

## Crystal Orr

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**From:** Jan Hodder [jhodder111@gmail.com]  
**Sent:** Thursday, September 05, 2019 8:16 AM  
**To:** andrewstamp@comcast.net  
**Cc:** Planning Department  
**Subject:** Hodder comments County Remand File No. REM-19-001/LUBA Case No. 2016-095  
**Attachments:** January 2019 CBharbor safety committee.pdf; Hodder comments to Stamp in response to reopen FINAL.docx

This Message originated outside your organization.

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Dear Mr. Stamp,

Please find attached two documents.

1. Comments in reply to your 23 August 2019 open record for County Remand File No. REM-19-001/LUBA Case No. 2016-095
2. A copy of the Minutes of the Coos Bay Harbor Safety Committee January 2019 that I reference in my comments.

Please advise as to receipt of this transmittal.

Sincerely,

Jan Hodder

541 297 0664

Exhibit 59  
Date: 9/5/19

**Date:** 15 January 2019

**From:** HSC Board

**To:** HSC

**Subj:** January 15 HSC Meeting minutes

The meeting was called to order at 1300 by George Wales. Chair Richard Dybevik was unable to attend. See attendance list.

Approval of minutes: Minutes approved.

**Port Updates:**

1. Port staff swing bridge update: Center shearing disassembly 1 week until completion. 2 to 3 weeks is expected to disassemble/assemble. Bridge will return to full service 4 to 6 weeks.
2. Range A light is falling over and getting progressively worse causing passage safety issue. USCG will follow up with George 1/15/2019.
3. Bouys, Umpqua and Port Orford offline: NOAA not in attendance to provide feedback due to government furlough.
4. Crabbing Tow Lanes: Coos Bay Pilots (CBP) stated there are no open lanes. Out of town boats are suspected of placing lines in the tow lanes. A general discussion on how to inform out of town boats of lanes ensured. Newport is having the same issue. CBP were encouraged to pass through lines as needed. USB was provided to CBP to pass out with lane charts/maps.

**New Business:**

***2016 CB fishing vessel fatality review***

Frank Whipple, Amergent Techs, presented and spoke to a slide show of the three casualities in Coos Bay which resulted in fatalities in 2016. He provided an overview of the tragic loss of life that occurred during the 2016 Coos Bay Fishing season. The presentation was given to see if anything the HSC could do to possibly prevent or reduce casualties of this type in the future. This presentation also set the stage for conversation regarding he proposed shipping liquid natural gas out of Coos Bay.

All information provided came directly from the Marine Casualty reports obtained through the USCG. In the three fatality cases, no safety recommendations were made by the USCG investigators. A safety recommendation would necessitate the USCG take an action not currently being done. All incident investigations revealed ways the incidents could have been mitigated by Owners and Captains.

General discussion of drug testing surviving members of vessel incidents. The USCG does not assist with testing as it is the Owners/Captains responsibility to ensure captain and crew members are tested after an incident. The local medical facility will not drug screen when testing is required by the government. Those in the HSC who have a requirement for drug testing should check to ensure they have a facility that will do required drug testing.

In addition to USCG monitoring the bar for safe passage, working with National Weather service to provide warnings about bar conditions would be helpful. There was interest in feedback as to what information should USCG or government alerts contain when restricting the bar. Also how the VTS, when in service, could provide better information to waterway users on bar conditions. Possibly combining tidal conditions, weather, sea conditions, and actual bar conditions would be helpful on a single webpage.

### *JCEP Presentation of the Marine Transit Emergency Plan*

Peter Schaedel, JC LNG presented a PowerPoint on the transit emergency plan and covered safety and security zones. The impact of a safety or security zone around LNG vessels in transit was a main topic. Peter addressed the fishing community and public with a plan in draft form. There is no firm dimensions of a safety or security zone by the USCG at this time. JC estimated that possibly a 500-yard safe zone may be enacted. These zones are “not” exclusion zones and vessels may transit in them when authorized by the USCG COTP. CC, USCG, and CBP will work together to determine which vessels can encroach a safety or security zone.

JC LNG anticipates 120 LNG vessels to call per year (240 transits - arrival/departures) through Coos Bay. CBP noted that vessel departure will only happen on high water, slack tide. Inbound LNG vessels do not need the high water, slack tide. Zones are to be patrolled by USCG and Coos County. Estimated transit times when Security zones would apply:

Pilot station (five miles offshore) to berth 120 minutes  
Jetty to berth 90 minutes  
Jetty bar passage 10 – 15 minutes.

During this discussion it was made clear that the times that the fisherman and crabbers were most concerned about was not in conflict with the Jordan Cove operations. George Wales, the Coos Bay pilot made clear that LNG tankers would not be transiting the bar in the conditions that were of concern local traditional users. LNG TANKERS WILL NOT TRANSIT THE BAR in seas over 12 feet. The representatives from the fishing fleets and Dungeness crab Association stated that this understanding alleviated their concerns as they were more worried about seas in the 18 to 20 foot range.

The PowerPoint will be gone through to remove any security information and made available to HSC.

**Memorandum**

Janet Niessner with Confederate Tribes requested a copy of the full ERP draft. JC rep to follow up with her to set up meeting.

General discussions based around tsunami event and ways LNG vessels will handle such events. JC LNG gave their current plans for handling these events.

JCEP USCG Discussion of Security Zones and Large ship transit. Presenter for the USCG was not present due to Gov. shut down. JC and Coos County Sheriffs Department stated that transiting of LNG vessels will resemble today's transit of large vessels in the federal channel. Transit times will be published and the VTS will work to avoid LNG carriers transiting at special times and will schedule all ships into and out of the bay. The County will be working on building a list of local fishing vessels to use in determining local fisherman.

