123.69633	Groundfish Index
West Juan de Fuca	>60	JWEV	48.20333	-123.50417	Groundfish Index
West Juan de Fuca	20-40	JWWT	48.24200	-124.17167	Groundfish Index
West Juan de Fuca	40-60	JWWU	48.24450	-124.16950	Groundfish Index
West Juan de Fuca	>60	JWWV	48.31917	-124.11183	Groundfish Index
Georgia Basin	20-40	GBNT	48.88700	-122.90033	Groundfish Index
Georgia Basin	40-60	GBNU	48.86983	-122.90967	Groundfish Index
Georgia Basin	>60	GBNV	48.85100	-122.93167	Groundfish Index
Georgia Basin	5-20	GBSS	48.69700	-122.64817	Groundfish Index
Georgia Basin	40-60	GBSU	48.73433	-122.74767	Groundfish Index
Georgia Basin	>60	GBSV	48.77783	-122.86233	Groundfish Index
San Juan Islands	5-20	SJNS	48.70767	-122.70083	Groundfish Index
San Juan Islands	40-60	SJNU	48.72650	-122.80417	Groundfish Index
San Juan Islands	>60	SJNV	48.67533	-123.02967	Groundfish Index
San Juan Islands	20-40	SJST	48.45017	-122.68867	Groundfish Index
San Juan Islands	40-60	SJSU	48.42817	-122.72933	Groundfish Index
San Juan Islands	>60	SJSV	48.56717	-123.01083	Groundfish Index
Hood Canal	5-20	HCNS	47.92717	-122.67767	Groundfish Index
Hood Canal	40-60	HCNU	47.91033	-122.61783	Groundfish Index
Hood Canal	>60	HCNV	47.63433	-122.89483	Groundfish Index
Hood Canal	20-40	HCST	47.35583	-123.06467	Groundfish Index
Hood Canal	40-60	HCSU	47.37767	-123.12667	Groundfish Index
Hood Canal	>60	HCSV	47.41583	-123.12333	Groundfish Index
Whidbey Basin	20-40	WINT	48.08600	-122.41817	Groundfish Index
Whidbey Basin	40-60	WINU	48.10467	-122.45367	Groundfish Index
Whidbey Basin	>60	WINV	48.11317	-122.49067	Groundfish Index
Whidbey Basin	5-20	WISS	48.01150	-122.36667	Groundfish Index
Whidbey Basin	40-60	WISU	48.04250	-122.30583	Groundfish Index
Whidbey Basin	>60	WISV	47.96617	-122.31033	Groundfish Index
Central Sound	20-40	CSMT	47.68800	-122.41433	Groundfish Index
Central Sound	40-60	CSMU	47.56267	-122.48883	Groundfish Index
Central Sound	>60	CSMV	47.56317	-122.47167	Groundfish Index
Central Sound	5-20	CSNS	47.99533	-122.69350	Groundfish Index

Central Sound	40-60	CSNU	47.94567	-122.58617	Groundfish Index
Central Sound	>60	CSNV	47.81793	-122.45970	Groundfish Index
Central Sound	5-20	CSSS	47.36983	-122.47983	Groundfish Index
Central Sound	40-60	CSSU	47.28717	-122.47817	Groundfish Index
Central Sound	>60	CSSV	47.31600	-122.50017	Groundfish Index
South Sound	20-40	SSNT	47.27150	-122.72033	Groundfish Index
South Sound	40-60	SSNU	47.24517	-122.67083	Groundfish Index
South Sound	>60	SSNV	47.23417	-122.64867	Groundfish Index
South Sound	5-20	SSSS	47.11867	-122.75567	Groundfish Index
South Sound	40-60	SSSU	47.12767	-122.68483	Groundfish Index
South Sound	>60	SSSV	47.13433	-122.67383	Groundfish Index

Figure 2. Trawl vessel *F/V Chasina* used for WDFW bottom trawl survey

Table 2. Proposed schedule for the 2016 WDFW bottom trawl survey. Note that two options are given; the option chosen shall be decided during week 2 based upon weather forecasts for the regions to be sampled in weeks 3-4.

