



U.S. Department
of Homeland Security
**United States
Coast Guard**

LOCAL NOTICE TO MARINERS

District: 13

Week: 20/16

ISSUED BY: COMMANDER, THIRTEENTH COAST GUARD DISTRICT (dpw)
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<http://www.navcen.uscg.gov/?pageName=lnmDistrict®ion=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	D13-0393-16	D13-0429-16

ABBREVIATIONS

A through H

ADRIFT - Buoy Adrift
AICW - Atlantic Intracoastal Waterway
AI - 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.

COLUMBIA RIVER – PACIFIC OCEAN TO HARRINGTON POINT – Synthetic AIS Addition to Desdemona Sands Channel Lighted Bell Buoy 21 (Revised from LNM 19/16)

The U.S. Coast Guard has deactivated the Synthetic AIS (Automatic Identification System) identifier that was signaling as a temporary measure at Desdemona Sands Channel Lighted Bell Buoy 21 (LLNR 9985). The synthetic AIS had been assigned the MMSI number of 993692048. For more information about AIS, Mariners can log on to the U.S. Coast Guard Navigation Center website page <http://www.navcen.uscg.gov/?pageName=AISmain>.

Chart 18521

LNM: 20/16

WASHINGTON – GRAYS HARBOR - WESTHAVEN COVE - Ceremonial Lighting of the Grays Harbor Lighthouse

The Westport South Beach Historical Society will be illuminating the original Fresnel lens in the tower of the Grays Harbor Lighthouse from 2000 through 2200 on 28 May 16. The modern aid to navigation on the lighthouse will remain active and visible, flashing its Al WR 30s characteristic. The Fresnel lens will be lit but not rotate so it will not appear as a flash but rather a solid white light visible from North and South. For additional information contact (360) 267-0078 or via email at operations@westportmaritimemuseum.com.

Charts: 18500 18502

LNM: 20/16

WASHINGTON – STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA – HARO STRAIT – Acoustic Recorder Deployed (Revised from LNM 23/13)

Acoustic recorders have been set and charted at three locations in Haro Strait. 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

For additional information contact Mr. Mark LeBlanc at 250-363-2034 or email Mark.LeBlanc@forces.gc.ca.

Chart 18433

LNM: 20/16

WASHINGTON – STRAIT OF JUAN DE FUCA AND BOUNDARY PASS – Temporary Subsurface Buoy Deployment (Revised from LNM 18/13)

WASHINGTON – STRAIT OF JUAN DE FUCA AND BOUNDARY PASS – Temporary Subsurface Buoy Deployment (Revised from LNM 18/13)
Subsurface oceanographic mooring buoys extending 10 meters above the ocean floor have been set and charted 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
48-30.499N, 124-45.027W
48-45.978N, 123-02.413W

For additional information contact Mr. Mark LeBlanc at 250-363-2034 or email Mark.LeBlanc@forces.gc.ca.

**WASHINGTON - SOUTH PUGET SOUND - CHAMBERS BAY - BURLINGTON NORTHERN SANTA FE RAILROAD SPECIAL DRAWBRIDGE
NOTICE - Critical Navigation Notice**

The U.S. Coast Guard is establishing a temporary deviation to test a proposed regulation change for the subject drawbridge. The temporary test deviation will be effective from midnight on 01 Jun 16 to midnight 01 Dec 16. During this period the subject bridge shall open on signal, except from 10 p.m. to 6 a.m. when the draw shall open on signal if at least 4 hours notice is given; however vessels engaged in emergency response and vessels in distress needing a drawbridge opening shall be passed as soon as possible. Interested parties are encouraged to submit comments anytime during this test deviation period. At the end of the test period the U.S. Coast Guard will make a determination if this change should be made permanent. Comments may be sent to the Bridge Administrator, Thirteenth Coast Guard District; e-mail D13-PF-D13BRIDGES@uscg.mil.

Chart 18448

LNM: 20/16

**WASHINGTON - LAKE WASHINGTON SHIP CANAL - LAKE WASHINGTON - SR-520 SPECIAL BRIDGE NOTICE - Critical Navigation
Notice - Part A (Revised from LNM 19/16)**

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 November 16.

From 0000 on 16 May 16 through 2400 on 22 May 16 the East Navigation channel will be closed to all marine traffic. While the East navigation channel is blocked the West navigation channel will be open to mariners. Up to five construction barges may be operating in the navigation channel during this time.

From 0000 on 26 May 16 through 2000 on 26 May 16 the East Navigation channel will be closed to all marine traffic. While the East navigation channel is blocked the West navigation channel will be open to mariners. Up to five construction barges may be operating in the navigation channel during this time.

From 0000 on 30 May 16 through 2400 on 02 Jun 16 the East Navigation channel will be closed to all marine traffic. While the East navigation channel is blocked the West navigation channel will be open to mariners. Up to five construction barges may be operating in the navigation channel during this time.

From 0000 on 06 Jun 16 through 2400 on 11 June 16 the East Navigation channel will be closed to all marine traffic. While the East navigation channel is blocked the West navigation channel will be open to mariners. Up to five construction barges may be operating in the navigation channel during this time.

From 0000 on 16 May 16 through 2400 on 30 Jun 16 the West Navigation channel will be intermittently partially blocked by a single spud barge. At any time while the East navigation channel is blocked the West navigation channel will be fully open to all mariners.

Vessels with vertical aircraft requirements of greater than 43 feet, needing to transit the east span are requested to provide at least 2 hours advance notice to Big Eagle on Channel 16 or by calling the marine superintendent at 425-749-6675.