A question was raised regarding the need for highway reader boards on HWY 101. These public information systems were requested by the emergency planning group to assist the Oregon Department of Transportation as a means for assisting traffic on a regular basis and during emergencies of any type. They will be just like other highway reader boards. Control of the message will be with either ODOT or Coos County. The boards will be used throughout the life of the project as a public information system.

There were numerous questions from the floor regarding LNG operations. One concern that was pointed out was the difference in language in the FERC application and the discussion of safety and security zones vs. the practical application of enforcement of security around an LNG tanker. It was pointed out that a permit application is substantially different and by its nature must be a broader statement of overall principles versus the actual work in an area. This is due to Geographic and cultural differences and the different needs for security. The Coos County Sheriff's Office stated that deconfliction with local users was a critical use for the Southwestern Oregon Regional Safety Center. They will have a data base of all local vessels.

**North Jetty Repair Update:**

The port is working with ACOE to bring the jetty back to its 2012 state. The ACOE will take projects to bid once all approvals completed. Both CBP and Vessel captains stated that the jetties current conditions are changing the breaks at the jetty posing safety concerns.

The Harbor Safety Committee is a consortium of local officials, fishing and crabbing fleet members, law enforcement, and United States Coast Guard. These meetings are held for marine community members and industry representatives to discuss safety concerns and general operational issues for the port of Coos Bay. The public is encouraged to attend these meetings to ask questions and provide input. This meeting was well attended, leaving standing room only and included a lively interaction. February 19 at 1300 is the next HSC meeting. Meeting adjourned at 1430.

**Memorandum**

This meeting was well attended by the public. The Harbor Safety Committee would like to remind public members that sometimes sensitive issues are discussed as such meeting of decorum is critical. There was some name-calling from the audience and in future meetings this will not be tolerated.

Sincerely,

Richard

Dr. Janet Hodder  
63840 Fossil Point Road  
Coos Bay  
OR 97420

Jill Rolfe  
Coos County Planning  
Coos County Courthouse  
250 N. Baxter  
Coquille, OR 97423

September 4, 2019

Re: County Remand File No. REM-19-001/LUBA Case No. 2016-095  
Emailed to: [andrewstamp@comcast.net](mailto:andrewstamp@comcast.net) and [planning@co.coos.or.us](mailto:planning@co.coos.or.us)

Dear Hearings Officer Stamp,

I am replying to issues that you raised in your August 23, 2019 letter to the Coos County planning office requesting clarifications of several issues related to the scope and effect of U.S. Coast Guard Security Zone on other boat traffic and recreational uses as a result of plans to transit LNG tankers in Coos Bay. I am well qualified to provide you evidence related to these questions for a number of reasons:

1. Since 1986 I have lived at 63840 Fossil Point Road in a house that provides me with a direct view of lower Coos Bay and the entrance to the open ocean known as the "bar". This is my view from the living room and bedroom:

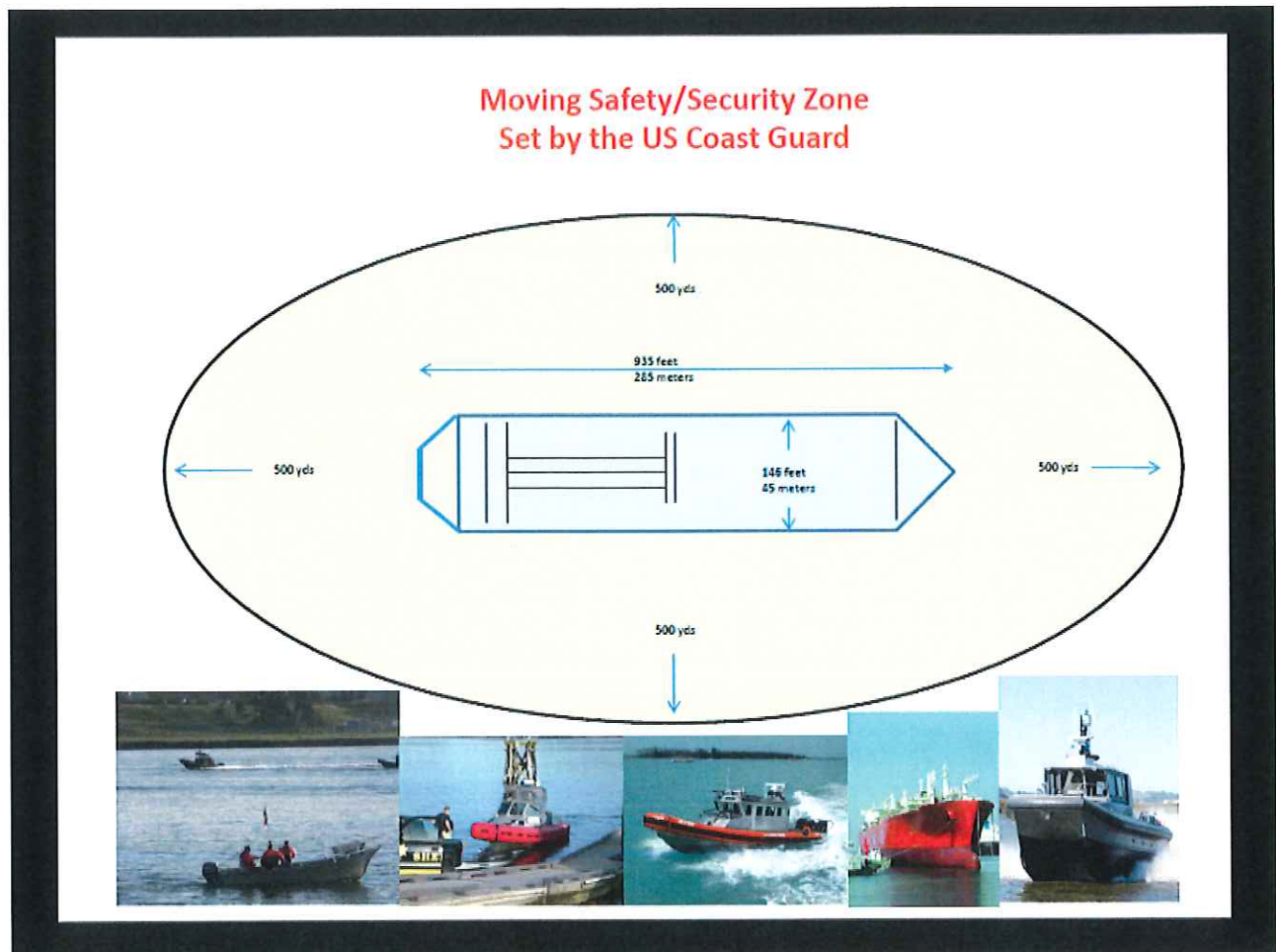


2. As a faculty member at the University of Oregon’s Institute of Marine Biology in Charleston I have taught an upper division undergraduate course for the last decade or more that has a strong focus on Oregon’s recreational and commercial fisheries. Thus I am both familiar with the workings of Oregon fisheries and with a number of people who participate in both the types of fishing.

Below I provide you with information and evidence that should help you gain a more complete understanding of some of the issues that you outlined in your letter and why, in addition to the issues discussed in my initial comments (submitted on June 18, 2019), **that together this information and evidence leads me to conclude that there is unreasonable interference with Public Trust Rights in associated with the movement of LNG tankers to and from the ocean. And that the Jordan Cove project associated with encroachment upon the public’s right to use the navigable waters in Coos Bay and Jordan Cove for a variety of commercial, fishing, and recreational activities.**

### 1. The Coast Guard Security Zone

The diagram below is from the March 27, 2012 Open House that Jordan Cove Energy held at the Mill Casino/Hotel in North Bend during which presentations were made to provide information on the facility, safety and security, tsunami planning, required training, and potential community impacts and benefits.



Note that the width of the tanker is 146 ft and if you add that to the 500 yard security zone adjacent to the port and starboard sides of the vessel the total distance that any other vessels will be excluded is 1,048.6 yards.

The applicant has failed to include any spatial analysis of the security zone for LNG carriers including pinch points, safe waiting areas for all types of vessels, or vessel delays. Without this analysis one has to rely on evidence provided by the US Coast Guard. At the June 24, 2019 Coos Bay FERC hearing I talked with John Precenon of the FERC environmental staff about why there was no representation by the US Coast Guard, a cooperating agency, at the hearing. I was interested in learning about the safety precautions that would be implemented for the LNG tanker transits. Mr. Peconon offered the explanation that Jordan Cove's responsibilities ended when LNG is transferred to an LNG tanker. Thus FERC's responsibility also ends at that point and they do not have regulatory authority over the shipping of LNG. The LNG vessels will not be owned by Jordan Cove, and as yet there is no information about any company that has been identified to ship the LNG that Jordan Cove will produce in Coos Bay. This is an important point as it means that Pembina does not have control over the transit of ships from their home port, wherever that will be, until they reach the LNG terminal to pick up the product.

Mr. Peconon suggested I contact the US Coast Guard directly and ask my questions to them. On June 27, 2019 I mailed a letter to the USCG Commander of the Port 13th Coast Guard District asking about the safety issues. (Letter attached as Exhibit A). A week or so later I received a telephone call from the Coast Guard replying to my questions. Essentially all the Coast Guard person could tell me was that the only information available to the public about LNG transits was that included in the Coast Guard's Water Suitability Report for the Jordan Cove Energy Project that you have referenced in your 23 August, 2019 letter to Ms. Rolfe. He mentioned that any other information, if there is in fact any available, was not in the public record. He also said that the Coast Guard was not currently working on any plans involving the transit of LNG tankers in Coos Bay and were waiting until it was certain that the JC LNG facility was realized. On August 28, 2019 I attended US Representative Peter DeFazio's town hall meeting in Coos Bay where he invited the US Coast Guard to update the audience on activities in southern Oregon. I spoke with Captain Olav Saboe, the Sector North Bend Commander, and he confirmed that the Coast Guard is essentially in a "wait and see" mode and is not actively planning for safety and security measures until there is certainty that the Jordan Cove terminal will be built.

Unfortunately the Coast Guard was involved in the government shutdown when the Coos Bay Harbor Safety Committee met in January 2019 so they were not in attendance for the agenda items concerning JCEP Presentation of the Marine Emergency Plan and JCEP/USCG Discussion of Security Zones and Large ship transits (Harbor Safety minutes attached as Exhibit B). Consequently these minutes only reflect draft plan information provided by a Jordan Cove representative and speculative information from the Coos County's Sheriff's office that, "*they will have a database of all local vessels*". There is no information on what is meant by a local vessel, how they will obtain that information, how this will be used in connection with LNG transits, whether the individual was authorized to speak on this subject for the Coos County Sheriff's office, or any other details of this single statement.

