



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

LOCAL NOTICE TO MARINERS

District: 13

Week: 28/16

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	D13-0580-16	D13-0596-16

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.

OREGON – CAPE BLANCO TO CAPE FLATTERY – Undersea cable route survey

The R/V Geo Resolution will conduct an undersea telecommunications cable survey from 27 Jul 16 through 15 Sep 16 from Pacific City, OR, to the U.S. Exclusive Economic Zone boundary along the route shown in Enclosure (7) of this LNM between approximate positions 45-11.200N 123-56.300W and 42-50.000N 129-09.000W. The operation will consist of a 24/7 cable route survey including the stern deployment of a tethered sonar towfish at varying water depths to collect geophysical and bathymetric data for a proposed undersea cable. The maximum water depth of tow operations will be 1500 meters. The sonar sensor will be towed approx. 20-40 meters from the seafloor and up to 3 kilometers behind the vessel. The survey corridor is 500 meters centered on the survey centerline. Operations in water depths greater than 1500 meters will utilize hull mounted equipment. The vessel will stand by on VHF-FM Ch. 13 and 16. Additional vessel contact information is: Bridge VSAT PHONE: +65 3158 9828, MMSI: 538 005 923, INMARSAT-1B voice 4538 40052 or 4538 40053, vessel mobile: +852 5808 7208, or email the Captain at grcaptain@egssurvey.com.

Chart 18003

LNM: 28/16

COLUMBIA RIVER – PACIFIC OCEAN TO HARRINGTON POINT - Jetty A rehabilitation

Kiewit Infrastructure Group will conduct rehabilitation work at Jetty A from 20 Jul 16 through 02 Aug 16. Work hours will be 24/7 while the rock supply barge is being unloaded, then 0700-1700, Monday thru Saturday while it is gone for refilling. The deck barge Dioskouroi and the tug Billy H will be moored to dolphins next to the inland side of the jetty to transfer rocks for the project. Both vessels will display proper navigation lights in accordance with the navigation rules. Billy H will monitor VHF-FM Ch. 13 and 16. Excavating vehicles and equipment will be lighted with work lights at night. For additional information contact Mr. Dustin Lehman at 907-942-4317 or Mr. Jeff Villagomez at 907-942-4317.

Chart 18521

LNM: 28/16

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 09 Aug 16, with an alternate time of 0900 until 1100 on 11 Aug 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¤tOutages>

Chart 18521

LNM: 28/16

COLUMBIA RIVER - BONNEVILLE TO THE DALLES - Hood River Highway Bridge notice (Revised from LNM 21/16)

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 early August 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: 28/16

OREGON – WILLAMETTE RIVER – PORT OF PORTLAND - Special Bridge Notice

The U.S. Coast Guard has issued a temporary deviation from the normal operating schedule that governs the Broadway Bridge (LLNR 14955.2), the Burnside Bridge (LLNR 14955.4), the Morrison Bridge (LLNR 14955.5), and the Hawthorne Bridge (LLNR 14955.6), all crossing the Willamette River at Portland, OR. This deviation is to accommodate the Providence Bridge Pedal event, and allows the draw spans to remain in the closed-to-navigation position, and need not open for maritime traffic from 0600 to 1230 on 14 Aug 16. The Broadway Bridge, RM 11.7, provides a

vertical clearance of 90 feet in the closed position, the Burnside Bridge, RM 12.4, provides a vertical clearance of 64 feet in the closed position, the Morrison Bridge, RM 12.8, provides a vertical clearance of 69 feet in the closed position, and the Hawthorne Bridge, RM 13.1, provides a vertical clearance of 49 feet in the closed position; all clearances are referenced to the vertical clearance above Columbia River Datum 0.0. Vessels able to pass through the bridge in the closed-to-navigation positions may do so at any time. The bridges will be able to open for emergencies and there is no immediate alternate route for vessels to pass. The bridges shall operate in accordance to 33 CFR § 117.897 at all other times. For more information, contact Barbara Blanchard at barbara.c.blanchard@multco.us.

Chart 18526

LNM: 28/16

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

The U.S. Coast Guard Navigation Center has proposed off-air time for the Robinson Point, WA DGPS site to conduct equipment maintenance from 1000 to 1400 on 10 Aug 16 with an alternate time of 1000 to 1400 on 11 Aug 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 18474

LNM: 28/16

WASHINGTON – PUGET SOUND – SOUTHERN PART – TACOMA HARBOR – Hylebos waterway demolition work

Orion Marine Contractors, Inc. will conduct demolition operations near the northeast abutment of the East 11th Street Bridge (LLNR 17205). The spudded deck barge OMCI 1601 will remove pilings and a shoreside structure. Work will be 0700 to 1730 11 Jul 16 through 29 Jul 16. The tug Skagit will be on scene as needed. Mariners are requested to minimize wake and stay clear of demolition vessels and equipment. Vessels operating on the project will monitor VHF-FM Ch. 13 and 14. For additional information contact Mr. Ira Nelson at 253-552-1140 or email Inelson@orionmarinegroup.com.

Chart 18453

LNM: 28/16

WASHINGTON – LAKE WASHINGTON SHIP CANAL – Lock closure

The Hiram M. Chittenden large and small locks will close to all marine traffic 0800 through 1200 10 Aug 16 to inspect a saltwater drain screen structure. The structure, immediately upstream of the locks, prevents salmon from entering the locks' saltwater return intake. Divers closed the 10, 10-foot-by-6-foot doors and inspected the 30-by-60 foot curved-front, mesh screen structure on 07 Jul 16. Divers will perform monthly inspections like this one until the doors are opened mid-September. The inspections require lock closures to all but emergency vessels on emergency calls. The staff will complete work as quickly and safely as possible. For additional information, contact lockmasters Larry Meyer or Vickie Shepard, at 206-789-2622 ext. 230, or Public Affairs Officer Bill Dowell, at 206-764-3464.

Chart 18447

LNM: 28/16

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 (LLNR 18182), mile 2.6, across the Lake Washington Ship Canal in Seattle, WA. The deviation is necessary to accommodate the Fun Ride event. This deviation allows the bridge to remain in the closed position from 1030 until 1230 on 14 Aug 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: 28/16

WASHINGTON - LAKE WASHINGTON SHIP CANAL - LAKE WASHINGTON - SR-520 SPECIAL BRIDGE NOTICE - Critical Navigation Notice - Part A (Revised from LNM 27/16)

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 Nov 16.

From 0000 05 Jul 16 through 2400 31 Jul 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 five construction barges may be operating in the west navigation channel during this time.

Mariners are advised to use caution while transiting near derrick (crane) barges within the SR520 project area. These vessels are currently anchored and may present submerged hazards. Mariners should maintain a safe distance and minimize wake around all floating derrick barges and other construction vessels.

Beginning the week of 18 Jul 16 through December 2016, the pontoons that made up the old SR-520 bridge will be transported from Lake Washington to Shilshole Bay.

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

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 (6) of this LNM. 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.

The west navigation channel has been relocated to its final location directly west of the floating bridge pontoons as shown in Enclosure (6) of this LNM. 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.

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.

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) and blue retroreflective tape have been relocated near the bridge for the mooring of the deconstructed old bridge sections as shown in enclosure (6) of this LNM. The new positions are:

Buoy A 47-38-42.770N, 122-16-12.754W
Buoy B 47-38-40.363N, 122-15-57.150W
Buoy C 47-38-37.992N, 122-15-41.774W
Buoy D 47-38-35.619N, 122-15-26.398W
Buoy E 47-38-33.246N, 122-15-11.022W
Buoy F 47-38-30.872N, 122-14-55.649W
Buoy G 47-38-21.308N, 122-15-58.312W
Buoy H 47-38-14.986N, 122-15-17.343W

West Approach Project: Complete

Vessels with vertical air draft requirements of greater than 43 feet, needing to transit the east channel are requested to provide at least 2 hours advance notice to tug Big Eagle on VHF-FM Ch. 16 or by calling the marine superintendent at 425-749-6675. For additional information, contact Mr. Matt Steffens at 425-679-6675 or email matt.steffens@kiewit.com

Chart 18447

LNM: 28/16

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

The U.S. Coast Guard Navigation Center has proposed off-air time for the Whidbey Island, WA DGPS site for scheduled maintenance from 1000 to 1300 on 17 Aug 16, with an alternate time of 1000 to 1300 on 18 Aug 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>.

Charts: 18421 18440 18465

LNM: 28/16

OREGON – YAQUINA HEAD TO COLUMBIA RIVER – Subsurface oceanographic equipment deployment

Oregon State University will deploy oceanographic research equipment in the vicinity of Camp Rilea, OR on 30 Jun 16 and will retrieve it at approximately 19 Aug 16. 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 Ch. 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: 26/16

OREGON – ASTORIA – LEWIS AND CLARK RIVER – LEWIS AND CLARK BRIDGE – Bridge notice

The U.S. Coast Guard has issued a temporary deviation change from the operating schedule that governs the Lewis and Clark River Bridge (LLNR 14607) across the Lewis and Clark River, mile 1.0, at Astoria, OR. This deviation is from 0700 16 Jul 16 through 1700 31 Oct 16. This deviation is necessary to accommodate road maintenance on the bridge. The deviation allows the bascule span of the Lewis and Clark River Bridge to remain in the closed-to-navigation position; however, the span will be available to open on Wednesdays and Sundays with at least three hour advanced notice. The bascule span will also open at any time for emergency situations with at least a three hour advanced notice. The span of the bridge will have a containment system installed which will reduce the vertical clearance by 5 feet from 17 feet above mean high water to 12 feet above mean high water. Vessels able to pass under the bridge in the closed-to-navigation position may do so at anytime. For more information contact Mr. Dave True at: Dave.True@odot.state.or.us.

