



OREGON FISHERMEN'S CABLE COMMITTEE, INC.®

UNDERSEA CABLE UPDATE

March 2021
Volume 9, Issue 1

2021 Virtual Port Meetings — Wednesday, March 24

TRAWLER OWNERS, CAPTAINS AND CREW (Draggers, Shrimpers & Whiting Fleet)

Please give us 20 minutes of your time to share the new OFCC 9-minute training video and a quick update on Oregon submarine cables, and you could win a **\$50 gift card from Englund Marine Supply**. Join the live meetings at <https://bluejeans.com/5033252285/2285/webrtc> (phone, tablet or computer). *This link will be emailed to everyone we have email addresses for. Please email your address to staff@ofcc.com.*

If you are at sea or don't have a strong connection, you can dial in (audio only) **408.419.1715**
Meeting ID: **503 325 2285** Passcode: **2285**

Choose the time that works best for you on **Wednesday, March 24 — 8:30 AM, 12 Noon, or 4:00 PM**. A **\$50 Englund Marine gift card** will be given away at each of those three times. There will also be a **second chance** drawing for all non-winners after the last 'Port Meeting.'

We will try to answer questions about the short-term deployment of seafloor seismic sensors offshore Oregon, Washington, and British Columbia investigating geohazards in the Pacific Northwest scheduled for late May through mid-July 2021. *See article inside.*

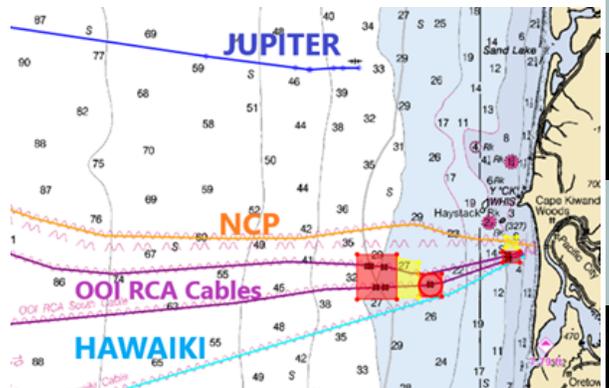
You can find the OFCC training video (and a shorter promo video) at **OFCC VIDEO — YouTube**. **Look for the 8:48 min. instructional film.** The video was created to allow vessel owners to get the information about safely fishing around cables to skippers and crew that are unable to attend our port meetings. It provides some basics about the OFCC protocols which are designed to reduce fishermen's liability and increase safety for fishermen and cables.

What? OFCC is giving away a \$200 Cabela's Card?

Owners and Skippers — We need your help to keep our boat/owner/skipper information up to date!! Please check and update the stamped and addressed information card included with this mailing and return it to us. If there are no changes, please write OK and return. All returned cards will be entered into a drawing for a **\$200 Cabela's gift card on April 8 — so fill it out now!**

OFCC Version 11 Thumb Drive is available adding the as-laid Jupiter Cable - Phase 1, starting approximately 3 ½ miles offshore and going west. This outer portion of the Jupiter Cable was installed offshore of Sand Lake, north of Cape Kiwanda, in Summer 2020. Phase 2, installation to shore, is planned for this spring. Ver. 11 includes plotter info for TimeZero, Coastal Explorer, P-Sea WindPlot, ECC-Globe, OLEX, Nobeletc, and Maptech. **This is the first new cable since 2018.**

A thumb drive can be used numerous times and on multiple boats. For help loading, please call Scott McMullen at 503.440.3569.



Caution! Please Avoid Seafloor Science Instruments Between May 23 and July 1!