Chart 18447

LNM: 20/16

**WASHINGTON - LAKE WASHINGTON SHIP CANAL - LAKE WASHINGTON - SR-520 Special Bridge Notice - Critical Navigation
Notice - Part B (Revised from LNM 19/16)**

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 (FI 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 425-679-6675 or email matt.steffens@kiewit.com

Chart 18447

LNM: 20/16

WASHINGTON – PUGET SOUND – NORTHERN PART – EVERETT HARBOR

Redside Construction will conduct a marine construction operation at Howarth Park, southwest of the Port of Everett. A spud barge, a deck barge, and an equipment barge will place sediment for a beach restoration project. All barges will be lighted in accordance with the Navigation Rules. Operations will be conducted from June through September 2016. Mariners are requested to transit the area with caution and reduce wake. For additional information, including details of the construction location, contact Mr. David Berry at 206-940-2529 or David@Redside.biz or Mr. Sam Berry at 206-940-0564 or Sam@Redside.biz.

Chart 18433

LNM: 20/16

BRITISH COLUMBIA – Consolidation of MCTS Victoria and MCTS Comox

Effective 10 May 16, Marine Communications and Traffic Service (MCTS) Comox was consolidated to MCTS Victoria. The MMSI for Comox Coast Guard radio is discontinued. Vessel using VHF-FM digital selective calling should now use the Victoria MMSI number 003160011. Participating vessels operating in the Comox traffic zone will report to Victoria Traffic on VHF-FM Ch. 71 and Victoria Coast Guard Radio on VHF-FM Ch. 16 and other working channels in accordance with the vessel traffic service zone regulations.

LNM: 20/16

COLUMBIA RIVER AND SNAKE RIVER - Summer Seasonal Lockage Schedule for Recreational Craft

The USACE Portland and Walla Walla Districts will implement the summer seasonal lockage schedule, from 15 May 16 to 15 Sep 16, for the passage of recreational craft through the navigation locks. When a recreational vessel lockage schedule is in effect, recreational vessels will only be allowed to lock through at the times designated, and during these times, they will take precedence over commercial vessels. At all other times, commercial vessels will continue to have lockage precedence over recreational vessels. Recreational vessels may be allowed to lock through with commercial vessels at the discretion of the lock operator.

The USACE will consider special lockages, outside the above scheduled lockage times, for flotillas or other unique requirements sponsored by yacht clubs, marinas, and other groups, provided advance (at least 24-hours) arrangements have been made with the appropriate control room operator. Contact the following control room operators via VHF-FM Ch. 14 or commercial telephone for scheduling of special lockage's: For the lockage schedules and additional information, visit Portland's website at: <http://www.nwp.usace.army.mil/Missions/Navigation.aspx> and the Walla Walla website at: <http://www.nww.usace.army.mil/Missions/Navigation.aspx>, or the Operations Division at (509) 527-7115 or 7112. For additional information on safe boating procedures and locking through, visit the website: <http://www.nwp.usace.army.mil/Portals/24/docs/navigation/HowToLockThru.pdf>.

LNM: 19/16

COLUMBIA RIVER AND SNAKE RIVER – APPLETON DGPS SITE - Proposed DGPS off-air time

The U.S. Coast Guard Navigation Center is proposing off-air time for the Appleton, WA, DGPS site to conduct preventive maintenance from 0900 until 1100 on 27 Jun 16, with an alternate date of 0900 until 1100 on 28 Jun 16. There will be a minimal loss of coverage during these times. For additional information or objections, contact the USCG Navigation Center DGPS Operations at (703) 313-5902 or <http://www.navcen.uscg.gov/?pageName=dgpsSiteInfo¤tOutages>.

LNM: 19/16

COLUMBIA RIVER AND SNAKE RIVER – SENECA DGPS SITE – Proposed DGPS Off-air time

The U.S. Coast Guard Navigation Center is proposing off-air time at the Seneca, OR, DGPS site to conduct preventive maintenance, from 0900 to 1100 on 30 Jun 16, with an alternate date from 0900 to 1100 on 01 Jul 16. There will be minimal loss of coverage during these times. For additional information or objections, contact the USCG Navigation Center DGPS Operations at (703) 313-5902 or

LNM: 19/16

OREGON – WILLAMETTE RIVER – PORT OF PORTLAND - Bridge notice

The U.S. Coast Guard has issued a temporary deviation from the operating schedule that governs the upper deck of the Steel Bridge (LLNR 14955.3), mile 12.1, and the Burnside Bridge (LLNR 14955.4), mile 12.4 crossing the Willamette River at Portland, OR. This deviation is necessary to accommodate the efficient movement of light rail and roadway traffic associated with the Rose Festival Parade on 11 Jun 16. The upper deck of the Steel Bridge and the Burnside Bridge need not open for maritime traffic from 0700 until 1400 on 11 Jun 16. Both bridges will be required to open, if needed, for public vessels of the United States and Canada, as well as for vessels engaged in emergency response operations, at all times even during the authorized closure periods. Vessels which do not require an opening of these two bridges may continue to transit beneath the bridges during the authorized closures.

Chart 18526

LNM: 19/16

WASHINGTON – STRAIT OF JUAN DE FUCA AND NORTHERN PUGET SOUND – Subsea oceanographic equipment deployment

NOAA/National Ocean Service/Center for Operational Oceanographic Products and Services has deployed oceanographic instrumentation in trawl-resistant bottom mounts (TRBM, m-TRBM, ES-2) or subsurface taut-line moorings (SUBS, DWM) within the Strait of Juan de Fuca and Puget Sound, WA, in the positions listed in Enclosure (5). The equipment will remain in place until at least 26 Aug 16. The stations should not have any presence on the surface. The SUBS extend up to 38 meters above the seafloor. This equipment will be used for a current circulation study to improve current predictions, and may help save lives and property. The SUBS and deep water moorings are NOT TRAWL RESISTANT and may cause damage to fishing gear. If brought to the surface, please notify NOAA by calling 1-800-FOR-NOAA (367-6622). For additional information, contact Ms. Crescent Moegling at 206-526-6840, 206-707-5409 or email crescent.moegling@noaa.gov.