Chart 18521

LNM: 26/16

MONTANA – POLSON - Polson DGPS site off air time

The U.S. Coast Guard Navigation Center has approved off air times for the DGPS site at Polson, MT, for scheduled maintenance. The site will be unusable from 0900 to 1100 local on 18 Jul 16, with an alternate date from 0900 to 1100 local on 19 Jul 16. There will be no significant loss of coverage due to dual DGPS coverage in the area. For additional information or objections, contact the U.S. Coast Guard Navigation Center DGPS Operations at (703) 313-5816 or 5902.

LNM: 26/16

NORTH AMERICA WEST COAST SAN DIEGO TO ALEUTIAN ISLANDS AND HAWAI'IAN ISLANDS – Oceanographic Research

As part of the Ocean Observatories Initiative, the University of Washington will deploy scientific instruments in the vicinity of Axial Volcano approximately 200 nautical miles offshore Tillamook Head, OR. Pending weather conditions, it is anticipated the research vessel R/V Sikuliaq will be working in the vicinity of the areas on the areas and dates listed in Enclosure (5). The OOI deployments will be performed 24 hours a day, 7 days a week with support from a remotely operated vehicle (ROV). The research vessel will monitor VHF-FM Ch. 13 and 16 during all operations. Mariners are requested to keep a 2,000-yard CPA in the vicinity of the research vessel to avoid possible entanglement or damage to equipment and/or fishing gear. For more additional information, e-mail Mr. Brian Ittig at bittig@uw.edu.

Chart 530

LNM: 25/16

IDAHO – LAKE PEND OREILLE – Bridge notice

Divers will install pile support cables on the US-95 Highway Bridge (LLNR 20086) on Lake Pend Oreille, mile 2.0, from 15 Jul 16 through 15 Oct 16. A temporary mooring and work platform will be constructed on the southern end of the bridge. Diving operations will be Monday through Friday during daylight hours only. A small work boat and barge will be on site near the divers. The vessels will be moored at the temporary platform over night and weekends. Recreational diver flags and Code Alfa will be displayed while divers are working in the water. Mariners are requested to transit in the vicinity of the divers with no wake. The onsite dive supervisor can be contacted at (509) 710-5118.

LNM: 25/16

WASHINGTON – GRAYS HARBOR – Hazard to navigation

The U.S. Coast Guard has designated a previously unknown wreck at approximate position 46-58-03.660N 123-52-26.520W as a hazard to navigation. The vessel is 27' in length. It is above authorized depth and will further reduce the Federal Project Depth if it remains present for the eventual deepening of the channel. The vessel is located in an area of known shoaling and would cause difficulty for vessel dredging in the area. This wreck has been charted.

Chart 18502

LNM: 25/16

WASHINGTON – APPROACHES TO ADMIRALTY INLET DUNGENESS TO OAK BAY - Pacific Northwest National Laboratory Sequim Bay Research Project (Revised from LNM 24/16)

The Pacific Northwest National Laboratory (PNNL) will conduct a research project in Sequim Bay, Washington, in four separate locations starting in July 2016 and ending in September 2016, as shown in Enclosure (4). Below is a description of each site:

An Acoustic Doppler Current Profiler (ADCP) is to be deployed in approximate position 48-04-44.637N, 123-02-36.747W on the seafloor. This object has an eight inch diameter and is eight inches tall. The ADCP is battery powered. One orange and white surface warning buoy will be placed 10 yards north of the subsurface equipment to mark the location. Deployment is 10 Jul 16 to 01 Sep 16.

A Biosonic Transducer will be deployed in approximate position 48-04-46.092N, 123-02-38.076W on the seafloor. This object is a 58 inch square and 21 inches tall. The Biosonic Transducer is powered by a seafloor cable that will come ashore at the PNNL dock, which is WSW of the transducer at 100 yards. One orange and white surface warning buoy will be placed 10 yards north of the subsurface equipment to mark the location. Deployment is 10 Jul 16 to 01 Sep 16.

Mooring 1 (subsurface) is equipment that will be moored in the water column in approximate position 48-04-46.308N, 123-02-38.220W. Two yellow surface buoys will be placed 10 yards north and south of the subsurface equipment to mark the location. Deployment is 17 Jul 16 to 08 Aug 16.

Mooring 2 (subsurface) is equipment that will be moored in the water column in approximate position 48-04-51.145N, 123-01-40.827W. Two yellow surface buoys will be placed 10 yards east and west of the subsurface equipment to mark the location. Deployment is 17 Jul 16 to 08 Aug 16.

Subsurface equipment will extend approximately 16.5 ft above the bottom, leaving approximately 10-15 feet of water above the submerged float. Mariners are advised not to pass between the two yellow surface buoys marking the subsurface Mooring 1 or Mooring 2. Mariners are also requested to not anchor or drag the bottom within 100 yards of the ADCP or Biosonic seafloor equipment positions.

The research vessel Strait Science may at times be tending to the above listed equipment and can be hailed on VHF-FM Ch 16. For additional information contact PNNL Marine Sciences Laboratory, Ms. Susan Southard at 360-681-3615 (office) or 360-460-1999 (cell) or email sue.southard@pnnl.gov.

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	0593-16	28/16	
9475	Siuslaw River Inner Range Rear Light	LT IMCH	18583	0456-16	21/16	
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	
11125	Bachelor Dike Light 15	LT IMCH	18525	0444-16	21/16	
11150	Willow Dike Light 23	STRUCT DEST	18525	0174-14	10/14	
11308	Airport Bar Range Rear Light	LT EXT	18531	0563-16	26/16	
11430	Fisher Quarry Channel Range Front Light	LT IMCH	18531	0359-16	18/16	
11645	Prindle Dike Light 73	LT EXT	18531	0470-16	22/16	
11770	Bonneville Pool Light 4	STRUCT DEST	18531	0905-10	37/10	
12560	Lake Umatilla Light 36	LT EXT/DAYMK MISSING/STRUCT DMGD	18537	0511-16	24/16	
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	
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/DAYMK MISSING	18502	0746-15	35/15	
17090	Browns Point Light	REDUCED INT	18453	0870-15	41/15	

DISCREPANCIES (FEDERAL AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
9025	North Bend Range Rear Light	WATCHING PROPERLY	18587	None	28/16	28/16
17460	East Bay Light 1	WATCHING PROPERLY	18456	0592-16	27/16	28/16
19725	Mosquito Pass Daybeacon 2	REBUILT/REMAINS	18433	0581-16	03/16	28/16

DISCREPANCIES (PRIVATE AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
652	OSU Yaquina Research Lighted Buoy	MISSING	18561	None	21/16	
16115	University of Washington LaPush Research Lighted Buoy	BUOY DMGD/LT EXT	18480	0541-16	26/16	
19284	Bellingham Bay Research Lighted Buoy B	OFF STA	18424	0420-16	20/16	
19365	Skyline Marina Entrance Light 2	LT IMCH	18427	0478-16	22/16	

DISCREPANCIES (PRIVATE AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
12385	John Day Dam Lower Breakwater Light 2	RELIGHTED	18535	None	28/16	28/16

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
9440	Siuslaw River Entrance Range Front Light	DISCONTINUED	18583	0590-16	28/16	
9475	Siuslaw River Inner Range Rear Light	DISCONTINUED	18583	0590-16	28/16	
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	
10720	Fisher Island Channel Lighted Buoy 5	RELOCATED FOR DREDGING	18524	0594-16	28/16	
11150	Willow Dike Light 23	TRLB	18525	0177-14	10/14	
11770	Bonneville Pool Light 4	TRLB	18531	0909-10	38/10	
12560	Lake Umatilla Light 36	TRLB	18537	0529-16	25/16	

TEMPORARY CHANGES CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
15595	Grays Harbor Channel Lighted Whistle Buoy 11	Returned to Assigned Position	18502	0544-16	11/16	
19725	Mosquito Pass Daybeacon 2	Reestablished	18433	0584-16	04/16	28/16

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.