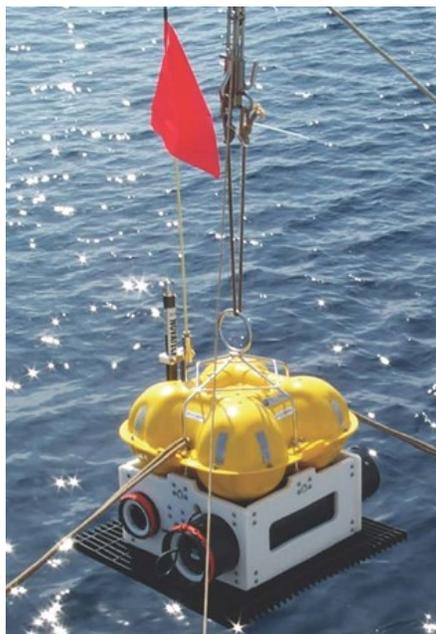
Scientists from Woods Hole Oceanographic Institution and partners will conduct a seismic survey off OR, WA and BC, in May. R/V Oceanus will deploy receivers on the seabed in offshore lines, and then the R/V Langseth will cruise over the instruments trailing air guns and hydrophones recording the echoes from the percussions. The R/V Langseth will typically make one pass and move on while the R/V Oceanus will recover the seabed instruments, which also recorded the echoes.

OBNs (*yellow dots on graphic*) will be spaced about every 545 yards off the Alsea River, Tillamook Hd, and Port Orford **starting May 23**. The 350 units will be **recovered by June 19**. OBNs are approximately 1 foot square and less than 6" high. The node arrays will be from 71 fm to 1640 fm deep.



Ocean Bottom Node (OBN) — yellow dots at right

Two styles of Ocean Bottom Seismometers (OBSs) — orange and red dots on graphic at right.

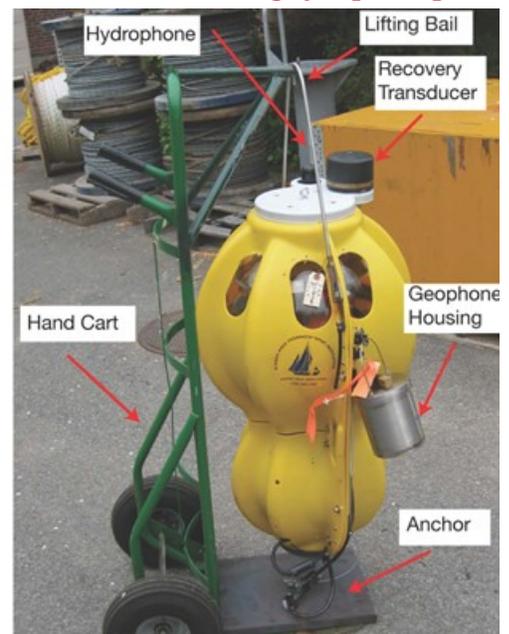


OBSs (*red and orange dots on graphic*) will be spaced 8 to 10 km apart (approx. 5 naut. miles). They are 3 ft to 3 1/2 ft tall with a steel plate anchor that is 3 ft by 3 ft and approximately 2 inches thick. The anchor is a grid — not a solid plate — so should sink into sediment a bit.

A total of 60 OBSs will be on the ocean floor off Oregon (Brookings, Port Orford, Coos Bay, Newport, Pacific City and Astoria) **between May 24 and July 1**. (Between June 24 and July 12 there will be 55 OBS off Cape Elizabeth and Vancouver Island.) These dates are approximate and weather dependent.

The OFCC is being contracted to plot locations of the 465 seafloor seismic sensors in six marine navigation software formats and arrange for thumb drives with all the data. **We will make thumb drives available** for PSea WindPlot, Coastal Explorer, TimeZero, Nobeltec Visual Navigation Suite, ECC Globe, and OLEX. **Woods Hole asks that you please avoid these hazards during the stated dates.** These instruments do not pose a huge risk to your vessels or gear, but there is a large risk to the instruments.