Charts: 18440 18460 18465

LNM: 19/16

WASHINGTON – LAKE WASHINGTON – Annual summer refill (Revised from LNM 08/16)

The USACE began the annual summer refill of Lake Washington on 18 Feb 16. The final refill target is 22.0 feet by mid-May 2016 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/l/wns/hh/www/index.html#>, or call (206) 764-3750.

Chart 18447

LNM: 19/16

WASHINGTON – LAKE WASHINGTON SHIP CANAL – Lock inspection closure

The large and small locks will close to all marine traffic 0800 to 1300 07 Jun 16 to inspect a saltwater drain screen structure. The structure, immediately upstream of the locks, prevents salmon from entering the locks' saltwater return intake. Every year at this time divers close 10, 10-foot-by-6-foot doors and inspect the 30-by-60 foot curved-front, mesh screen structure. The inspections require lock closures to all but emergency vessels on emergency calls. For additional information, contact Mr. Larry Meyer or Ms. Vickie Shepard, at 206-789-2622 ext. 230, or Public Affairs Officer Bill Dowell at 206-764-3464.

Chart 18447

LNM: 19/16

WASHINGTON - LAKE WASHINGTON SHIP CANAL - Bridge Information

The U.S. Coast Guard has issued a temporary deviation from the operating schedule that governs the Montlake Bridge (LLNR 18240) across the Lake Washington Ship Canal, mile 5.2, at Seattle, WA. This deviation is necessary to accommodate the University of Washington graduation ceremony. The draw of the Montlake Bridge need not open for vessels from 0930 to 1230 and from 1630 to 1830 on 11 Jun 16, and from 1145 to 1345 and from 1615 to 1815 on 12 Jun 16. Vessels which do not require an opening of this bridge may continue to transit beneath the bridge during the authorized closures.

Chart 18447

LNM: 19/16

WASHINGTON – ADMIRALTY INLET – Waterways Analysis and Management System survey

The U.S. Coast Guard is conducting a user survey for the Admiralty Inlet area in Washington State. The U.S. Coast Guard uses the Waterways Analysis and Management Systems (WAMS) to validate the adequacy of the existing aids to navigation (AtoN) system, as well as to get a better understanding of the uses of each waterway and general safety issues. WAMS focuses on the waterway's present AtoN system, marine casualty information, port and harbor resources, changes in recreational and commercial marine vessel usage and future development and dredging projects. The survey is available at the Coast Guard District 13 WAMS website <http://www.uscg.mil/d13/dpw/wams.asp>. The deadline for survey entries will be 31 July 16. For additional information please contact LT Jeff Hiatt at (206) 220-7283 or email D13-PF-LNM@uscg.mil.

Chart 18471

LNM: 18/16

COLUMBIA RIVER – COLUMBIA RIVER PACIFIC OCEAN TO HARRINGTON POINT; ILWACO HARBOR – Safety zone

The U.S. Coast Guard is establishing a temporary safety zone for the navigable waters of the Columbia River within a 500 yard radius of the small boat Nessy, while in the area of Sand Island, near Chinook, WA, and associated vessels in support of removal operations conducted by the U.S. Army Corps of Engineers and the U.S. Department of Agriculture Wildlife Services. The safety zone is needed to protect personnel; vessels and the marine environment from potential hazards created by the removal operations which are being conducted using firearms and live

ammunition. Entry of vessels or persons into this zone is prohibited unless specifically authorized by the Captain of the Port Sector Columbia River, or a designated representative. The safety zone is in effect until 03 Jun 16. The safety zone is encompassed by the following points:

46-15-45.000N 123-59-39.000W

46-15-24.000N 123-59-42.000W

46-13-32.000N 123-57-18.000W

46-15-09.000N 123-55-24.000W

46-15-54.000N 123-58-06.000W

A chartlet of the safety zone, not for navigation, is included in Enclosure (4) of this LNM. For further information contact Mr. Kenneth Lawrenson at 503-240-9319 or email msupdxwwm@uscg.mil.

Chart 18521

LNM: 17/16

OREGON – WILLAMETTE RIVER – Steel Bridge Special Notice

The U. S. Coast Guard has issued a temporary deviation from the operating schedule that governs the Steel Bridge across the Willamette River, RM 12.1, at Portland OR from 1900 to 2330 on 04 Jun 16. The deviation allows the Steel Bridge upper deck to remain in the closed position, and need not open for maritime traffic from 1900 to 2330 04 Jun 16. The upper deck of the Steel Bridge will remain closed-to-navigation position to facilitate safe efficient movement of light rail and roadway traffic associated with the Starlight Parade and Rose Parade. The Steel Bridge is a double-deck lift bridge with a lower lift deck, and an upper lift deck which operate independent of each other. When both decks are in the down position the bridge provides 26 feet of vertical clearance above Columbia River Datum 0.0. When the lower deck is in the up position the bridge provides 71 feet of vertical clearance above Columbia River Datum 0.0. This deviation does not affect the operating schedule of the lower deck which opens on signal. Vessels which do not require an opening of the upper deck of the bridge may continue to transit beneath the bridge and, if needed, may obtain an opening of the lower deck of the bridge for passage during this closure period of the upper deck. The bridge shall operate in accordance to 33 CFR § 117.897 at all other times. Mariners will be notified and kept informed of the bridge's operational status via the U. S. Coast Guard Local Notice to Mariners publication and Broadcast Notice to Mariners as appropriate. The bridge will be required to open, if needed, for vessels engaged in emergency response operations during this closure period.