PROPOSED 2016 WDFW Trawl Survey Schedule—OPTION A (STRAITS WEEK 3)				
Day	**Date**	**Depart From**	**Return to**	**Survey Area/Stations**
	Mon 4/25	*GEAR PREP AND CREW TRAINING*		
	Tue 4/26			
	Wed 4/27			
	Thu 4/28	FISHERMEN'S TERMINAL	FISHERMEN'S TERMINAL	LOAD GEAR
	Fri 4/29	FISHERMEN'S TERMINAL	FISHERMEN'S TERMINAL	LOAD GEAR
BOAT MOVES TO SHILSHOLE				
1	**Mon 5/2**	SHILSHOLE	QUARTERMASTER HARBOR	CSMU, CSMV, CSSS
2	**Tue 5/3**	QUARTERMASTER HARBOR	MAYO COVE	<CSSS>, SSSV, SSSS, SSSU,
3	**Wed 5/4**	MAYO COVE	BLAKE ISLAND	SSNT, SSNU, SSNV, CSSV, CSSU
4	**Thu 5/5**	BLAKE ISLAND	EVERETT	CSMT, CSNV, WISV
	Fri 5/6	*OFF*	*OFF*	--
5	**Mon 5/9**	EVERETT	EVERETT	WISU, WINV, WINU, WINT, WISS
6	**Tue 5/10**	EVERETT	TAHUYA	<WISS>, HCNV
7	**Wed 5/11**	TAHUYA	PORT LUDLOW	HCST, HCSU, HCSV, HCNS
8	**Thu 5/12**	PORT LUDLOW	PORT LUDLOW	HCNU, CSNU, CSNS
	Fri 5/13	*OFF*	*OFF*	--
BOAT MOVES TO PORT TOWNSEND				
9	**Mon 5/16**	PORT TOWNSEND	PILLAR POINT	JEET, JEWV, JWWV
10	**Tue 5/17**	PILLAR POINT	PORT ANGELES	JWWT, JWWU, JWEU, JWES
11	**Wed 5/18**	PORT ANGELES	PT ANGELES/ DUNGENESS SPIT	JWEV, JEWU, JEWS
12	**Thu 5/19**	PT ANGELES/ DUNGENESS SPIT	ANACORTES	JEEU, JEEV
	Fri 5/20	*OFF*	*OFF*	--
13	**Mon 5/23**	ANACORTES	ANACORTES/LUMMI	SJST, SJSU, GBSS
14	**Tue 5/24**	LUMMI	SUCIA/MATIA	GBSU, SJNS, SJNU, GBSV
15	**Wed 5/25**	SUCIA/MATIA	WALDRON	GBNT, GBNU, GBNV
16	**Thu 5/26**	WALDRON	ANACORTES (OR SHILSHOLE)	SJNV, SJSV
	Fri 5/27	*OFF*	*OFF*	--
BOAT MOVES TO FISHERMEN'S TERMINAL				
	Mon 5/30	*OFF*	*OFF*	*HOLIDAY*
	Tue 5/31	FISHERMEN'S TERMINAL	FISHERMEN'S TERMINAL	UNLOAD GEAR
	Wed 6/1	*CONTINGENCY FISHING DATES*		
	Thu 6/2			
[a] Schedule and operating areas are subject to change due to equipment failure, weather, and other conditions. <> Indicates a planned second tow will be conducted at the site				