18400	49th Ed.	01-APR-12	Last LNM: 25/16	NAD 83		28/16
<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	Mosquito Pass Daybeacon 2 to R "2" Ra ref.				CGD13 at 48-34-57.609N	123-10-19.468W
18421	51st Ed.	01-MAY-13	Last LNM: 26/16	NAD 83		28/16
<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	Mosquito Pass Daybeacon 2 to R "2" Ra ref.				CGD13 at 48-34-57.609N	123-10-19.468W
18433	6th Ed.	01-APR-05	Last LNM: 05/16	NAD 83		28/16
<i>Chart Title: Haro Strait-Middle Bank to Stuart Island</i>						
Main Panel 1686 HARO STRAIT MIDDLE BANK TO STUART ISLAND. Page/Side: N/A						
CHANGE	Mosquito Pass Daybeacon 2 to R "2" Ra ref.				CGD13 at 48-34-57.609N	123-10-19.468W
18440	30th Ed.	01-OCT-10	Last LNM: 26/16	NAD 83		28/16
<i>Chart Title: Puget Sound</i>						
Main Panel 1688 PUGET SOUND. Page/Side: N/A						
RELOCATE	Puget Sound Traffic Separation Lane Lighted Buoy TC				CGD13 from 47-19-29.680N to 47-19-29.355N	122-27-23.630W 122-27-23.451W
18448	36th Ed.	01-DEC-15	Last LNM: 14/16	NAD 83		28/16
<i>Chart Title: Puget Sound-southern part</i>						
CHART WA - PUGET SOUND - SOUTHERN PART. Page/Side: N/A						
RELOCATE	Puget Sound Traffic Separation Lane Lighted Buoy TC				CGD13 from 47-19-29.680N to 47-19-29.355N	122-27-23.630W 122-27-23.451W
18456	21st Ed.	01-NOV-10	Last LNM: 37/15	NAD 83		28/16
<i>Chart Title: Olympia Harbor and Budd Inlet</i>						
Main Panel 1717 OLYMPIA HARBOR AND BUDD INLET. Page/Side: N/A						
CHANGE	East Bay Light 1 Nominal range to 4 M.				CGD13 at 47-03-44.006N	122-53-55.624W

ChartTitle: Puget Sound-Shilshole Bay to Commencement Bay

Main Panel 1679 PUGET SOUND SHILSHOLE BAY TO COMMENCEMENT BAY. Page/Side: A

RELOCATE	Puget Sound Traffic Separation Lane Lighted Buoy TC	CGD13 from 47-19-29.680N to 47-19-29.355N	122-27-23.630W 122-27-23.451W
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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)

COLUMBIA RIVER – VANCOUVER TO BONNEVILLE – Change of Bonneville Pool Light 4 to Lighted Buoy 4

In September of 2010 Bonneville Pool Light 4 (LLNR 11770) was destroyed. Since that time, a small temporary lighted buoy has been in place. Due to an unknown time frame for the rebuilding of the structure, the U.S. Coast Guard will change the temporary lighted buoy to a permanent and larger lighted buoy, and increasing the nominal range of the light from 3 NM to 4 NM. The lighted buoy will be set in approximate position 45-38-29.011N 121-55-59.008W.

Chart 18532 LNM: 28/16

WASHINGTON – COLUMBIA RIVER TO DESTRUCTION ISLAND – Extended disestablishment of North Head Light for construction

The Washington State Parks and Recreation Commission will be conducting extensive masonry restoration and other work at North Head Light (LLNR 700) from approximately 12 Jul 2016 through 01 Jun 2017. For the majority of this period the light will not be able to operate. Once a specific date is determined, a Broadcast Notice to Mariners will be issued upon the disestablishment of the light.

Chart 18500 LNM: 25/16

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			

Proposed Change Notice(s)

WASHINGTON – COLUMBIA RIVER TO DESTRUCTION ISLAND - Disestablishment of North Head Light

The U.S. Coast Guard is proposing to permanently disestablish North Head Light (LLNR 700) as it is considered redundant and is no longer necessary to the safe navigation of the waterway.

Chart 18500 LNM: 24/16

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: 28/16

SUMMARY OF DREDGING OPERATIONS

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

LNM: 28/16

SUMMARY OF MARINE EVENTS

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

LNM: 28/16

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 - PACIFIC OCEAN TO HARRINGTON POINT - Bridge special notice

ODOT is removing existing paint coating by sand blast and power tooling methods within engineered containments on the Astoria-Megler Bridge (LLNR 14630/10086) at Columbia River mile 13.5. Replacement of rivets, steel repairs, and new paint will be applied until complete on 31 Aug 18. The containment system will reduce the vertical clearance beneath the bridge by six feet. The work will be during daylight hours, generally from 0630 to 1800, Monday through Friday. Weekend work is not anticipated but could occur. The containment system will be in place for the duration of the project. The containment system is movable and will occupy approximately 300 to 400 feet at any one time. The work is anticipated to be performed year round. Mariners are advised to exercise caution when navigating under the bridge and to be aware of fall hazards while containment scaffolding is being relocated. All work will be staged from the roadway deck. On scene contacts for ODOT are Jeremy Chauvin at 503-338-8837 and Grant Hudkins at 503-338-0574.

Chart 18521

LNM: 23/16

COLUMBIA RIVER – LAKE CELILO – US-97 Highway Bridge Inspection

Washington State Department of Transportation will inspect the US-97 Highway Bridge that spans the Columbia River at Biggs Junction, OR, at approximate river mile 209. The inspection will take place between 0800 and 1530 18 Jul 16 through 21 Jul 16. The bridge will be inspected using an under-bridge inspection truck (UBIT) that occupies a portion of the roadway and extends a boom under the bridge. The boom is marked with a yellow flashing light. There is minimal impact to navigational clearance from this operation. Mariners are advised to use caution while transiting the area. For additional information contact Mr. Colt Tatum, P.E. at 360-464-0949 or tatumc@wsdot.wa.gov.

Chart 18533

LNM: 23/16

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

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

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

LNM: 22/15

WASHINGTON – HOOD CANAL AND DABOB DAY – HOOD CANAL BRIDGE - Special bridge notice

Northwest Underwater Construction will conduct underwater cable repairs on the Hood Canal Bridge (LLNR 17769) from 0600 on 01 Aug 16 until 1900 on 15 Oct 16. Four white mooring buoys with flashing white lights will mark the vessels conducting the operation. Working and support vessels will be on station and monitoring VHF-FM Ch 16 and 68. A remote operated vessel (ROV) will be used to assist with repairs. During these repairs, only half (300 feet) of the center span will be able to open. The center span on the Hood Canal Bridge is restricted by tidal currents to openings only at slack tide. Mariners are requested to use the east (50 feet of vertical clearance) and west (35 feet of vertical clearance) spans until the end of this deviation period. If a center span opening is required, please time the request for an opening during slack tide. For additional information contact Ms. Amy Amos at 360-874-3016.

Chart 18476

LNM: 23/16

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 - 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

COLUMBIA RIVER AND SNAKE RIVER - Summer Seasonal Lockage Schedule for Recreational Craft (Revised from LNM 19/16)

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.

Portland District	
Upstream	Downstream
0900	0930
1200	1230
1500	1530
1800	1830
2100	2130

Walla Walla District	
Upstream	Downstream
0900	0930
1201	1230
1500	1530
1800	1830
2100	2130

The USACE will consider special lockage's, 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: 21/16

COLUMBIA RIVER - VANCOUVER TO BONNEVILLE; BONNEVILLE DAM – Waterways Analysis and Management System survey

The U.S. Coast Guard is conducting a user survey for the Upper Columbia River from Vancouver to Bonneville Pool. 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 AUG 16. For additional information please contact BMC Berryhill at (503) 240-9305 or email D13-smb-MSUPortlandFAC@uscg.mil.

Chart 18531

LNM: 21/16

OREGON – YAQUINA HEAD TO COLUMBIA RIVER; NETARTS BAY

NOAA's Pacific Marine Environmental Laboratory has deployed a yellow research lighted buoy at approximate position 44-40-10.860N 124-43-12.060W, approximately twenty eight nautical miles west of Yaquina Head, OR. The buoy is marked with a FI Y 4s light and will be recovered from its station in mid-September 2016. For additional information contact Mr. Christian Meinig at 206-526-6149 or email Christian.Meinig@NOAA.gov.

Chart 18520

LNM: 22/16

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 - WASHINGTON – CAPE BLANCO TO CAPE FLATTERY - COAST AND RIVER SYSTEMS – Fireworks Displays with Safety Zones

The U.S. Coast Guard has established temporary safety zones for the fireworks displays listed in Enclosure (5) of LNM 26/16. The safety zones may be enforced up to one hour prior to the start and one hour after the conclusion of the fireworks displays. These zones will encompass all navigable waters within a 450 yard radius of the launch sites. For additional information contact U.S. Coast Guard Sector Columbia River at 503-861-6211.

Chart 18003

LNM: 23/16

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

SAINT JOE RIVER – SAINT MARIES – Dredging at St. Maries, ID

Arcadis U.S. Inc. will conduct sediment remediation on the south side of the St. Joe River within the town of St. Maries, ID, from 01 Jul 16 through

SAINT JOE RIVER – SAINT MARIES – Dredging at St. Maries, ID

01 Oct 16. Site activities include dredging, backfilling, and water quality monitoring. Operations are expected to occur 24 hours a day Monday through Saturday. The work area is located at approximate position 47-19-19.420N 116-34-46.550W. Three construction barges may be positioned near the dredging area, and monitoring buoys will be deployed during the construction period. Warning buoys, lights, and day shapes will be displayed. Mariners are requested to use caution and reduce wake when transiting the area. For additional information, contact Arcadis at 720-339-6657 or 408-772-5714.

LNM: 24/16

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 07/16)

A 20 foot by 20 foot section of dock has sunk in the Hoquiam River in approximate position 46-58-41.035N 123-52-56.606W causing a hazard to navigation. The hazard is marked by a white can buoy with orange bands. 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: 21/16

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 – 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 (4) of LNM 22/16. 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 - STRAIT OF JUAN DE FUCA – EASTERN PART - Temporary Deployment of lighted research buoy with seafloor equipment

Oregon State University will deploy a temporary lighted research buoy at approximate position 48-13-45.840N, 123-25-33.240W, within the traffic separation zone as shown in Enclosure (4) of LNM 26/16. Along with the surface buoy there is a separate piece of equipment placed on the seafloor close to the buoy's mooring. All equipment is to be deployed on or about 16 Jun 16 and recovered on or about 15 Sep 16. The surface buoy will be yellow and marked with a flashing yellow light that flashes every four seconds (FL Y 4s). For more information contact Dr. Holger Klinck at 541-867-0182 or email Holger.Klinck@oregonstate.edu.