Chart 18526

LNM: 17/16

OREGON – WASHINGTON- IDAHO - MONTANA – GPS testing (Revised from LNM 12/16)

US Strategic command is conducting 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: 17/16

WASHINGTON - BELLINGHAM BAY - BURLINGTON NORTHERN SANTA FE REPLACEMENT RAIL BRIDGE OVER BELLINGHAM BAY AT POST POINT LAGOON - Special Bridge Notice. (Revised from LNM 16/16)

The U.S. Coast Guard has issued a public notice announcing a proposal from Burlington Northern Santa Fe Railway Company (BNSF), to replace a bridge over a navigable waterway of the United States at the unnamed shallow embayment informally known as Post Point Lagoon adjacent to Bellingham Bay at Bellingham, Washington at approximate position 48-43'06.22, 122-31'00.27. BNSF proposes to replace the twin parallel bridges at the subject location. For further information regarding environmental implications and the scope of work please consult Public Notice 01-14 which solicits comment and is available at <http://www.navcen.uscg.gov/?pageName=pnBridges&Active=1®ion=13>. Question or comments can be addressed to the Bridge Administrator, Mr. Steve Fischer at (206) 220-7282, or email steven.m.fischer3@uscg.mil.
pageName=pnBridges&Active=1®ion=13. Question or comments can be addressed to the Bridge Administrator, Mr. Steve Fischer at 206-220-7282, or email steven.m.fischer3@uscg.mil.

Chart 18421

LNM: 17/16

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	MISSING	18007	0376-16	18/16	
8700	Coquille River South Jetty Light 8	SS INOP	18588	0416-16	20/16	
9605	Yaquina Bay South Jetty Light 4	STRUCT DEST	18581	1075-15	50/15	
9620	Yaquina Bay Inner Range Front Light	LT EXT	18581	0404-16	20/16	
9900	Columbia River Entrance Range Rear Light	LT EXT	18521	0415-16	20/16	
10270	Pillar Rock Light 17	REDUCED INT	18523	0375-16	18/16	
10585	Eureka Dike Light 77	STRUCT DMGD	18523	0250-14	15/14	
11150	Willow Dike Light 23	STRUCT DEST	18525	0174-14	10/14	
11430	Fisher Quarry Channel Range Front Light	LT IMCH	18531	0359-16	18/16	
11770	Bonneville Pool Light 4	STRUCT DEST	18531	0905-10	37/10	
12685	Lake Umatilla Light 59	LT IMCH	18539	0358-16	18/16	
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	
15187	Willapa Bay Entrance Buoy D	MISSING	18504	0342-16	17/16	
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	
15950	Grays Harbor South Channel Light 6	DAYMK IMCH	18502	0335-16	16/16	
16520	Double Bluff Light	REDUCED INT	18477	0315-16	15/16	
17090	Browns Point Light	REDUCED INT	18453	0870-15	41/15	
19245	Whatcom Waterway Range Rear Light	LT IMCH	18424	0414-16	20/16	
19295	Lummi Island Light 3	REDUCED INT	18424	0411-16	20/16	
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
8765	Guano Rock Lighted Whistle Buoy 4	RESET ON STATION	18587	0423-16	20/16	21/16
9045	North Bend Upper Range Rear Light	REBUILT/REMAINS	18587	400-16	19/16	20/16
9985	Desdemona Sands Channel Lighted Bell Buoy 21	RESET ON STATION	18521	0401-16	19/16	20/16
12595	Messner Middle Range Front Light	RELIGHTED	18537	None	20/16	20/16
14895	Post Office Range Front Light	WATCHING PROPERLY	18526	None	20/16	20/16
15130	Rock Island Channel Buoy 15	RESET ON STATION	18528	0422-16	19/16	20/16
15550	Grays Harbor Entrance Lighted Whistle Buoy 2	RELIGHTED	18502	None	20/16	20/16
16223	Race Rocks East Cautionary Lighted Buoy VG	RESET ON STATION	18465	0397-16	06/16	20/16

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	
16838.3	Elliott Bay Marina Breakwater Light D	LT EXT	18450	0395-16	20/16	
19172	Secret Harbor Fish Pen Lights (2)	LT EXT	18429	0409-16	20/16	
19173	Deepwater Bay North Fish Pen Lights (2)	LT EXT/REDUCED INT	18427	0408-16	20/16	

DISCREPANCIES (PRIVATE AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
16775	Golden Gardens Boat Ramp Pier Light	RELIGHTED	18446	None	20/16	20/16
19282	Squalicum Creek Waterway Range Rear Light	WATCHING PROPERLY	18424	0413-16	19/16	20/16

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
9825	Tillamook Bay Entrance Regulated Navigation Area Warning Sign	DISCONTINUED	18558	0382-16	19/16	
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.

18003	20th Ed.	01-NOV-06	Last LNM: 11/16	NAD 83		20/16
<i>Chart Title: Cape Blanco to Cape Flattery</i>						
Main Panel 1651 CAPE BLANCO TO CAPE FLATTERY. Page/Side: N/A						
RELOCATE	Grays Harbor Entrance Lighted Whistle Buoy 2				CGD13 from 46-52-42.750N to 46-52-42.520N	124-12-40.300W 124-12-40.128W
18400	49th Ed.	01-APR-12	Last LNM: 19/16	NAD 83		20/16
<i>Chart Title: Strait of Georgia and Strait of Juan de Fuca</i>						
Main Panel 1656 STRAIT OF GEORGIA AND STRAIT OF JUAN DE FUCA. Page/Side: N/A						
CHANGE	Sandy Point Light 2 Height to 16ft and range to 4M.				CGD13 at 48-47-12.429N	122-42-44.748W
18421	51st Ed.	01-MAY-13	Last LNM: 19/16	NAD 83		20/16
<i>Chart Title: Strait of Juan de Fuca to Strait of Georgia; Drayton Harbor</i>						
CHART WA - STRAIT OF JUAN DE FUCA TO STRAIT OF GEORGIA. Page/Side: N/A						
CHANGE	Sandy Point Light 2 Height to 16ft and range to 4M.				CGD13 at 48-47-12.429N	122-42-44.748W
18424	28th Ed.	01-FEB-11	Last LNM: 16/16	NAD 83		20/16
<i>Chart Title: Bellingham Bay; Bellingham Harbor</i>						
CHART WA - BELLINGHAM BAY. Page/Side: N/A						
CHANGE	Sandy Point Light 2 Height to 16ft and range to 4M.				CGD13 at 48-47-12.429N	122-42-44.748W
ADD	Foul area (pilings) bounded by: 48-45-09.040N, 122-29-06.580W 48-45-06.430N, 122-29-10.392W 48-45-05.054N, 122-29-08.567W 48-45-07.614N, 122-29-04.625W				CGD13	
18431	9th Ed.	01-MAY-14	Last LNM: 19/16	NAD 83		20/16
<i>Chart Title: Rosario Strait to Cherry Point</i>						
Main Panel 1684 ROSARIO STRAIT TO CHERRY POINT. Page/Side: N/A						
CHANGE	Sandy Point Light 2 Height to 16ft and range to 4M.				CGD13 at 48-47-12.429N	122-42-44.748W
18441	47th Ed.	01-JUN-11	Last LNM: 19/16	NAD 83		20/16