PROPOSED 2016 WDFW Trawl Survey Schedule—OPTION B (STRAITS WEEK 4)				
Day	**Date**	**Depart From**	**Return to**	**Survey Area/Stations**
	Mon 4/25	*GEAR PREP AND CREW TRAINING*		
	Tue 4/26			
	Wed 4/27			
	Thu 4/28	FISHERMEN'S TERMINAL	FISHERMEN'S TERMINAL	LOAD GEAR
	Fri 4/29	FISHERMEN'S TERMINAL	FISHERMEN'S TERMINAL	LOAD GEAR
BOAT MOVES TO SHILSHOLE				
1	**Mon 5/2**	SHILSHOLE	QUARTERMASTER HARBOR	CSMU, CSMV, CSSS
2	**Tue 5/3**	QUARTERMASTER HARBOR	MAYO COVE	<CSSS>, SSSV, SSSS, SSSU,
3	**Wed 5/4**	MAYO COVE	BLAKE ISLAND	SSNT, SSNU, SSNV, CSSV, CSSU
4	**Thu 5/5**	BLAKE ISLAND	EVERETT	CSMT, CSNV, WISV
	Fri 5/6	*OFF*	*OFF*	--
5	**Mon 5/9**	EVERETT	EVERETT	WISU, WINV, WINU, WINT, WISS
6	**Tue 5/10**	EVERETT	TAHUYA	<WISS>, HCNV
7	**Wed 5/11**	TAHUYA	PORT LUDLOW	HCST, HCSU, HCSV, HCNS
8	**Thu 5/12**	PORT LUDLOW	PORT LUDLOW	HCNU, CSNU, CSNS
	Fri 5/13	*OFF*	*OFF*	--
BOAT MOVES TO ANACORTES				
9	**Mon 5/16**	ANACORTES	ANACORTES/LUMMI	SJST, SJSU, GBSS
10	**Tue 5/17**	LUMMI	SUCIA/MATIA	GBSU, SJNS, SJNU, GBSV
11	**Wed 5/18**	SUCIA/MATIA	WALDRON	GBNT, GBNU, GBNV
12	**Thu 5/19**	WALDRON	PORT TOWNSEND	SJNV, SJSV, JEEV
	Fri 5/20	*OFF*	*OFF*	--
13	**Mon 5/23**	PORT TOWNSEND	PILLAR POINT	JEEU, JWWV
14	**Tue 5/24**	PILLAR POINT	PORT ANGELES	JWWT, JWWU, JWEU, JWES
15	**Wed 5/25**	PORT ANGELES	PT ANGELES/DUNGENESS SPIT	JEWV, JWEV, JEWU, JEWS
16	**Thu 5/26**	PT ANGELES/DUNGENESS SPIT	SHILSHOLE	JEET
	Fri 5/27	*OFF*	*OFF*	--
BOAT MOVES TO FISHERMEN'S TERMINAL				
	Mon 5/30	*OFF*	*OFF*	*HOLIDAY*
	Tue 5/31	FISHERMEN'S TERMINAL	FISHERMEN'S TERMINAL	UNLOAD GEAR
	Wed 6/1	*CONTINGENCY FISHING DATES*		
	Thu 6/2			
[a] Schedule and operating areas are subject to change due to equipment failure, weather, and other conditions. <> Indicates a planned second tow will be conducted at the site				

SAFETY AND SECURITY ZONES

Washington - Tank Ship Protection 33 CFR 165.1313

Do not approach within 100 yards of any Tank Ship. No vessel or person is allowed within 100 yards of a tank ship, unless authorized by the on-scene official patrol or tank ship master. If you need to pass within 100 yards of a Tank ship, in order to ensure a safe passage and in accordance with the Navigation Rules, you must contact the Tank Ship on VHF-FM channel 16. When within a tank ship security zone all vessels shall operate at the minimum speed necessary to maintain a safe course and shall proceed as directed by the on-scene official patrol or tank ship master.

Washington - Large Passenger Protection 33 CFR 165.1317

When within a large passenger vessel security and safety zone all vessels must operate at minimum speed necessary to maintain a safe course and must proceed as directed by the on-scene official patrol or large passenger vessel master. No vessel or person is allowed within 100 yards of a large passenger vessel that is underway or at anchor, unless authorized by the on-scene official patrol or large passenger vessel master. No vessel or person is allowed within 25 yards of a large passenger vessel that is moored.

Oregon - Large Passenger Protection 33 CFR 165.1318

When within a large passenger vessel security and safety zone all vessels must operate at minimum speed necessary to maintain a safe course and must proceed as directed by the on-scene official patrol or large passenger vessel master. No vessel or person is allowed within 100 yards of a large passenger vessel that is underway or at anchor, unless authorized by the on-scene official patrol or large passenger vessel master. No vessel or person is allowed within 25 yards of a large passenger vessel that is moored.