Chart 18465

LNM: 23/16

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

WASHINGTON – PUGET SOUND – PORT GAMBLE – Marine construction

Orion Marine Contractors, Inc. will conduct construction operations including; pile removal, installation of capping materials, demolition of structures, and dredging at the former mill site located at the northwest corner of Port Gamble entrance to the south end of Port Gamble Bay. Operations will be from 15 Jun 16 through January 2017. Loaded material barges will transit through the entrance to Port Gamble from work

WASHINGTON – PUGET SOUND – PORT GAMBLE – Marine construction

locations on both sides of the former mill site and to work locations at the south end of the bay. All vessels will be lighted in accordance with the navigation rules. Mariners are requested to slow through the work area and stay clear of construction vessels and equipment. The crane and tugs will monitor VHF-FM Ch. 05A and 13. For additional information please contact Mr. Justin Strong at (253) 552-1140 or email jstrong@orionmarinegroup.com.

Chart 18458

LNM: 24/16

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 – 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 – EVERETT HARBOR - Beach restoration (Revised from LNM 20/16)

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. Tugs Fury and Mary Margaret will be on site and will monitor VHF-FM Ch. 05A and 13. All vessels will be lighted in accordance with the Navigation Rules. Barges and equipment will be shifted between the project site and the load out site on the Snohomish River upstream of the I-5 Highway Bridges (LLNR 18594.2). Operations will be conducted at varying times of day based on tides seven days a week 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: 21/16

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

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
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SECTION VIII - LIGHT LIST CORRECTIONS (Continued)

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
10561	Pacific and Western Railroad Bridge						Remove from list. 28/16
							*
14815	Pacific and Western Railroad Bridge	46-06-46.000N 123-12-41.000W				Swing bridge.	28/16
	Clatskanie River mile 0.7.						
*	*	*	*	*	*	*	*
17460	EAST BAY LIGHT 1 40 feet outside channel limit.	47-03-44.006N 122-53-55.624W	FIG 2.5s	28	4	SG on pile.	28/16
					*		
19725	Mosquito Pass Daybeacon 2	48-34-57.609N 123-10-19.468W				TR on pole.	Ra ref. 28/16
							*

ENCLOSURES

Enclosure 1

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

LNM: 28/16

Enclosure 2

OREGON - WASHINGTON - COLUMBIA RIVER - Summary of Dredging Operations

LNM: 28/16

Enclosure 3

OREGON - WASHINGTON - COLUMBIA RIVER - Summary of Marine Events

LNM: 28/16

Enclosure 4PNNL Sequim Bay research project
Chart 18471

LNM: 25/16

Enclosure 5

Ocean Observatory Initiative research vessel sailplan

LNM: 25/16

Enclosure 6SR-520 project buoyage and navigation channel diagrams
Chart 18447

LNM: 28/16

Enclosure 7

Undersea cable route survey diagram

LNM: 28/16

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

BRIDGE LIGHTING DISCREPANCIES AND CORRECTIONS

Enclosure (1)

BRIDGE DISCREPANCIES						
Waterway	Light List	Bridge Name	Location	Status	Date Reported	BNM
OREGON COAST						
Isthmus Slough	9089	Coos City Highway Bridge	Coos City, OR	Down river center channel green light is extinguished	6/6/2016	No BNM
South Slough	9180	South Slough Bridge	Charleston, OR	Span open position lights stay red vice green	4/27/2016	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
Columbia River	13052.5	Pasco Kennewick Intercity Bridge	Pasco/Kennewick, WA	Multiple lights extinguished (SR-397)	5/27/2016	0473-16
Cathlamet Channel	10545	Puget Island Bridge	Cathlamet, WA	East red pier light extinguished	6/23/2016	0560-16
Columbia River	13103	Olds Station Bridge (US-97)	East Wenatchee, WA	Up river green center channel light reduced intensity	6/28/2016	0564-16
Clatskanie River	10561	P&W Railroad Bridge	Clatskanie, OR	Clearance gauge broken	6/28/2016	0562-16
Lake Celilo	12333	Biggs-Maryhill HWY Bridge	Biggs, OR; Maryhill, WA	Down river red pier light extinguished	7/10/2016	0586-16
SNAKE RIVER						
None						
WILLAMETTE RIVER						
Willamette River	15159	Lyon Street Bridge	Albany, OR	Multiple lights extinguished	6/4/2016	0487-16
Willamette River	14955.1	Fremote Bridge	Portland, OR	Reduced intensity	7/2/2016	0577-16
Willamette River	14959.5	Marquam Bridge	Portland, OR	Multiple lights extinguished	7/2/2016	0578-16
WASHINGTON COAST						
None						
PUGET SOUND						
Lake Washington	18340	Evergreen Point Bridge (SR-520)	Seattle, WA	* South side red pier lights extinguished	6/7/2016	0503-16
IDAHO						
Pend Oreille River	20075	Merritt Brothers Highway Bridge	Priest River, ID	All lights extinguished	5/21/2016	No BNM
* Updated report						

BRIDGE LIGHTING DISCREPANCIES AND CORRECTIONS

Enclosure (1)

BRIDGE LIGHTING CORRECTIONS						
Waterway	Light List #	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
6-Jul-16	31-Jul-16	24 Hrs, 7 Days	Port Orford (RM 00+00 to 00+07+50)	M/V Heidi Renee	M/V Norton Bay, M/V Sand Island	VHF-FM 13 & 16	T B D	26/16
18-Jul-16	11-Oct-16	24 Hrs, Mon-Sat	Coos Bay: (RM 11+00 to 12+32)	M/V DB Oakland	Knutson Tow Boat TBD	VHF-FM 13, 16 & 66	ODMDS H & O, OS Site F	29/16
6-Jul-16	31-Jul-16	24 Hrs, 7 Days	Coos Bay: Charleston (RM 00+10 to 00+43)	M/V Heidi Renee	M/V Norton Bay, M/V Sand Island	VHF-FM 13 & 16	Area F-OS	26/16
6-Jul-16	15-Jul-16	24 Hrs, 7 Days	Umpqua River Entrance (RM 12 to 0+40)	M/V Yaquina	None	VHF-FM 13 & 16	Ocean Site	27/16
15-Jul-16	20-Jul-16	24 Hrs, 7 Days	Yaquina Bay Entrance (RM -1-00 to 1+00)	M/V Yaquina	None	VHF-FM 13 & 16	Ocean Site, North and South	26/16
11-Jul-16	13-Jul-16	24 Hrs, 7 Days	Columbia River: Tongue Point (RM 19+00 to 21+00)	M/V Essayons	None	VHF-FM 13 & 16	O-18.3-IW	27/16
11-Jul-16	18-Jul-16	24 Hrs, 7 Days	Columbia River; Wauna Reach & Puget Island Range (RM 40+30 to 41+30)	M/V Bayport	M/V John M	VHF-FM 13, 16 & 66	W-35.3-IW O-43.2-IW	29/16
16-Jul-16	18-Jul-16	24 Hrs, 7 Days	Columbia River: Gull Island (RM 54+10 to 54+40)	M/V Essayons	None	VHF-FM 13 & 16	W-53.1-IW	27/16
18-Jul-16	22-Jul-16	24 Hrs, 7 Days	Columbia River Stella-Fisher (RM 56+20 to 57+40)	M/V Essayons	None	VHF-FM 13 & 16	W-53.7-IW	27/16
13-Jul-16	16-Jul-16	24 Hrs, 7 Days	Columbia River Stella-Walker; (RM 58+30 to 59+30)	M/V Essayons	None	VHF-FM 13 & 16	W-53.7-IW, O-59.4-IW	29/16

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			
12-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
13-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
14-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
15-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
16-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
16-Jul-16	1000-1800	Kiteboarding 4 Cancer	Hood River, OR
16-Jul-16	1100-1600	Gorge Outrigger Race	Columbia River from Stevenson, WA to Bingen, WA
17-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
17-Jul-16	1000-1800	Kiteboarding 4 Cancer	Hood River, OR
17-Jul-16	1100-1600	Gorge Outrigger Race	Columbia River from Stevenson, WA to Bingen, WA
18-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
18-Jul-16	1100-1600	Wildside Relay	Columbia River; Stevenson, WA to Bingen, WA
19-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
19-Jul-16	1100-1600	Wildside Relay	Columbia River; Stevenson, WA to Bingen, WA
19-Jul-16	1830-sunset	OCSA Sailboat Races	Columbia River Between I-5 and I-205 Bridges
20-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
20-Jul-16	1100-1600	Wildside Relay	Columbia River; Stevenson, WA to Bingen, WA
21-Jul-16	1830-sunset	OCSA Sailboat Races	Columbia River Between I-5 and I-205 Bridges
21-Jul-16	1200-1600	Rivers for Change	Home Valley Beach to Hood River Marina
21-Jul-16	1100-1600	2016 Laser North American Championship	Columbia River between Cascade Locks and Stevenson, WA
22-Jul-16	1200-1600	Rivers for Change	Home Valley Beach to Hood River Marina
22-Jul-16	1100-1600	2016 Laser North American Championship	Columbia River between Cascade Locks and Stevenson, WA
23-Jul-16	1200-1600	Rivers for Change	Home Valley Beach to Hood River Marina
23-Jul-16	0900-1300	SUP for the Cure	Willamette River; Portland, OR
23-Jul-16	1100-1600	2016 Laser North American Championship	Columbia River between Cascade Locks and Stevenson, WA
24-Jul-16	1100-1600	2016 Laser North American Championship	Columbia River between Cascade Locks and Stevenson, WA
25-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
26-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
26-Jul-16	1830-sunset	OCSA Sailboat Races	Columbia River Between I-5 and I-205 Bridges
27-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
28-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
28-Jul-16	1830-sunset	OCSA Sailboat Races	Columbia River Between I-5 and I-205 Bridges
29-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
29-Jul-15	0700-1730	Tri-City Water Follies	McNary Pool of the Columbia River; Between Pasco and Kennewick, WA
30-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA

MARINE EVENTS

Enclosure (3)

30-Jul-15	0700-1730	Tri-City Water Follies	McNary Pool of the Columbia River; Between Pasco and Kennewick, WA
30-Jul-15	0900-1400	RATI (Race Around the Island)	Columbia River - Chinook Landing Marine Park
31-Jul-16	1100-1700	Columbia Gorge Racing Association	Columbia River between Cascade Locks, OR and Home Valley, WA
31-Jul-15	0700-1730	Tri-City Water Follies	McNary Pool of the Columbia River; Between Pasco and Kennewick, WA

SECTOR PUGET SOUND MARINE EVENTS

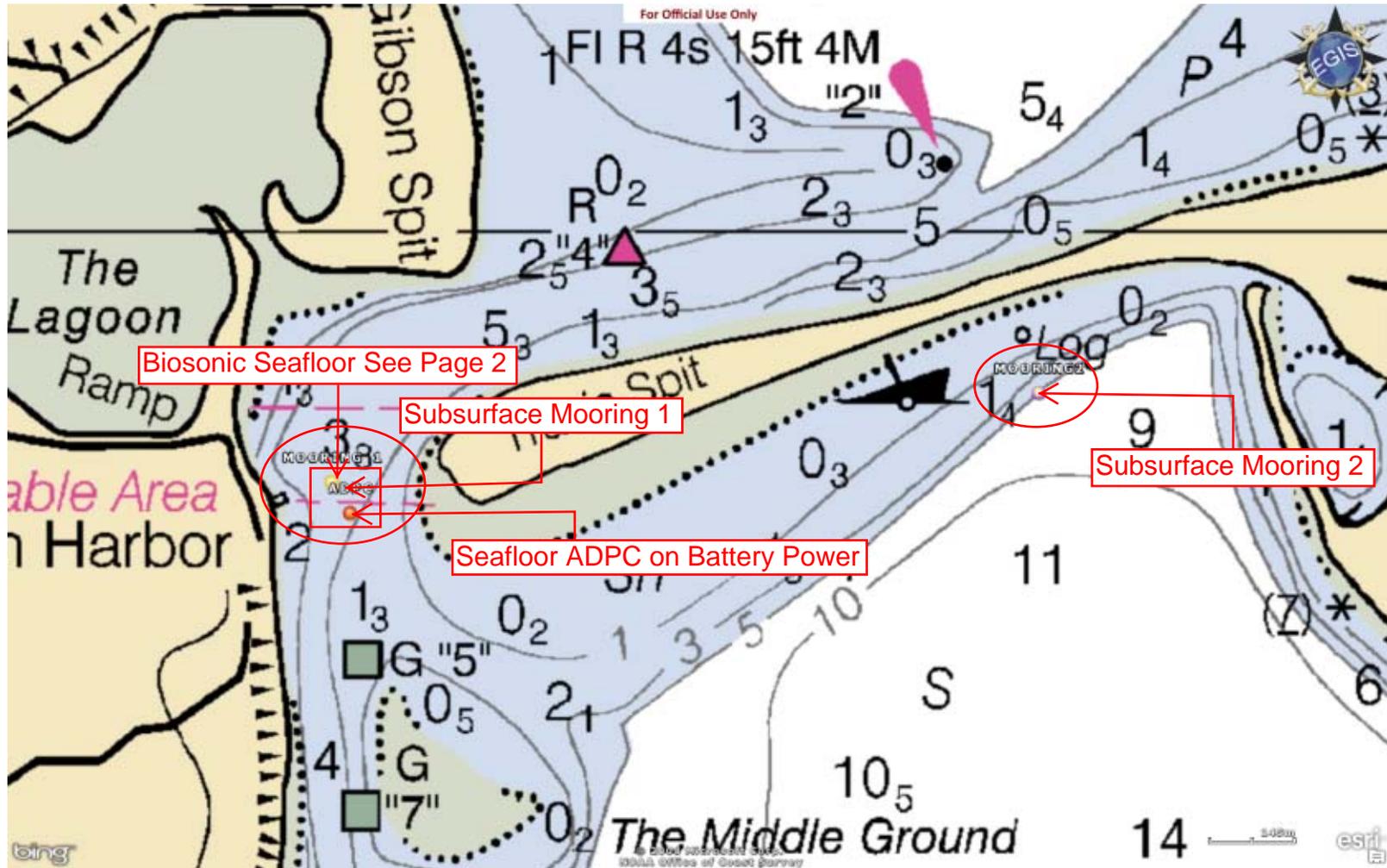
EVENT DATE	TIME	EVENT NAME	EVENT LOCATION
12-Jul-16	1700-2000	Lake Washington Tuesday Evening Nights	Lake Washington
12-Jul-16	1800-2200	Duck Dodge Seattle	Lake Union
13-Jul-16	1900-2100	Windseeker	Commencement Bay
13-Jul-16	1800-2100	SSSS Summer Series Wednesday Nights	Budd Inlet
13-Jul-16	1800-2030	Pier B'Ham	Guemes Channel
13-Jul-16	1700-2000	Lake Evening Series Wednesday Nights	Lake Washington
13-Jul-16	1700-2000	Sound Evenng Series- Wednesday Night	Shilshole Bay
14-Jul-16	1700-2000	Sound Evenng Series- Thursday Night	Shilshole Bay
14-Jul-16	1730-1930	Duck Dodge Series Race	Sequim Bay
14-Jul-16	1830-2030	Downtown Sailing Series	Elliot Bay
15-Jul-16	1815-2100	Log Dodge Series	Port Gardner
15-Jul-16	1800-2100	2016 summer cats paw series	Port Townsend Bay
16-Jul-16	1000-1700	SBYC Saturday Series	Sequim Bay
18-Jul-16	1800-2030	STYC Ballard Cup Series	Shilshole Bay
19-Jul-16	1700-2000	Lake Washington Tuesday Evening Nights	Lake Washington
19-Jul-16	1800-2200	Duck Dodge Seattle	Lake Union
20-Jul-16	1900-2100	Windseeker	Commencement Bay
20-Jul-16	1800-2100	SSSS Summer Series Wednesday Nights	Budd Inlet
20-Jul-16	1800-2030	Filalgo Bay Bouy Races	Fidalgo Bay
20-Jul-16	1700-2000	Lake Evening Series Wednesday Nights	Lake Washington
20-Jul-16	1700-2000	Sound Evenng Series- Wednesday Night	Shilshole Bay
21-Jul-16	1700-2000	Sound Evenng Series- Thursday Night	Shilshole Bay
21-Jul-16	1730-1930	Duck Dodge Series Race	Sequim Bay
21-Jul-16	1830-2030	Downtown Sailing Series	Elliot Bay
22-Jul-16	1815-2100	Log Dodge Series	Port Gardner
22-Jul-16	1900-2200	STYC Take Your Time Fridays	Shilshole Bay
22-Jul-16	1800-2100	2016 summer cats paw series	Port Townsend Bay
23-Jul-16	1000-1700	SBYC Saturday Series	Sequim Bay
25-Jul-16	1800-2030	STYC Ballard Cup Series	Shilshole Bay
26-Jul-16	1700-2000	Lake Washington Tuesday Evening Nights	Lake Washington
26-Jul-16	1800-2200	Duck Dodge Seattle	Lake Union
27-Jul-16	1900-2100	Windseeker	Commencement Bay