The conclusions and recommendations section of the FERC DEIS (page 5-32) support the information that the Coast Guard has not completed an Emergency Response Plan for LNG ship transits in Coos Bay. It states, "*Prior to commencement of service, Jordan Cove shall file a request for written authorization from the Director of OEP. Such authorization will only be granted following a*



*determination by the Coast Guard, under its authorities under the Ports and Waterways Safety Act, the Magnuson Act, the MTSA of 2002, and the Security and Accountability For Every Port Act, that appropriate measures to ensure the safety and security of the facility and the waterway have been put into place by Jordan Cove or other appropriate parties. (section 4.13.1.6)".*

It is quite possible that the US Coast Guard will implement similar restrictions on the Jordan Cove facility and LNG tankers that service the facility as they have for other LNG operations in the US. The US government regulations site: <https://www.govinfo.gov/content/pkg/CFR-2010-title33-vol2/xml/CFR-2010-title33-vol2-part165.xml#seqnum165.110> lists regulations under Subpart F—Specific Regulated Navigation Areas and Limited Access Areas for several LNG terminals and the associated LNG shipping.

*§ 165.110 Safety and Security Zone; Liquefied Natural Gas Carrier Transits and Anchorage Operations, Boston, Massachusetts.*

*(1) Vessels underway. All navigable waters of the United States within the Captain of the Port (COTP) Boston zone, as defined in 33 CFR 3.05-10, two miles ahead and one mile astern, and 500 yards on each side of any liquefied natural gas carrier (LNGC) vessel while underway.*

*§ 165.502 Safety and Security Zone; Cove Point Liquefied Natural Gas Terminal, Chesapeake Bay, Maryland.*

*(a) Location. The following area is a safety and security zone: All waters of the Chesapeake Bay, from surface to bottom, encompassed by lines connecting the following points, beginning at 38°24'27" N, 76°23'42" W, thence to 38°24'44" N, 76°23'11" W, thence to 38°23'55" N, 76°22'27" W, thence to 38°23'37" N, 76°22'58" W, thence to beginning at 38°24'27" N, 76°23'42" W. These coordinates are based upon North American Datum (NAD) 1983. This area is 500 yards in all directions from the Cove Point LNG terminal structure.*

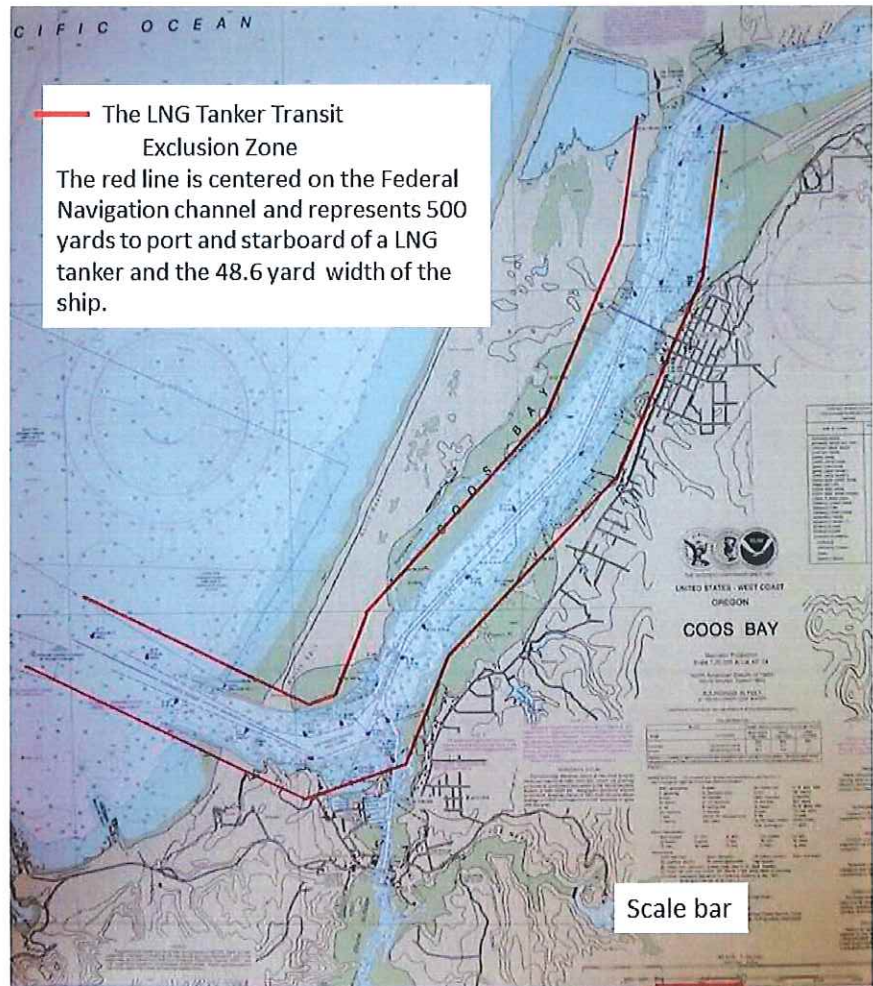
*§ 165.1709 Security Zones: Liquefied Natural Gas Tanker Transits and Operations at Phillips Petroleum LNG Pier, Cook Inlet, AK.*

*(a) Location. The following areas are established as security zones during the specified conditions:*

*(1) All navigable waters within a 1000-yard radius of the Liquefied Natural Gas (LNG) tankers during their inbound and outbound transits through Cook Inlet, Alaska between the Phillips Petroleum LNG Pier, 60°40'43" N and 151°24'10" W, and the Homer Pilot Station at 59°34'86" N and 151°25'74" W. On the inbound transit, this security zone remains in effect until the tanker is alongside the Phillips Petroleum LNG Pier, 60°40'43" N and 151°24'10" W.*