An effort was made to put many instruments in EFH areas, but they could not avoid trawl grounds entirely. ***If you pick up a node or seismometer in your gear, do NOT throw it back overboard. Please bring it to port and follow the instructions on the instrument to arrange for pick up.***



Proposed Short-Term Deployment of Seafloor Seismic Sensors Offshore Oregon, Washington, and British Columbia in Support of Investigations for Geohazards in the Pacific Northwest

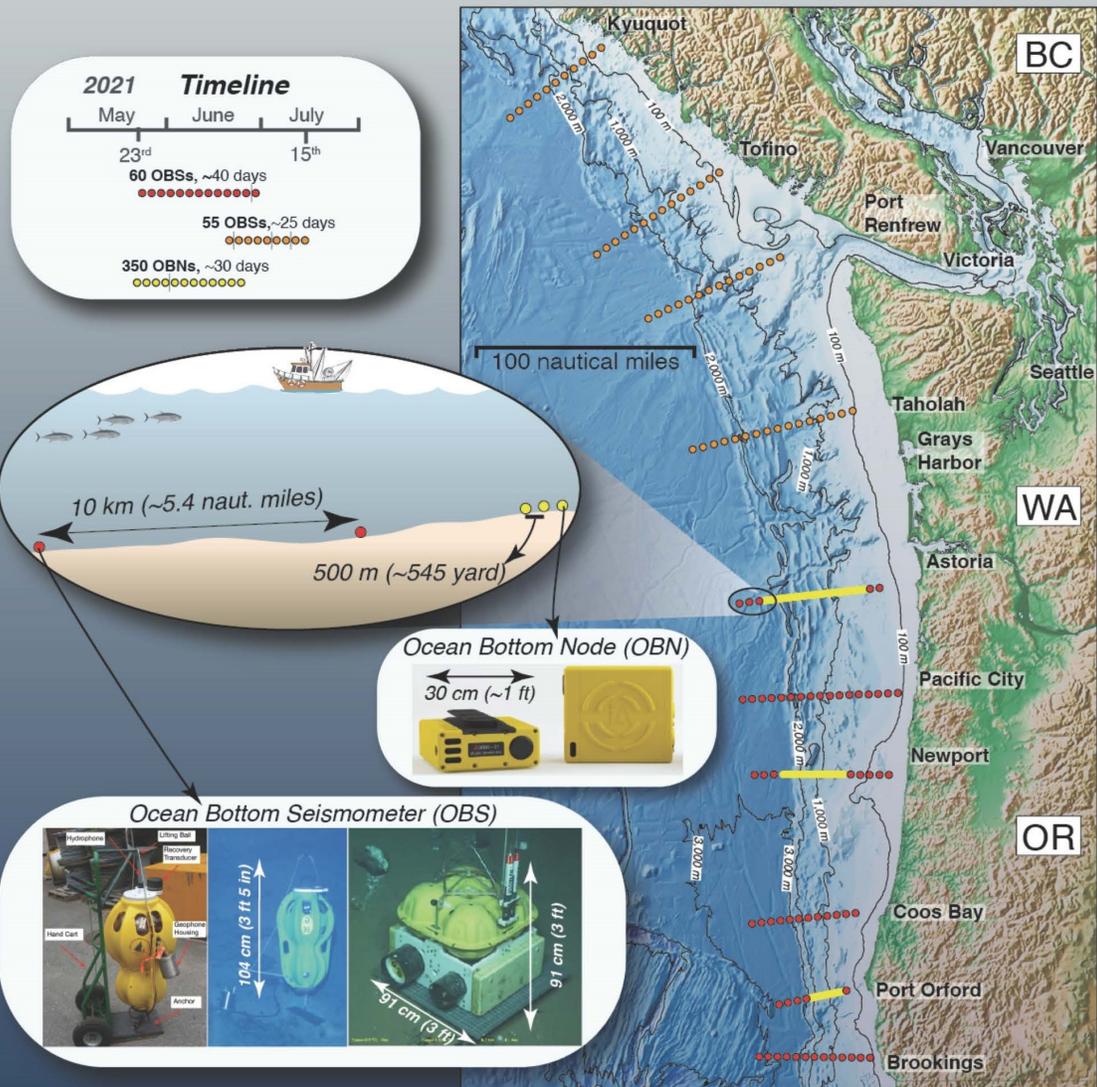
Scientists from a number of U.S. and Canadian academic and federal institutions are proposing to conduct geophysical investigations that would provide the observations and data necessary to address fundamental science questions relevant for understanding the structures and processes that contribute to, and result from, earthquakes, tsunamis, and associated geohazards in the Pacific Northwest. Because the geological targets are located offshore, the proposed projects include deployment of ocean-bottom seismic instrumentation along linear arrays from the continental shelf to the abyssal plain. Ocean Bottom Seismometers (OBSs) and Ocean Bottom Nodes (OBNs) are stand-alone individual units placed on the seafloor without any cable or rope connecting them. They would be used to record, at different spatial scales, the seismic waves generated by the natural regional seismicity and by acoustic marine sound sources. The data recorded by these instruments would enable researchers to investigate the physical properties of the continental slope sediments and crust, which are critical for predicting the intensity of earthquake-triggered shaking along the Pacific Northwest and assessing tsunami/landslide hazards under hypothetical scenarios of future earthquake rupture.