MARINE EVENTS

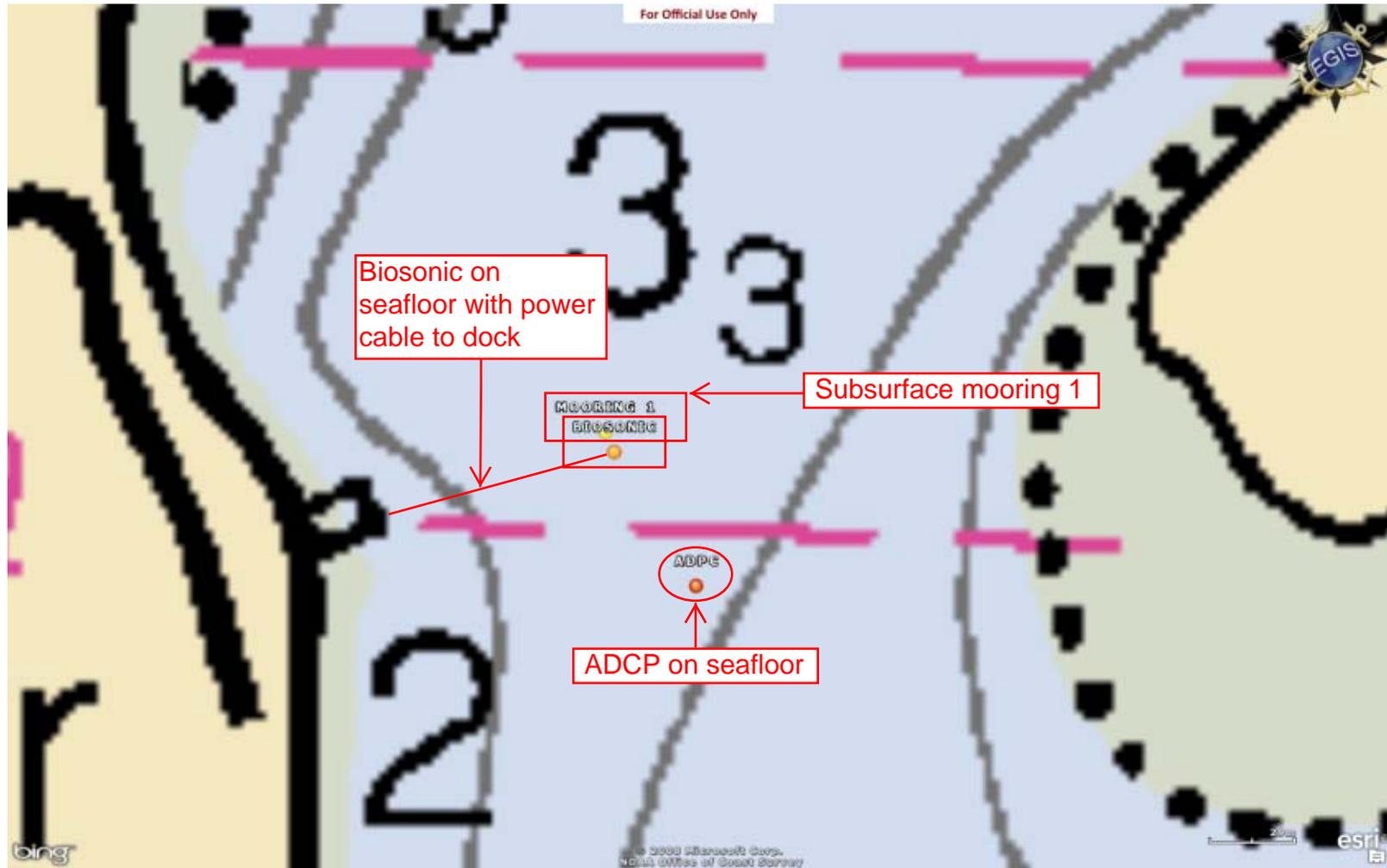
Enclosure (3)

27-Jul-16	1800-2100	SSSS Summer Series Wednesday Nights	Budd Inlet
27-Jul-16	1800-2030	Fidalgo Bay Bouy Races	Fidalgo Bay
27-Jul-16	1700-2000	Lake Evening Series Wednesday Nights	Lake Washington
27-Jul-16	1700-2000	Sound Evenng Series- Wednesday Night	Shilshole Bay
28-Jul-16	1700-2000	Sound Evenng Series- Thursday Night	Shilshole Bay
28-Jul-16	1730-1930	Duck Dodge Series Race	Sequim Bay
28-Jul-16	1830-2030	Downtown Sailing Series	Elliot Bay
29-Jul-16	1815-2100	Log Dodge Series	Port Gardner
29-Jul-16	1900-2200	STYC Take Your Time Fridays	Shilshole Bay
29-Jul-16	2200-2245	Whaling Days	Dyes Inlet
30-Jul-16	1000-1700	SBYC Saturday Series	Sequim Bay

PNNL Sequim Bay Research Equipment-Part 1



PNNL Sequim Bay Research Equipment-Part 2



Enclosure (5)

NORTH PACIFIC – Oceanographic Research

As part of the Ocean Observatories Initiative, the University of Washington will be deploying scientific instruments in the vicinity of Axial Volcano approximately 200 nautical miles offshore Tillamook Head (OR). Pending weather conditions, it is anticipated the research vessel will be working in the vicinity of the below areas on the following dates:

Leg 1

45°49'13.656"N, 129°44'35.376"W (PN3A – Axial Base, WD 2600m) from July 11 to July 14
44°30'34.452"N, 125°23'53.664"W (PN1A – Slope Base, WD 2900m) from July 15 to July 18
44°21'49.140"N, 124°57'43.128"W (PN1C – Endurance Offshore, WD 615m) from July 19 to July 20

Leg 2

44°41'29.004"N, 124°27'25.236"W (PN1D – Endurance Shelf, WD 115m) from July 23 to July 25
44°21'49.140"N, 124°57'43.128"W (PN1C – Endurance Offshore, WD 615m) from July 25 to July 26
44°34'11.438"N, 125°08'48.541"W (Southern Hydrate Ridge, WD 800m) from July 26 until July 27
44°30'34.452"N, 125°23'53.664"W (PN1A – Slope Base, WD 2900m) from July 27 to July 28
45°49'13.656"N, 129°44'35.376"W (PN3A – Axial Base, WD 2600m) on July 29
44°56'28.620"N, 129°58'11.280"W (PN3B – Axial Caldera, WD 2600m) from July 29 to August 1

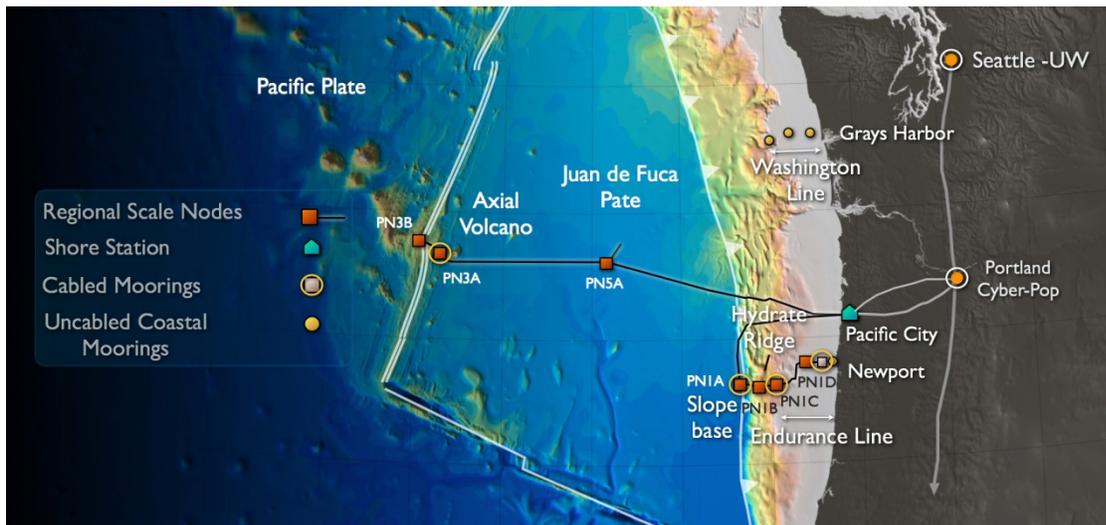
Leg 3

44°21'49.140"N, 124°57'43.128"W (PN1C – Endurance Offshore, WD 615m) from August 4 to August 5
44°30'34.452"N, 125°23'53.664"W (PN1A – Slope Base, WD 2900m) August 5 to August 7
45°49'13.656"N, 129°44'35.376"W (PN3A – Axial Base, WD 2600m) from August 8 to August 12

The OOI deployments will be performed 24 hours a day, 7 days a week from the R/V Sikuliaq, with support from a remotely operated vehicle (ROV). The research vessel will monitor VHF-FM Channels 13 and 16 during all operations. Mariners are requested to keep a 2,000-yard CPA in the vicinity of the research vessel to avoid possible entanglement or damage to equipment and/or fishing gear. For more information or questions, e-mail Brian Ittig at bittig@uw.edu.

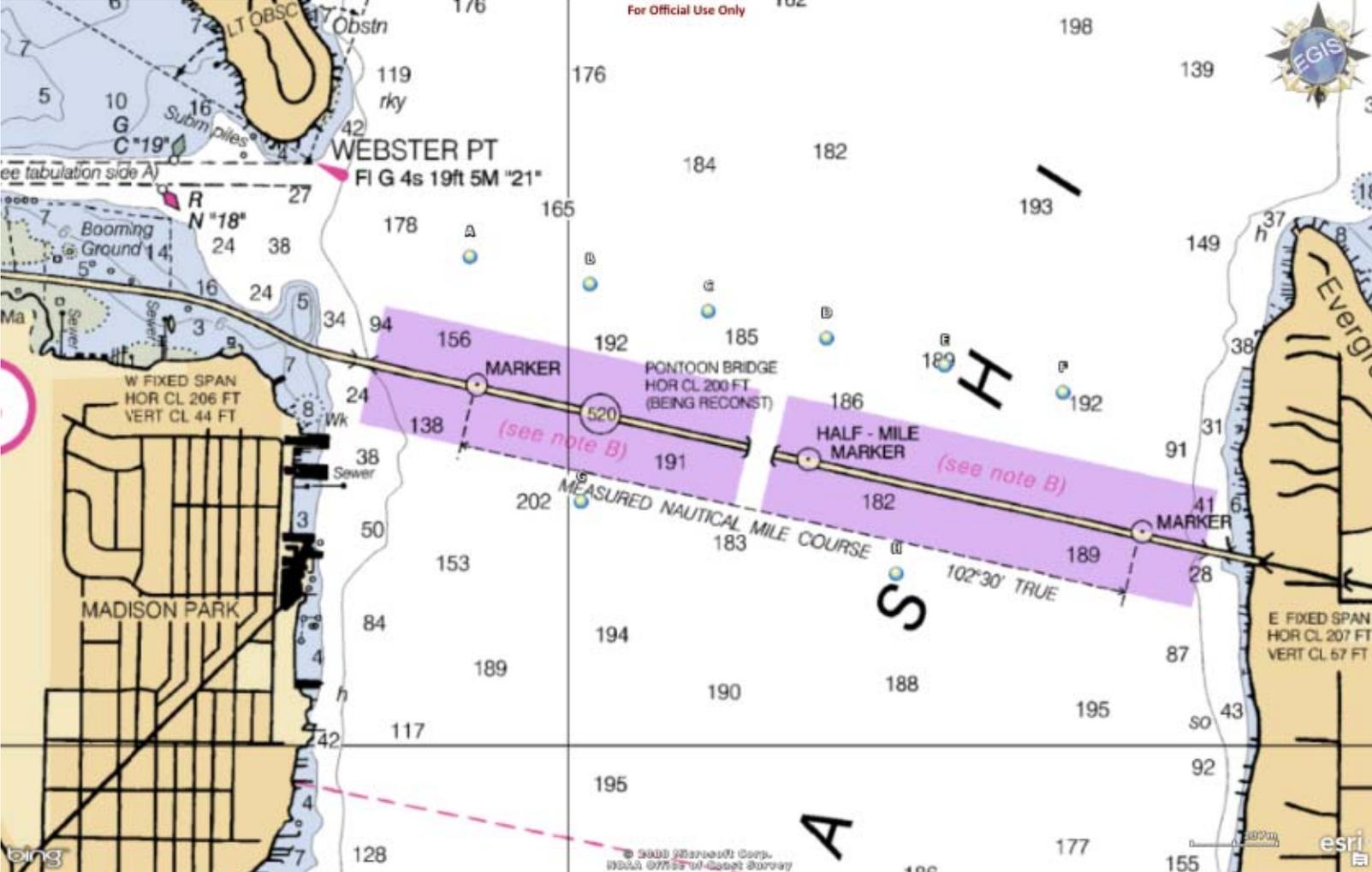
Enclosure 1 shows a geographic location of the deployment areas.