From these examples, and the preliminary details provided by the Coast Guard it seems clear that at least a 500 yard security zone will be in place around LNG tankers transiting Coos Bay. If you plot a 1,048.6 yard exclusion zone on the Coos Bay navigation chart (71<sup>st</sup> edition Last correction 3/4/2019) using the center of the Federal Navigation Channel as the presumed location for the middle of an LNG tanker you can see in the picture on the next how the exclusion zone will impact any other vessels. Almost all of the ~9 miles of LNG tanker transit through lower Coos Bay will prevent any other vessel the ability to move out of an area and still remain in the waters of Coos Bay. Note how the security zone encroaches on the entire region of the bar. It would prevent any other vessel from crossing the bar when an LNG ship was transiting. This has serious safety implications as well as preventing fishing and other recreational activities in this area. Any commercial or recreational vessels coming out of the Charleston marina would have to wait in the marina or the Charleston channel until the zone cleared. It

is not unusual for 10's of vessels to leave the marina within minutes of each other. Moving up the bay there are virtually no areas where boats could move out of the exclusion zone and have sufficient area or depth to safely wait out an LNG transit. I am not sure what recreational crabbers in the bay would do as there is not anywhere for them to move safely. What would happen to paddle craft or surfers – where would they go? Essentially the entire bay between river mile 0 and 9 is virtually unsafe for a sail boat, a motor boat or a paddle craft to move from the area of the exclusion zone. This is an unacceptable impingement on the public's right to use Coos Bay for fishing, navigation and recreation.



The Coos Bay navigation chart with the 1,048.6 yard exclusion zone are drawn in red

Although not ever discussed by the Coast Guard it is interesting to note that the exclusion zone touches land in several places along the channel including the Confederate Tribes Coos Head property, the Charleston Coast Guard housing, parts of the Oregon Institute of Marine Biology, areas of the North Spit, and the new RV park at Sitka Dock.

The Boston Coast Guard LNG regulations includes a two miles ahead and one mile astern exclusion zone while an LNG vessel is underway. It is possible that the Coast Guard would implement this in the shipping lanes outside of Coos Bay as the LNG tanker approached the "K" buoy (see diagram below) and until it crossed the bar at river mile 1. This would further disrupt recreational and

commercial vessels that access the open ocean off Coos Bay if this were to be one of the Coast Guard recommendations.

## **2. Night Operations and the Timing of LNG Transits**

### **Tidal implications and information on night time use of the lower Coos Bay**

Both the DSL permit application PDF page 10 and the FERC DEIS, on page 4-1032 indicate that for the first six months of LNG transits they have to occur during day light hours. This is also documented in both the Coast Guard Waterway Suitability Report and the May 10, 2018 U.S. Coast Guard's Letter of Recommendation (LOR) for the Jordan Cove Energy LNG Project which specify: *"restriction of LNG vessels to daylight transit for at least the first six months, unless approved in advance by the COTP Portland."*

The timing of LNG transits at night, (and also during the day), depends on a number of factors. Two interrelated physical factors are the most important. They are:

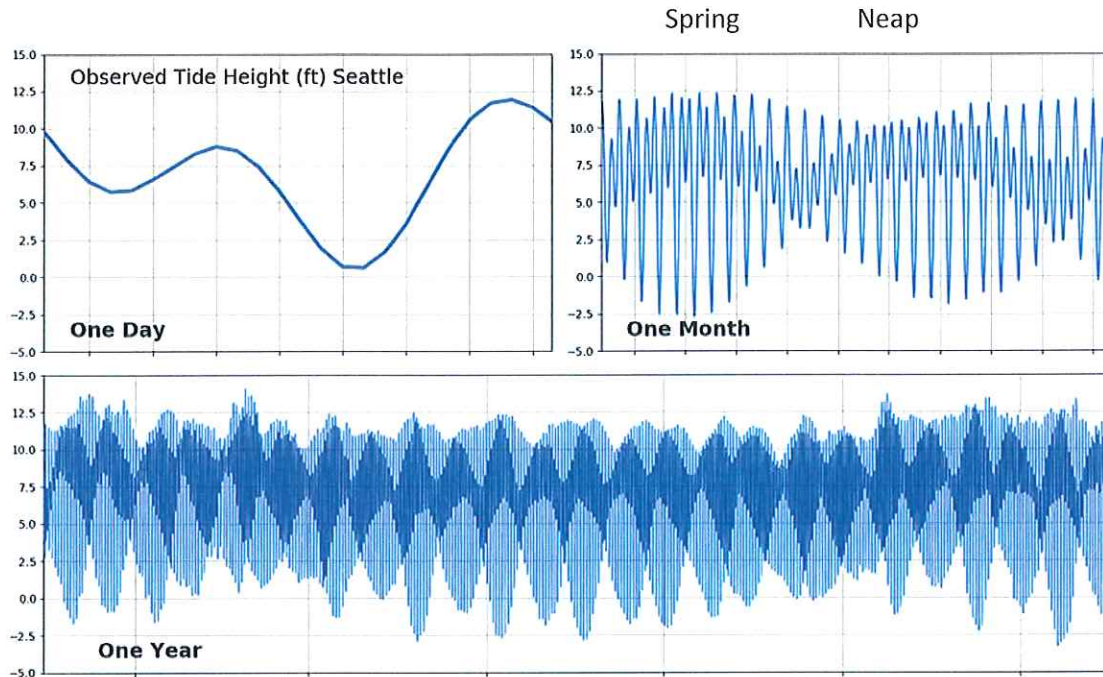
- a. The tidal regime in Coos Bay
- b. The difference between the depth of the Federal Navigation Channel and the access channel and slip that will serve the LNG terminal and the effect on when LNG tankers can transit the bay.