ChartTitle: Puget Sound-northern part

Main Panel 1689 PUGET SOUND - NORTHERN PART. Page/Side: N/A

ADD	Kingston Outfall Pipe Warning Daybeacon NW W/or Priv	CGD13 at 47-47-37.116N	122-29-58.427W
ADD	Kingston Small Boat Harbor Daybeacon 3 SG "3" Priv	CGD13 at 47-47-37.116N	122-29-58.427W

18446 18th Ed. 01-MAR-11 Last LNM: 19/16 NAD 83 20/16

ChartTitle: Puget Sound-Apple Cove Point to Keyport;Agate Passage

CHART WA - PUGET SOUND - APPLE COVE POINT TO KEYPORT. Page/Side: N/A

ADD	Kingston Outfall Pipe Warning Daybeacon NW W/or Priv	CGD13 at 47-47-37.116N	122-29-58.427W
ADD	Kingston Small Boat Harbor Daybeacon 3 SG "3" Priv	CGD13 at 47-47-37.116N	122-29-58.427W

18473 9th Ed. 01-APR-16 Last LNM: 19/16 NAD 83 20/16

ChartTitle: Puget Sound-Oak Bay to Shilshole Bay

Inset 1940 OAK BAY TO SHILSHOLE BAY PUGET SOUND. Page/Side: A

ADD	Kingston Outfall Pipe Warning Daybeacon NW W/or Priv	CGD13 at 47-47-37.116N	122-29-58.427W
ADD	Kingston Small Boat Harbor Daybeacon 3 SG "3" Priv	CGD13 at 47-47-37.116N	122-29-58.427W

18500 30th Ed. 01-MAY-08 Last LNM: 12/16 NAD 83 20/16

ChartTitle: Columbia River to Destruction Island

Main Panel 1730 COLUMBIA RIVER TO DESTRUCTION ISLAND. Page/Side: N/A

RELOCATE	Grays Harbor Entrance Lighted Whistle Buoy 2	CGD13 from 46-52-42.750N to 46-52-42.520N	124-12-40.300W 124-12-40.128W
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18502 87th Ed. 01-SEP-11 Last LNM: 17/16 NAD 83 20/16

ChartTitle: Grays Harbor;Westhaven Cove

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

RELOCATE	Grays Harbor Entrance Lighted Whistle Buoy 2	CGD13 from 46-52-42.750N to 46-52-42.520N	124-12-40.300W 124-12-40.128W
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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

<u>Approved Project(s)</u>	<u>Project Date</u>	<u>Ref. LNM</u>
None		

Advance Notice(s)

WASHINGTON - GRAYS HARBOR – Establishment of Grays Harbor Entrance Lighted Whistle Buoy 5

The U.S. Coast Guard will be establishing Grays Harbor Entrance Lighted Bell Buoy 5 (LLNR 15565) in approximate position 46-54-49.5N 124-12-035.0W, displaying a green light flashing every 2.5 seconds (FI G 2.5). This change is to better mark the approach to the Grays Harbor entrance for mariners approaching from the north and west.

Chart 18502 LNM: 17/16

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

<u>Proposed Project(s)</u>	<u>Closing</u>	<u>Docket No.</u>	<u>Ref. LNM</u>
None			
<u>Proposed Change Notice(s)</u>			
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: 20/16

SUMMARY OF DREDGING OPERATIONS

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

LNM: 20/16

SUMMARY OF MARINE EVENTS

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

LNM: 20/16

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. 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 – 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 - 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 LNM will be updated as more information is made available.

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

For additional information, contact Mr. Michael S. McElwee at (541) 386-1138.

Chart 18532

LNM: 09/15

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 Nunnally at (503) 510-7624 or Mr. Todd Ross at (503) 749-1818, or email: ToddR@LegacyContractingInc.com.

LNM: 22/15

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

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 44-36-31.080N 124-05-08.340W and 44-36-28.740N 124-05-06.180W. 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 - 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 – YAQUINA HEAD TO COLUMBIA RIVER – Subsurface oceanographic equipment deployment

Oregon State University will be deploying oceanographic research equipment in the vicinity of Camp Rilea, OR, 1030 through 1230 20 Apr 20 and will retrieve it at the end of May 2016. The deployment of the seafloor equipment will be conducted from the vessel M/V Forerunner at approximate position 46-06-28.000N 123-57-58.000W. There will be no equipment on the surface. The M/V Forerunner will monitor VHF-FM Channel 16. Mariners are requested to keep a safe distance when in the vicinity of the deployment and recovery of equipment. For additional information contact Mr. Joe Haxel at 541-867-0282 or email joe.haxel@oregonstate.edu.