For more information, please visit pnwgeohazards.who.edu

version: March 8, 21

For enquires and coordination efforts please contact:

J. Pablo Canales, *Woods Hole Oceanographic Institution, Woods Hole MA* (jpcanales@who.edu)
Nathan Miller, *U.S. Geological Survey, Woods Hole MA* (ncmiller@usgs.gov)





OFCC
 2021 Marine Dr. Suite 102
 Astoria, OR 97103
 Phone: (503) 325-2285
 E-mail: smcmullen@ofcc.com
 staff@ofcc.com

The Oregon Fishermen's Cable Committee Inc. is an organization of trawl fishermen and representatives from companies that operate fiber optic cables off the Oregon coast. Membership is free of charge and open to all west coast trawl fishermen that have either a west coast federal groundfish permit or an Oregon, Washington or California Pink Shrimp permit. Members that follow operating protocols receive replacement gear and compensation for lost time and catch if asked to sacrifice fishing gear to protect an undersea cable. In addition, such members may receive a release of liability for accidental damage to an undersea cable. Members also are eligible to participate in drawings for patrol vessel charter opportunities during undersea cable installations. To join, contact the OFCC office.

The OFCC tries to monitor an email address and phone number for use in a submarine cable emergency:

OFCC Emergency phone #: (503) 440-3569 Email: 911@ofcc.com

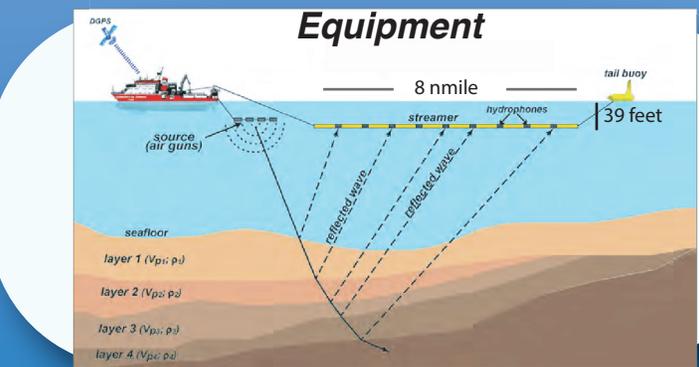
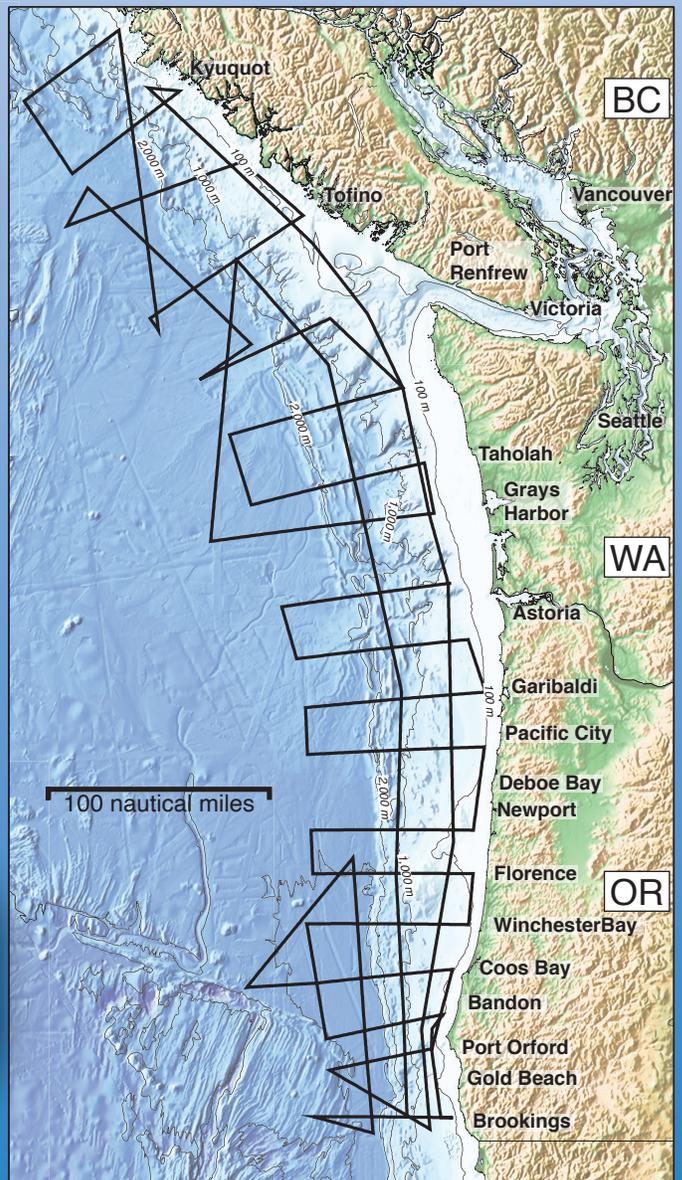
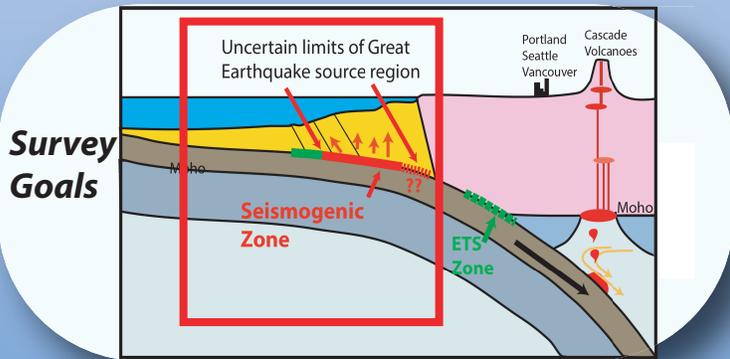
Emergency Contacts for Possible Cable Hang-ups			
CABLE	EMERGENCY EMAIL	CABLE OWNER	EMERGENCY #
	<i>When you can't call the Emergency #</i>		
AUFS-W	nocc2@gci.com	GCI	(888) 442-8662
TGN SEGMENTS 1, 5, 6	nmcwall@tatacommunications.com	TATA	(732) 282-4001
OOI RCA SEG 1, 2, 3, 4, 5	ooi-ofcc@uw.edu	WOODS HOLE	(855) 665-1424
NORTHSTAR AKORN	acscsnocc@acsalaska.com	ACS	(888) 734-1888
TRANS-PACIFIC EXPRESS (TPE)	acscsnocc@acsalaska.com	VERIZON	(888) 734-1888
SOUTHERN CROSS	acscsnocc@acsalaska.com	VERIZON	(888) 734-1888
JUPITER	JupiterOregon@fb.com	FACEBOOK	(855) 956-3222
NEW CROSS PACIFIC (NCP)	NCPSubsea@Centurylink.com	MICROSOFT	(844) 278-6966
HAWAIKI (HAW)	ofcc@hawaikicable.co.nz	HAWAIKI	(877) 242-9245
TPC-5 CABLES		AT&T	(866) 466-2288, prompt 5
FASTER	FASTER-NOC@kddia.com	GOOGLE	(877) 520-0800