#### **a. The Tidal Regime in Coos Bay**

Coos Bay experiences a semi-diurnal tide regime meaning that there are two high tides every 24 hours and 50 minutes. There is a difference in the height of these high tides, one being higher than the other is. Today for example, Wednesday, September 4, the high tide is at 4:38am (6.46ft), low tide at 10:21am (1.39ft), a second high tide at 4:45pm (7.75ft), and a second low tide at 11:23pm (0.19ft). The higher high tide does not occur at the same time each day because of the sun-moon-earth configuration's effect on the tidal regime.

You asked for clarification on whether variations in tide heights (such as moon phase) factor into the analysis of LNG passage and if both of the daily high tides are available for transits. Below I have included a diagram that explains the tidal rhythms for a semi-diurnal tide that occurs along the entire west coast of the US. It shows:

- a. the daily difference in the height of the two high (and low) tides (hence semi-diurnal)
- b. the monthly rhythm of spring (not the season) tides where highs and lows are the greatest distance apart - in Coos Bay's case a maximum of ~ 12ft and neap tides where highs and lows are not as far apart - in Coos Bay's case a minimum of ~ 3ft
- c. the annual cycle showing that spring and neap tides occur on a two- week period.



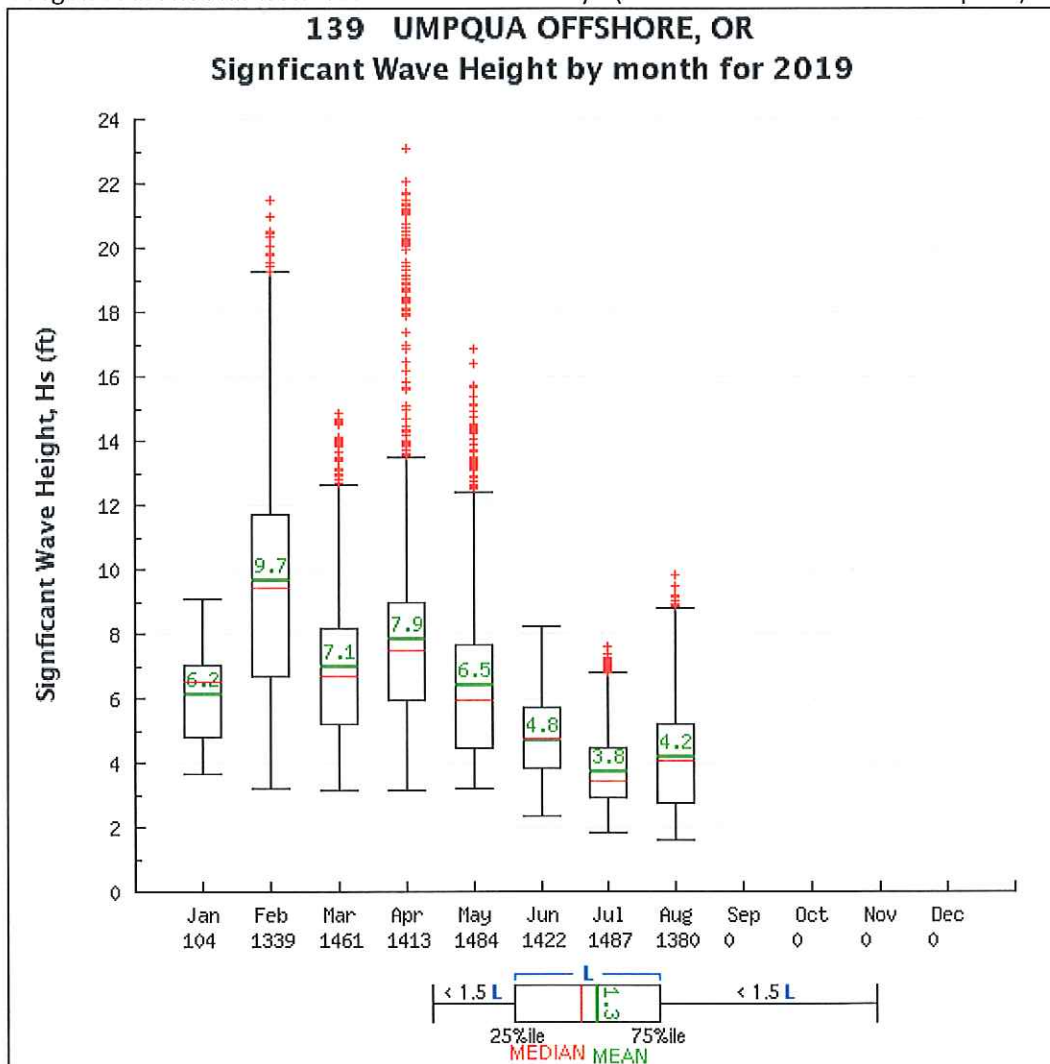
So in summary, a spring tide series occurs twice each lunar month all year long without regard to the season when the sun and the moon are in line with each other. A neap tides series, which also occurs twice a month, happens when the sun and moon are at right angles to each other. However because the lunar day is 24hours and 50 minutes the timing of the high and low tides is different each day. For further information on Charleston tides see: <https://www.tides.net/oregon/484/?year=2019&month=09>

### Why tidal height matters

The Q-Flex LNG tankers slated to be used in Coos Bay have a 12 m (39.4ft) draft and require a 10% under-keel clearance margin for safe passage. This means that an LNG vessel transiting the bay needs water depth of at least 43 ft. Because of the need for sufficient under-keel clearance, LNG tankers will be severely restricted to when they will be able to transit the bay and they will need to coordinate passage with the high tides to ensure they have sufficient under-keel clearance. The DSL permit application (PDF page 9) corroborates this information. It states, "Loaded LNG carriers departing the LNG facility could have a sailing draft approaching or exceeding the current channel navigation depth of -37 MLLW, thus requiring the use of tidal advantage and associated scheduled departure (i.e., loaded vessels would need to transit at slack high tide)."