Chart 18520

LNM: 15/16

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

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

OREGON – WASHINGTON- IDAHO - MONTANA – GPS testing (Revised from LNM 12/16)

US Strategic command will conduct 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

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 – 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

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. 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)

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 - 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 LNM 13/16.

Charts: 18400 18440

LNM: 13/16

WASHINGTON – PUGET SOUND – NORTHERN PART – HOOD CANAL – Bangor Pier Construction (revised from LNM 31/14)

Construction of the Explosives Handling Wharf (EHW) #2 at Bangor Submarine Base at approximate position 46-45-09N 122-43-23W is ongoing until 01 Aug 16. There are two mooring buoys deployed in the area immediately surrounding the work site. Mariners can expect material barges, crane barges, tug-push boats, and work skiffs within the vicinity of the EHW piers. The majority of activity will occur within the floating security barrier. Mariners are requested to transit at a slow speed and reduce wake. Working vessels will monitor VHF-FM Channels 18A and 88A. For more information, contact Mr. Pat Moore at (360) 598-2325 ext. 112 or (757) 620-8054.

Chart 18458

LNM: 15/16

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 – 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¤tOutages>.

Chart 18441

LNM: 13/16

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 – 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 – 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.

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

Greene at (607) 275-1662 or email chg2@cornell.edu.

Chart 18434

LNM: 38/14

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

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
15550	<i>Grays Harbor Entrance Lighted Whistle Buoy 2</i>	46-52-42.520N 124-12-40.128W	FI R 4s		4	Red.	20/16
16733	Kingston Small Boat Harbor Daybeacon 3	47-47-37.116N 122-29-58.427W			*	SG on steel I-Beam piling.	Private Aid. 20/16
* 16733.5	* Kingston Outfall Pipe Warning Daybeacon	* 47-47-37.116N 122-29-58.427W	* *	* *	* *	* NW on steel I-Beam piling.	* Private Aid. 20/16
* 19880	* SANDY POINT LIGHT 2	* 48-47-12.429N 122-42-44.748W	* FI R 4s	* 16	* 4	* TR on multi-pile structure.	* 20/16

ENCLOSURES

Enclosure 1

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

LNM: 20/16

Enclosure 2

OREGON - WASHINGTON - COLUMBIA RIVER - Summary of Dredging Operations

LNM: 20/16

Enclosure 3

OREGON - WASHINGTON - COLUMBIA RIVER - Summary of Marine Events

LNM: 20/16

Enclosure 4

Columbia River Sand Island Safety Zone

LNM: 17/16

Enclosure 5

Subsea moorings

LNM: 19/16

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

BRIDGE LIGHTING DISCREPANCIES						
Waterway	Light List #	Bridge Name	Location	Status	Date Reported	BNM
OREGON COAST						
Isthmus Slough	9089	Coos City Highway Bridge	Coos City, OR	Multiple lights extinguished	04/11/2016	0307-16
South Slough	9180	South Slough	Charleston, OR	Span open position lights stay red vice green	04/27/2016	0389-16
COLUMBIA RIVER						
Columbia River	11933	Hood River Bridge	Hood River, OR	Draw span damaged, unable to open ETR unknown	10/21/2015	0909-15
SNAKE RIVER						
None						
WILLAMETTE RIVER						
None						
WASHINGTON COAST						
None						
PUGET SOUND						
Lake Union	18184	George Washington Bridge	Seattle, WA	Red northeast pier light extinguished	05/18/2016	0424-16
Lake Union	18240	Montlake Bridge	Seattle, WA	Green open span light extinguished	05/18/2016	0425-16
Lake WA Ship Canal Lake WA Ship Canal	18169	Salmon Bay Bridge	Seattle, WA	Red fender light is missing on the north pier	05/18/2016	0429-16
IDAHO						
None						
<i>* Updated report</i>						
LIGHTING CORRECTIONS						
Waterway		Bridge Name	Location	Status	Date Reported	BNM
OREGON COAST						
Cocuille River	8727	Bullards Highway Bridge	Bamdon, OR	All lights watching properly	05/18/2016	No BNM
COLUMBIA RIVER						
Columbia River	11392	I-205 Bridge (Main channel)	Vancouver, WA	All lights watching properly	05/18/2016	No BNM
SNAKE RIVER						
None						
WILLAMETTE RIVER						
None						
WASHINGTON COAST						
None						
PUGET SOUND						
None						
IDAHO						
Pend Oreille Lake	20086	Sandpoint US-95 Bridge	Sandpoint, ID	All lights watching properly	05/17/2016	No BNM

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
10-May-16	17-May-16	24 Hrs, 7 Days	Coos Bay; Entrance (RM -1-00 to 1+00)	M/V Essayons	None	VHF-FM 13 & 16	Ocean Site F	18/16
9-Apr-16	18-May-16	24 Hrs, 7 Days	Grays Harbor: South Reach	M/V Bayport	M/V John M	VHF-FM 13, 16 & 66	South Beach & Pt Chehalis	19/16
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 unforeseen 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
17-May-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
19-May-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
20-May-16	0800-1800	Next Adventure's Summer Splash	Oaks Amusement Park, Willamette River, Portland, OR
21-May-16	0800-1800	Next Adventure's Summer Splash	Oaks Amusement Park, Willamette River, Portland, OR
24-May-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
26-May-16	1830-sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
27-May-16	2200-2230	Portland Rose Festival (Fireworks Display)	Willamette River between Hawthorne and Morrison Bridges, Portland, OR
27-May-16	0900-1600	USA World Jet Boat River Marathon Championship	Grand Ronde River, Lewiston, ID; From Hells Gate Marina to
28-May-16	0900-1600	USA World Jet Boat River Marathon Championship	Snake River, Lewiston, ID; Hells Gate Marina to Three Mile Island
29-May-16	0900-1600	USA World Jet Boat River Marathon Championship	Snake River, Lewiston, ID; Hells Gate Marina to Bear Bar and back
31-May-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
1-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
2-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
3-Jun-16	0700-1900	Richland Regatta (Hydroplane Races)	Columbia River at Howard Amon Park, Richland, WA
4-Jun-16	0700-1900	Richland Regatta (Hydroplane Races)	Columbia River at Howard Amon Park, Richland, WA
4-Jun-16	1100-1500	Hood 2 River Relay	Columbia River at Hood River Marina
4-Jun-16	1400-1900	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
5-Jun-16	0700-1900	Richland Regatta (Hydroplane Races)	Columbia River at Howard Amon Park, Richland, WA
7-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
8-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
9-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
10-Jun-16	0800-1700	Spring Testing for Water Follies	Tri-Cities, WA
11-Jun-16	0700-1800	Portland Rose Festival Dragon Boat Races	Willamette River between the Marquam and Hawthorne Bridges
12-Jun-16	0700-1800	Portland Rose Festival Dragon Boat Races	Willamette River between the Marquam and Hawthorne Bridges
14-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
15-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
16-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
18-Jun-16	1400-1900	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
21-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
22-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
23-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
27-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
28-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges
30-Jun-16	1830-Sunset	OCSA Sailboat Races	Columbia River between I-5 and I-205 bridges