Chart 18007



Enclosure 1: The OOI infrastructure offshore Oregon.

SR520 construction mooring buoys as of 06Jul16



SR 520 Bridge Replacement and HOV Program

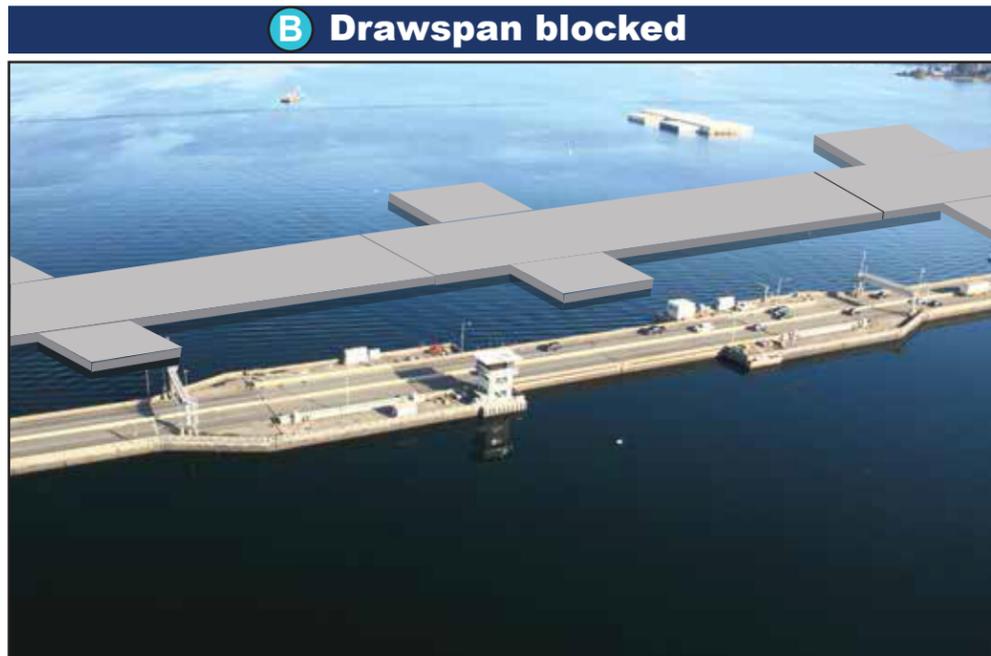
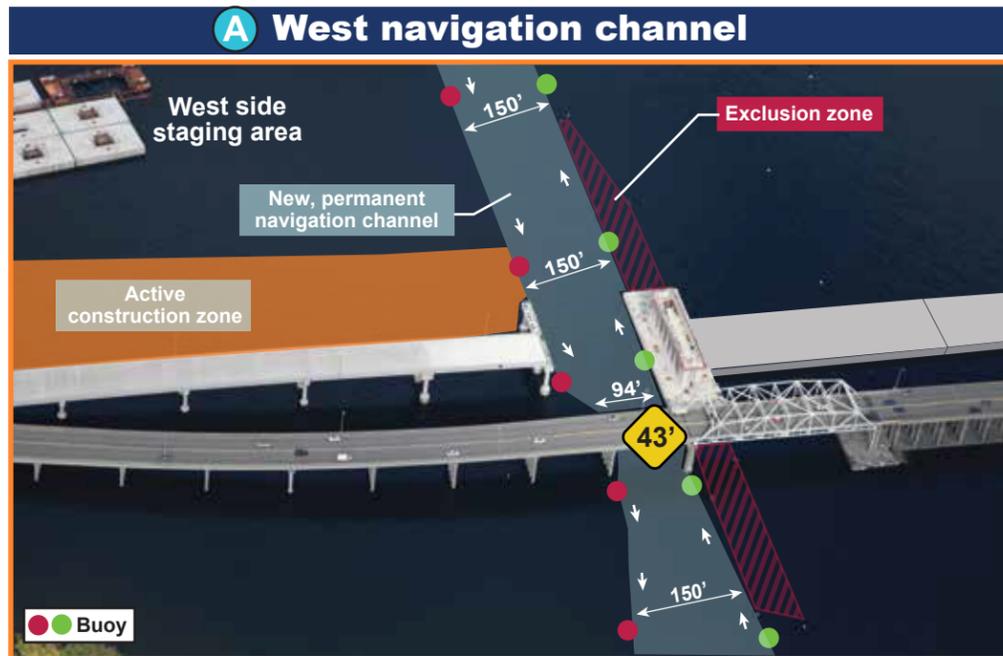


I-5 to Medina: Bridge Replacement and HOV Project

Navigation changes on Lake Washington at SR 520

March 2016

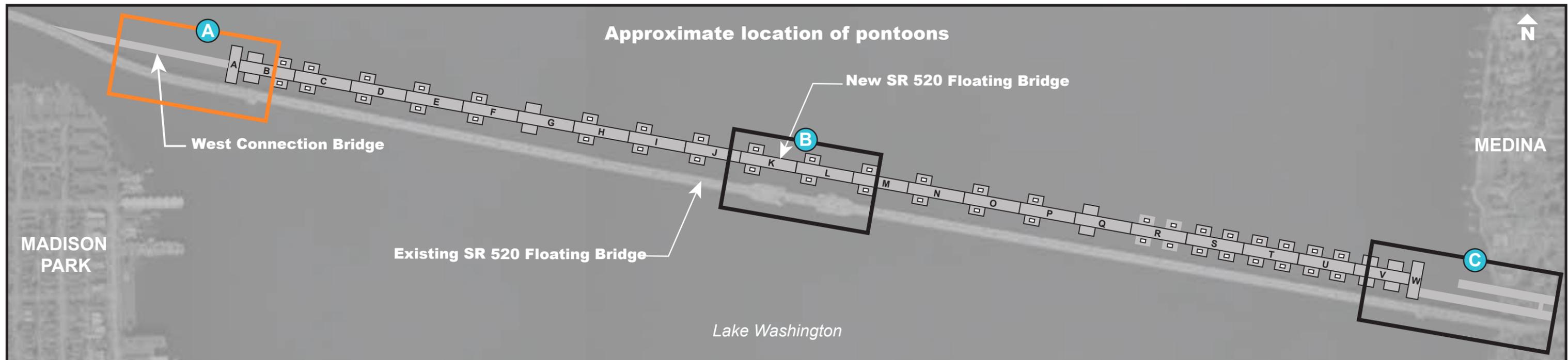
UPDATE: West navigation channel shifted east to new, permanent location on Monday, March 28



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

Drawspan blocked as of Feb. 17, 2015.

East navigation channel remains open.