The significance of the semi-diurnal tidal regime is that during a neap tide series Coos Bay experiences high tides that are only over 6 feet for a few hours. Today for example, Wednesday, September 4, the high tide is at 4:38am (6.46ft), low tide at 10:21am (1.39ft), a second high tide at 4:45pm (7.75ft), and a second low tide at 11:23pm (0.19ft). Due to the depth of the Federal navigation channel (37ft) LNG vessel transit, especially when exiting the bay with cargo, must occur on the higher of the high tides so that there is sufficient under-keel clearance. Even still in the September 4<sup>th</sup> example the 4.38 am 6.46 ft high tide would not have been suitable for vessel transit as it would have not allowed sufficient time for the vessel to travel along the entire Federal Navigation Channel and enter the terminal slip before the tide dropped below 6ft. Thus there are many night time (and daylight) high tides, especially those during the neap tide cycle, that are not suitable for LNG ship transit.

A search of the 2018 Coos Bay tide tables provides information about the number of nighttime higher high tides. It shows that the number of the nighttime higher high tides varies considerably during the year due to the tidal regime. On some months there are very few of these higher high tides at night. For example in January, there are only nine days, in February twelve, September fifteen, November four and December seven nighttime higher high tides. Other months have more, for example April has twenty-two and June twenty-seven. Thus there are many days in some months where LNG tankers will not have sufficient under keel clearance to transit Coos Bay during night time hours and will have to transit during the day. This has serious implications for public trust rights as most users of the bay, and those that cross the bar favor the slack high tides that will be necessary for the LNG vessel transits. Add to this the restriction that the tugs that will accompany the LNG tankers cannot be connected to the ships as they approach Coos Bay if wave heights are over 12 feet and you further restrict the time that LNG tankers can enter Coos Bay. Data from the Umpqua Offshore buoy ( NDBC 46229) located at 43 46.309' (N), 124 32.970' (W), 15.5 nm NW of the Winchester Bay, Oregon entrance shows that in 2019 there were a number of days, particularly in February – May when wave height exceeded 12 feet off the Oregon coast not far from the mouth of Coos Bay. (Note individual red + or box plots).



Data from the Coastal Data Information Program operated by the Ocean Engineering Research Group

(OERG), part of the Integrative Oceanography Division (IOD) at Scripps Institution of Oceanography [http://cdip.ucsd.edu/themes/cdip?tz=UTC&un=1&pb=1&d2=p70&u2=s:139:st:1:v:hs\\_box\\_plot:dt:201908](http://cdip.ucsd.edu/themes/cdip?tz=UTC&un=1&pb=1&d2=p70&u2=s:139:st:1:v:hs_box_plot:dt:201908)

b. The difference between the depth of the Federal Navigation Channel and the access channel and slip that will serve the LNG terminal and the effect on when LNG tankers can transit the bay.

The construction of the terminal's access channel and slip will create a 60-acre, deep-water, sump-like area adjacent to the Federal navigation channel. This will be a major factor in when an LNG ship can transit the bay and whether the LNG operations can occur mostly or typically at night. The LNG terminal access channel and slip will be dredged to a working depth 45ft so that at low tides there is sufficient under-keel clearance to keep the ship floating. The Federal navigation channel, into which the LNG tanker must pass, is dredged to 37ft. The depth discrepancy between the access slip and the navigation channel means that an LNG tanker cannot leave the terminal at tides lower than 6 feet. This will influence the timing of LNG transits, especially exits transits when the ship is loaded.

The tidal regime and the depth of the Federal Navigation Channel seriously restricts the movement of LNG tankers into and out of Coos Bay and it is not possible for all transits to take place at night. This information argues against the acceptance of a condition of approval you suggested requiring all or some portion of the LNG tanker trips to occur at night after the initial familiarization period. Although, if accepted, it would prevent LNG tankers from entering or leaving Coos Bay on a pretty regular basis! It also further shows that the LNG tanker transits will unreasonably restrict the use of, and access to, Coos Bay by the public. It violates the public's right to access a public waterway that the public already fully utilizes and expects to fully utilize in the future.

**Night time use of lower Coos Bay is a common occurrence for several commercial and recreational fisheries.**

You asked for more information about the nighttime use of Coos Bay by vessels. Both commercial and recreational fishing boats cross the Coos Bay bar to fish in the ocean. Below I provide several pieces of evidence that show there are many examples where this occurs outside day light hours, particularly before dawn.

Albacore tuna fishing is an increasing commercial and recreational enterprise out of the Charleston harbor. Data from the Oregon Department of Fish and Wildlife (ODFW) provides information about recreational tuna angler trips by port and month - [https://www.dfw.state.or.us/MRP/.../docs/Tuna\\_Eff\\_Month.pdf](https://www.dfw.state.or.us/MRP/.../docs/Tuna_Eff_Month.pdf) Below is the information for Charleston for recreational tuna fishing Note that trips involve two crossings of the bar – an outward journey to fish and an inward journey to return to the dock, hence the number of trips should be doubled to reflect bar crossings.