Washington – Protection of Military Cargo - Naval Vessel Protection Zone 33 CFR 165.1321

Do not approach within 100 yards of any U.S. Naval Vessel. Within 500 yards of operation of the U.S. Naval Vessel you must transit at minimum safe operating speed. If you need to pass within 100 yards of a U.S. Naval Vessel, in order to ensure a safe passage and in accordance with the Navigation Rules, you must contact the U.S. Naval Vessel of the Coast Guard escort vessel on VHF-FM channel 16. Vessels 20 meters or greater in length should seek permission from the COTP or a Designated Representative at least 4 hours in advance. Vessel less than 20 meters in length should seek permission at least 1 hour in advance. VTS Puget Sound may be reached on VHF-FM channel 14.

Washington - Elliot Bay – Cruise Ship Protection - Pier 91 33 CFR 165.1324

The Captain of the Port, Puget Sound has established the following areas as safety zones: All waters extending 1,000 yards due south from the end of Pier 91, to be in effect only during the arrival or departure of Large Passenger Cruise Vessels at Pier 91, Seattle, Washington. Additionally, a safety zone encompassing all waters within 100 yards surrounding Pier 91, Seattle, Washington is in effect when a Large Passenger Cruise Vessel is moored at Pier 91. In accordance with the general regulations in 33 CFR Part 165, Subpart D, no person or vessel may enter or remain in this security and safety zone, except for vessels authorized by the Captain of the Port or Designated Representatives.

Washington – Escorted U.S. Navy submarines in Sector Puget Sound COTP Zone 33 CFR 165.1327

The following area is a security zone: All waters within 1000 yards of any U.S. Navy submarine that is operating in the Sector Puget Sound Captain of the Port Zone, as defined in 33 CFR Section 3.65–10, and is being escorted by the Coast Guard. In accordance with the general regulations in 33 CFR Section 165, Subpart D, no person or vessel may enter or remain in the security zone created by paragraph (a) of this section unless authorized by the Coast Guard patrol commander. The Coast Guard patrol commander will coordinate with Vessel Traffic System users on a case-by-case basis to make appropriate passing arrangements under the circumstances. 33 CFR Section 165, Subpart D, contains additional provisions applicable to the security zone created in paragraph (a) of this section. The Coast Guard security escort will attempt, when necessary and practicable, to notify any persons or vessels inside or in the vicinity of the security zone created in this section of its existence via VHF Channel 16 and/or any other means reasonably available.

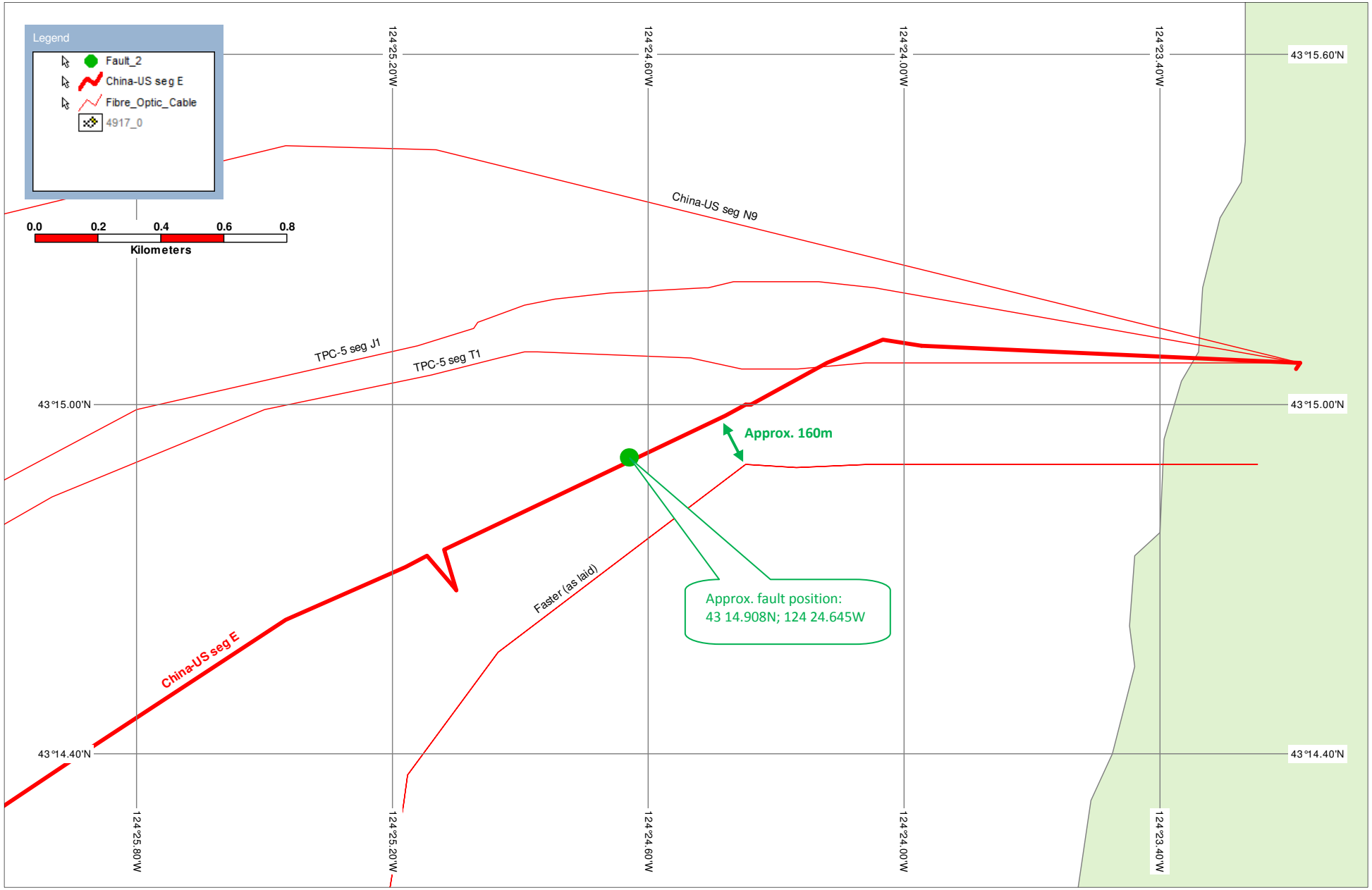
Washington – U.S. Navy submarines in Hood Canal RNA 33 CFR 165.1328