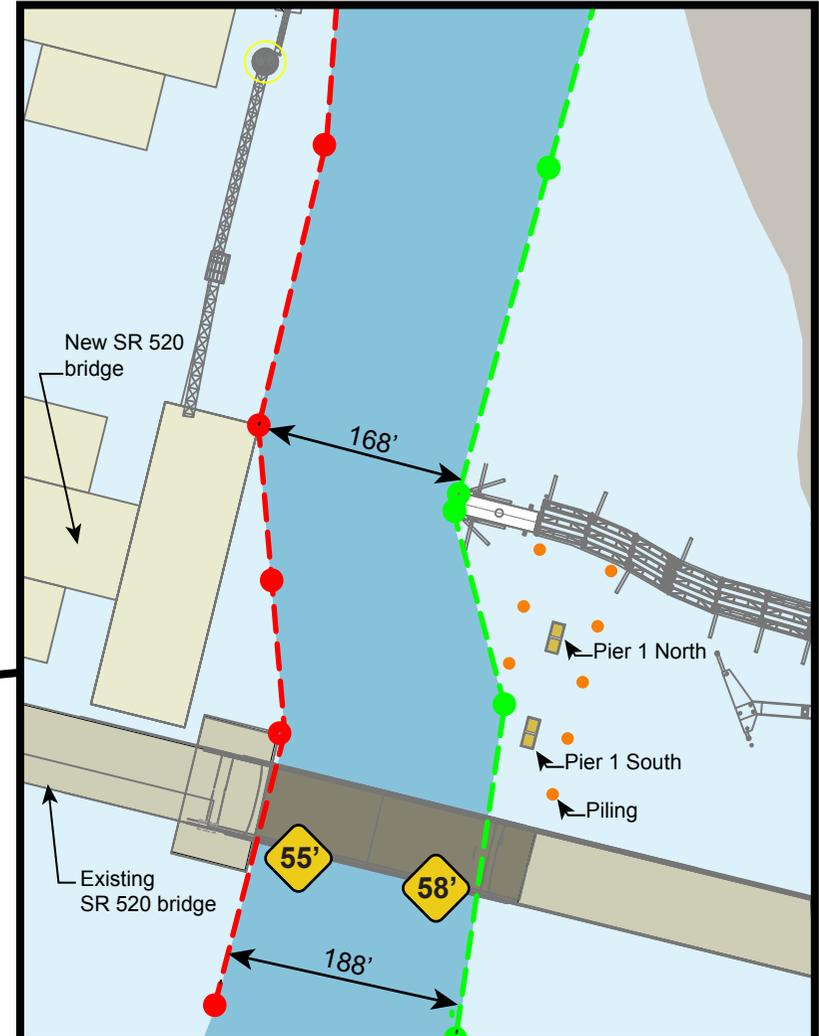
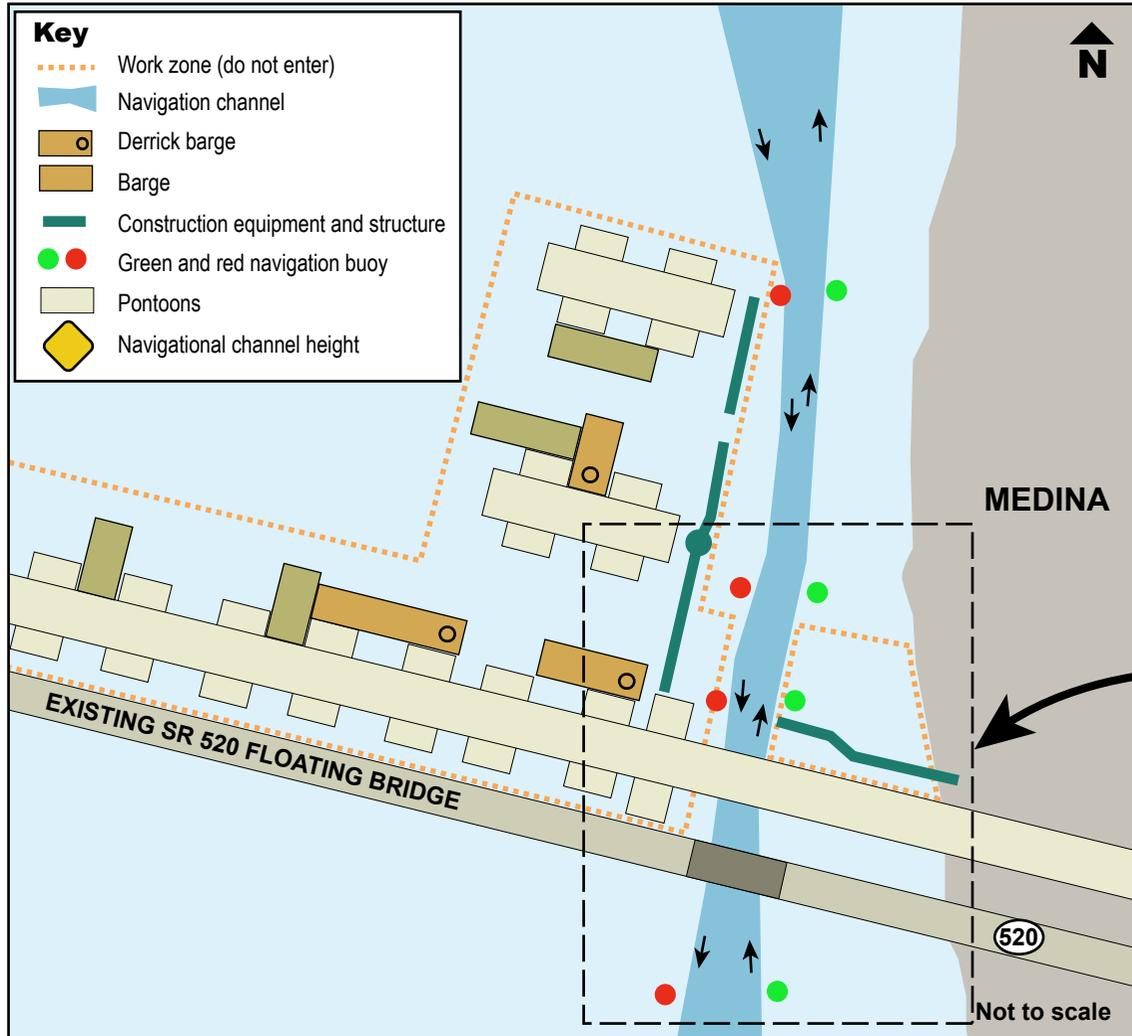
SR 520 Bridge Replacement and HOV Program

I-5 to Medina: Bridge Replacement and HOV Project

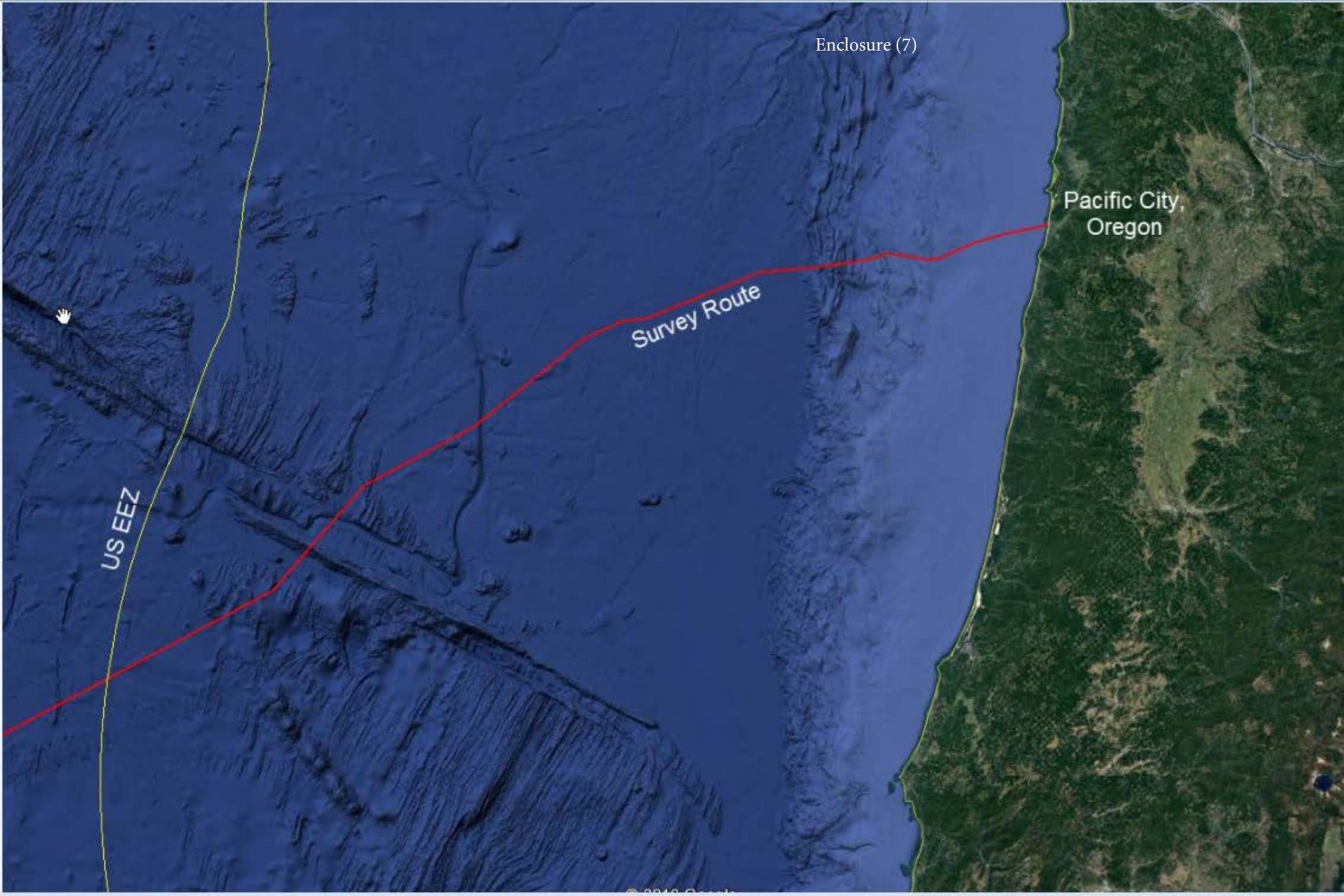


Lake Washington East Navigation Channel

February 2015



Note: This map not intended for navigational use



Enclosure (7)

Pacific City,
Oregon

Survey Route

US EEZ