SECTOR PUGET SOUND MARINE EVENTS

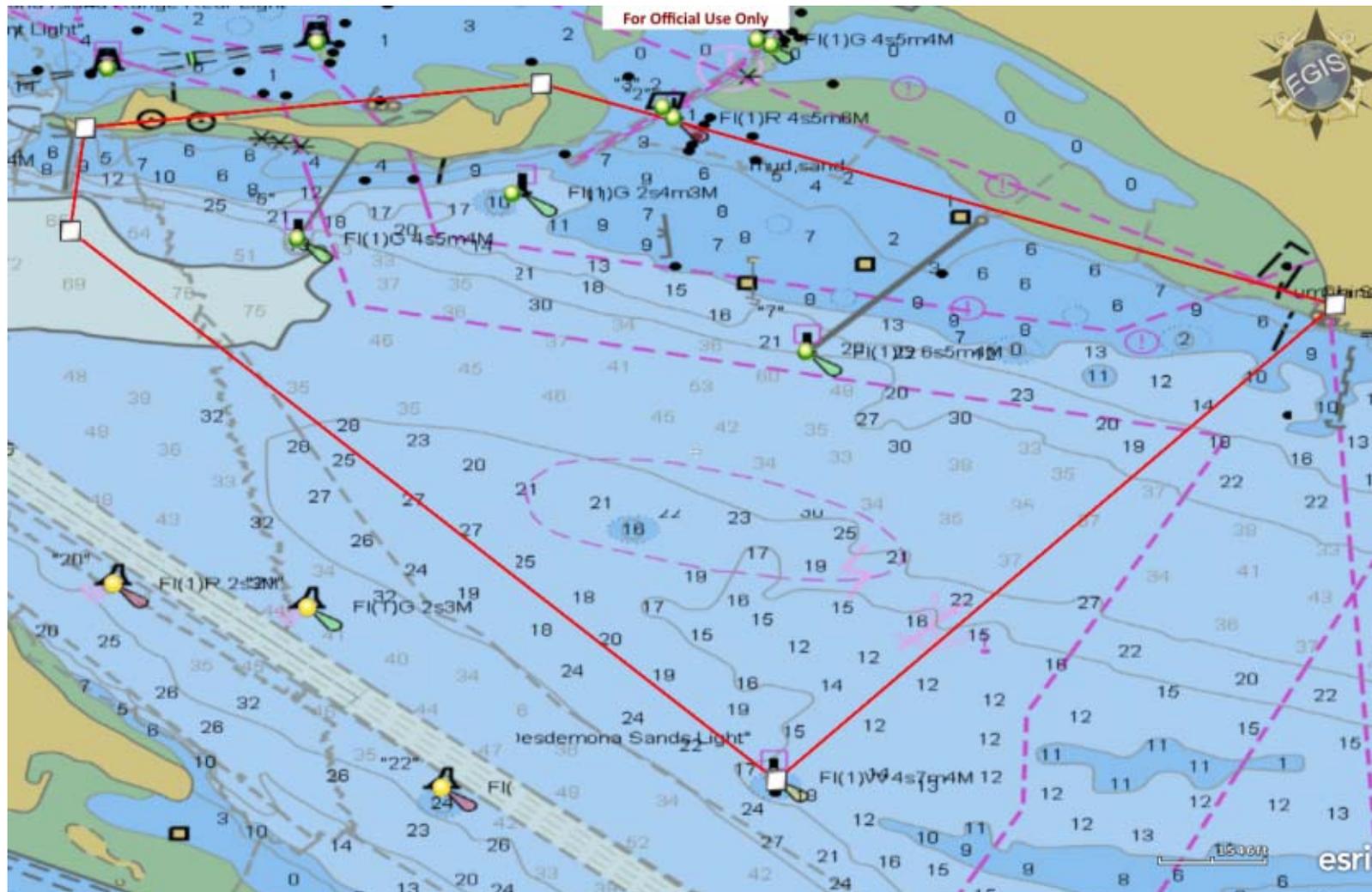
EVENT DATE	TIME	EVENT NAME	EVENT LOCATION
17-May-16	1800-2200	Duck Dodge Seattle	Lake Union
18-May-16	1900-2100	Windseeker	Commencement Bay
19-May-16	1700-2000	Sound Evenng Series- Thursday Night	Shilshole Bay

MARINE EVENTS

Enclosure (3)