The following area is a regulated navigation area (RNA): All waters of the Hood Canal in the State of Washington whenever any U.S. Navy submarine is operating in the Hood Canal and is being escorted by the Coast Guard. For purposes of this section, “Hood Canal” means all waters of Hood Canal, including Dabob Bay, located between two lines with the first line connecting positions 47°37.9' N, 122°57.1' W and 47°37.9' N, 122°52.9' W and the second line connecting positions 48°00.7' N, 122°41.0' W and 47°56.4' N, 122°36.9' W. Regulations. All persons and vessels located within the RNA created by this section shall follow all lawful orders and/or directions given to them by Coast Guard security escort personnel. 33 CFR Section 165, Subpart B, contains additional provisions applicable to the RNA created in this section. The Coast Guard security escort will attempt, when necessary and practicable, to notify any persons or vessels in the RNA created in this section of its existence via VHF Channel 16 and/or any other means reasonably available.

Washington – Elliot Bay – Pier 36 Security Zone 33 CFR 165. 1334

The Coast Guard has established a security zone at U.S. Coast Guard (USCG) Base Support Unit Seattle, Pier 36, Elliot Bay, Seattle, WA. This permanent security zone is necessary to protect military and visiting foreign vessels, waterfront facilities, and the maritime public from destruction, loss, or injury from sabotage, subversive acts, or other malicious acts of a similar nature. Entry into or movement within this security zone is prohibited without the permission of the Captain of the Port or a Designated Representative. 165. 1334 Security Zone; U.S. Coast Guard BSU Seattle, Pier 36, Elliot Bay, Seattle, WA. (a) Location: The following area is a security zone: all waters east of a line from 47-35.450’N 122-20.585’W to 47-35.409’N 122-20.585’W at Pier 36, Elliot Bay, Seattle, WA. (b) Regulations: In accordance with the general regulations in 33 CFR Part 165, Subpart D, no vessel may enter, transit, moor, or anchor within this security zone located at Pier 36, Elliot Bay, WA, except for vessels authorized by the Captain of the Port or Designated Representative.(c) Authorization: To request authorization to operate within this security zone, contact United States Coast Guard Sector Puget Sound Joint Harbor Operations Center at 206-217-6001.

China-US seg E



15th March 2016