Proposed Marine Seismic Survey offshore Oregon, Washington, and British Columbia in Support of Investigations for Geohazards in the Pacific Northwest

Scientists from a number of U.S. and Canadian academic and federal institutions are proposing to conduct geophysical investigations of the Cascadia subduction zone from Southern Oregon to British Columbia, within the region where “giant” earthquakes have occurred in the past along the fault zone between the oceanic Juan de Fuca plate and the North America continent. The portion of the fault zone that generates the largest earthquakes is located almost entirely offshore and marine surveys are needed to investigate its structure. The proposed investigations would use the scientific research vessel (RV) Langseth to collect modern deep penetration 2-D marine seismic reflection data using an acoustic sound source array and a hydrophone streamer and will be coordinated with concurrent marine and land deployments of seismometers. This scientific equipment would be towed behind the ship along predetermined lines extending from ~6-12 miles to ~62-124 miles offshore from southern Oregon to Vancouver Island. The acquired data would be used to construct detailed images and constrain physical properties of the slowly deforming sediments of the continental shelf and slope that lie above the earthquake-generating fault, the fault zone itself, and deep into the subducting oceanic crust below. The proposed survey would provide the observations and data necessary to address fundamental science questions relevant for understanding the structures and processes that contribute to, and result from, earthquakes, tsunamis, and their geohazards in the heavily populated Pacific Northwest. The proposed study would be the first such regional-scale seismic imaging investigation ever conducted spanning nearly the entire length of the Cascadia Subduction Zone and would move the region from arguably one of the least well characterized heavily populated megathrust regions in the world to one of the best.

For more information, please visit pnwgeohazards.whoi.edu.

For enquires and coordination efforts please contact: Suzanne Carbotte, Columbia University, New York (carbotte@ldeo.columbia.edu) J. Pablo Canales, Woods Hole Oceanographic Institution, Woods Hole MA (jpcanales@whoi.edu)



HEADS-UP—GEOHAZARDS RESEARCH

There will be an expansive research project off the coast of Oregon, Washington and British Columbia. The purpose is to characterize the Cascadia Subduction Zone to better understand the threat of subduction zone quakes and tsunamis. This is a very large project, but it has a relatively short duration, and the researchers request your help. Here is what is happening:

Around May 23rd, the RV Oceanus will leave Newport and lay 3 lines of Ocean Bottom Nodes (OBN), small receivers that are about 12" x 12" x 6" and weigh 46 lbs. These will be set on the seafloor in straight lines by an ROV, approximately 545 yards apart, off Tillamook Head (180 nodes), South Beach (106), and Port Orford (64). A second type of receiver, an Ocean Bottom Seismometer (OBS) will also be deployed by the RV Oceanus



at the same time, at the beginning and end of the OBN lines, as well as other lines at Brookings, Coos Bay, Pacific City, and Cape Elizabeth (and off Vancouver Island). These larger OBS receivers will be around 5 nm apart. All of these devices will be plotted in popular marine navigation software programs, available from the OFCC.

OBS



After these receivers are laid out, around June 1st, a seismic research ship, the RV Marcus Langseth, will make transits across the shelf, slope and offshore over the receivers as well as other lines between the receivers. The Langseth will be towing air guns to produce the sound waves. She will also be towing a hydrophone streamer that will be about 39' feet below the surface. She will be towing at about 4.5 knots. **This streamer is 8 nm long and has a surface tail buoy at the end. The Langseth will be extremely limited in her ability to maneuver and asks that no vessels pass between the ship and the tail buoy.** Seismic ship operations should be completed by July 10th.

After the ship has passed over a line of receivers, the RV Oceanus will recover the devices. Recovery of the small OBN will be slow, as they will be picked up like they were deployed, by an ROV crawling across the seafloor. The OBN doesn't have any signal to home in on—the ROV will move across the seafloor picking them up and setting them in a rack on the ROV. All OBNs (yellow dots) should be recovered by June 19th and OBSs should be recovered by July 12th.