21-May-16	0900-1700	Sinclair Thunder Boats	Sinclair Inlet
21-May-16	0900-2100	Bainbridge Island Race	Bainbridge Island
21-May-16	0900-1700	Sinclair Thunder Boats	Sinclair Inlet
21-May-16	0800-1700	2016 USA World Championship Jet Boat Race	St. Joe River ID
22-May-16	0900-1700	Sinclair Thunder Boats	Sinclair Inlet
22-May-16	0900-1700	Sinclair Thunder Boats	Sinclair Inlet
24-May-16	0900-1700	USA World Championship Marathon Jet Boat Race	Lake Roosevelt
24-May-16	1800-2200	Duck Dodge Seattle	Lake Union
25-May-16	0900-1700	USA World Championship Marathon Jet Boat Race	Lake Roosevelt
25-May-16	1900-2100	Windseeker	Commencement Bay
26-May-16	1700-2000	Sound Evenng Series- Thursday Night	Shilshole Bay
28-May-16	0900-1800	Swiftsure International Yacht Race	Strait of Juan de Fuca
29-May-16	1200-1800	Ski to Sea	Bellingham Bay
29-May-16	0900-1800	Swiftsure International Yacht Race	Strait of Juan de Fuca
31-May-16	1800-2200	Duck Dodge Seattle	Lake Union

Columbia River Sand Island Safety Zone Enclosure (4)





NOTICE TO MARINERS

Transiting the following locations:

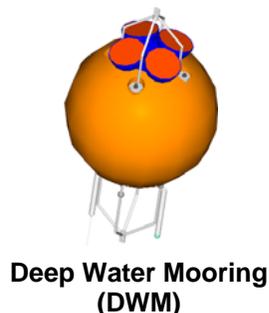
NOAA/National Ocean Service/Center for Operational Oceanographic Products and Services has deployed oceanographic instrumentation in trawl-resistant bottom mounts (TRBM, m-TRBM, ES-2) or subsurface taut-line moorings (SUBS, DWM) within the Strait of Juan de Fuca and Puget Sound, WA, in the following positions. The equipment will remain in place until at least until August 26th 2016. The stations should not have any presence on the surface. The SUBS do however extend up to 38 meters above the seafloor. This equipment will be used for a currents circulation study to improve current predictions, and may help save lives and property.

The SUBS and Deep Water moorings are NOT TRAWL RESISTANT and may cause damage to fishing gear.

If brought to the surface, please notify NOAA by calling 1-800-FOR-NOAA (367-6622). If possible return gear to original location.

Please take care to avoid disturbing the instruments between April 19th and August 26th 2016.

Station ID	Station Name	Latitude (N)	Longitude (W)	Duration (Days)	Depth (f)	Height Above Bottom (f)	Moorings Type
PUG1608	Hood Canal entrance (Foulweather Bluff)	47 55' 42.2"	122 38' 19.7"	130	50	6	SUBS
PUG1610	Foulweather Bluff, 1.9 miles NE of	47 57' 15.7"	122 34' 42.9"	130	62	16	SUBS
PUG1616	Admiralty Inlet (off Bush Point)	48 02' 00.6"	122 38' 15.5"	130	62	16	SUBS
PUG1622	West of Camano Island	48 10' 10.8"	122 33' 11.5"	54	58	11	SUBS
PUG1624	Point Wilson, 1.6 miles NE of	48 09' 24.7"	122 43' 33.7"	130	34	2	SUBS
PUG1626	Skagit Bay, 1 mile north of Rocky Pt.	48 16' 01.6"	122 31' 46.4"	54	20	2	SUBS
PUG1627	Skagit Bay, 1 mile south of Goat Island	48 20' 41.2"	122 32' 42.2"	54	13	0.5	MTRBM
PUG1628	Skagit Bay channel, southwest of Hope Island	48 23' 52.2"	122 34' 46.4"	54	11	0.5	TRBM
PUG1629	Yokeko Point, Deception Pass	48 24' 45.8"	122 36' 47.4"	54	14	2	SUBS
PUG1630	Kanem Point, 1.5 miles SW of, Protection Island	48 06' 27.5"	122 58' 25.1"	54	35	2	SUBS
PUG1631	Violet Point, 3.7 miles NW of, Protection Island	48 09' 41.3"	122 58' 05.1"	54	25	2	SUBS
PUG1632	Smith Island, 5.0 mi. SW of	48 19' 28.4"	122 57' 53.1"	54	60	16	SUBS
PUG1633	Point Partridge, 2.4 miles NW of	48 15' 20.2"	122 47' 34.9"	54	32	2	SUBS
PUG1634	Smith Island, 3.4 mi. ESE of	48 17' 47.0"	122 46' 34.7"	54	27	2	SUBS
PUG1635	New Dungeness Light, 2.8 miles NNW of	48 14' 00.5"	123 08' 00.4"	54	82	7	DWM
PUG1636	Discovery Island, 7.6 miles SSE of	48 18' 00.5"	123 10' 01.8"	54	63	16	SUBS
PUG1637	Ediz Hook Light, 5.3 miles ENE of	48 10 56.2"	123 16' 53.4"	54	38	2	SUBS
PUG1638	Ediz Hook Light, 1.2 miles N of	48 10' 00.1"	123 24' 57.0"	54	49	5	SUBS
PUG1639	Angeles Pt., 2 miles NNE of	48 10' 37.2"	123 31' 37.0"	54	16	2	SUBS
PUG1640	Race Rocks, 4.5 miles south of	48 13' 23.6"	123 31' 56.3"	130	82	7	DWM
PUG1641	Pillar Point, 6 miles NNE of	48 18' 00.0"	124 02' 14.7"	54	104	7	DWM
PUG1642	Strait of Juan de Fuca Entrance	48 26' 59.9"	124 35' 01.7"	130	137	7	DWM



For more information contact Drew Maczko: 206.979.1984, Tina Pico: 201.317.9056 or
Chris Paternostro: 301.221.1974.

For all other inquiries call NOAA TIDES & CURRENTS OFFICE (888)722-8433.