**Oregon Dept. of Fish and Wildlife - Ocean Recreational Boat Survey (ORBS)**



**Charleston**

**Estimated tuna fishing effort ( angler trips) by port and statistical month, 2002-2018**

<u>Year</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Season</u>
2002	-	104	-	-	-	104
2003	-	106	469	8	-	583
2004	14	98	311	206	-	629
2005	10	9	-	-	-	19
2006	2	86	63	4	-	155
2007	344	806	608	22	-	1,780
2008	-	133	910	18	6	1,067
2009	6	1,976	910	311	-	3,203
2010	-	37	1,215	416	-	1,668
2011	32	871	1,967	179	28	3,077
2012	61	1,648	1,951	83	-	3,743
2013	46	32	352	-	-	430
2014	-	1,640	1,021	1,275	114	4,050
2015	102	1,060	1,275	214	-	2,651
2016	1,114	1,510	406	442	-	3,472
2017	135	1,791	330	131	-	2,387
2018	250	1,138	558	59	-	2,005

(Note – ODFW angler trips are number of people).

It is obvious from the table that recreational tuna fishing out of Charleston is increasing and is likely to do so in subsequent years for many reasons, some of which include increasing water temperatures that favor tuna off Oregon, increased reliability of boats and engines allowing for faster and safer access to the tuna grounds, and increased promotion of the activity. Preliminary data from ODFW show that in 2019 even more recreational tuna trips were taken (pers.comm. )

To take advantage of calm water conditions before northwest winds pick up recreational boats often leaving before dawn. I can attest to this as I live on the eastern shore of Coos Bay, not far from the Charleston channel, opposite the Coos Bay bar. During summer I am often awakened at 3 or 4 am in the morning by a fleet of recreational boats leaving the Charleston harbor during the period that tuna, is being landed in Charleston.

Other recreational fisheries for such things as salmon, rockfish or halibut will also follow this timing of leaving before dawn again due to the calmer conditions that we experience in morning hours, or because the slack high tides, the safest time for crossing the bar into the open ocean, occur pre-dawn. Table A3 shown below gives an overview of the number of recreational trips that are taken out of Coos Bay/Charleston in 2017. The number of trips should be doubled to reflect the number of bar crossings; in 2017 38,470 recreational fishers crossed the Coos Bay bar 30,776 times and charter boats crossed 7,694 times. Although not documented by ODFW it is safe to say that a certain % of these trips will occur during nighttime hours.

Table A.3  
Recreational Fisheries Trips by Target Species for Ocean and Inland Locations at Port Groups in 2017

Ocean Angler Trips (Charter and Private) by Trip Purpose in 2017

Trips	Salmon	Combination	Bottomfish	Halibut/Tuna	Dive	Total
Astoria	7,908	599	747	260	0	9,514
Garibaldi	5,299	1,134	12,775	2,296	18	21,522
Pacific City	1,168	1,091	5,130	1,096	51	8,536
Depoe Bay	1,372	952	20,235	1,989	26	24,574
Newport	5,519	2,355	25,278	14,710	58	47,920
Florence	991	21	0	370	0	1,382
Winchester Bay	10,007	29	39	760	0	10,835
Coos Bay/Charleston	1,233	494	13,819	3,571	118	19,235
Bandon	95	30	3,418	1,026	0	4,569
Port Orford	-	-	-	-	-	-
Gold Beach	0	0	2,628	59	0	2,687
Brookings	2,006	6	16,582	1,312	185	20,091
Coastwide	35,598	6,711	100,651	27,449	456	170,865
<u>Proportion that is Charter</u>						
Astoria	8%	1%	3%	20%	n/a	8%
Garibaldi	0%	2%	58%	20%	100%	37%
Pacific City	7%	13%	29%	3%	0%	21%
Depoe Bay	36%	25%	83%	41%	0%	74%
Newport	10%	10%	61%	16%	0%	39%
Florence	0%	0%	n/a	0%	n/a	0%
Winchester Bay	0%	0%	0%	0%	n/a	0%
Coos Bay/Charleston	0%	0%	26%	6%	0%	20%
Bandon	0%	0%	53%	19%	n/a	44%
Port Orford	-	-	-	-	-	-
Gold Beach	n/a	n/a	24%	59%	n/a	25%
Brookings	1%	0%	22%	1%	0%	18%
Coastwide	5%	9%	51%	15%	4%	34%

- Notes: 1. A trip is one angler day.  
 2. Recreational crabbing is not included.  
 3. Combination trips target salmon and bottomfish.  
 4. The last year data was available for Port Orford was 2012, and the trips were 24 for salmon, eight combination, 439 bottomfish, 133 halibut, no tuna, and 74 dive. There was no ORBS sampling at Port Orford in 2017.

Source: ODFW (ORBS).

From: Oregon Commercial and Recreational Fishing Industry Economic Activity Coastwide and in Proximity to Marine Reserve Sites for Years 2016 and 2017 The Research Group, LLC. Oregon Commercial and Recreational Fishing Industry Economic Activity Coastwide and in Proximity to Marine Reserve Sites for Years 2016 and 2017. Prepared for Marine Reserve Program, Oregon Department of Fish and Wildlife, November 2018.

Commercial fishermen work throughout daylight and nighttime hours. Their passage in and out of Coos Bay is more dictated by weather and ocean conditions, and the scheduling of the fish buying and the processing plant, than by whether it is day or night. Large trawlers based in Charleston that fish for rockfish and shrimp have strong deck lights that are on constantly. From my house they light up my living room and bedroom at night and I see them return to port at all hours of the night. Likewise the vessels that fish for crab cross the bar at all hours both at the beginning of the season and as the season progresses. The Dungeness crab fishery is a December – August derby fishery in that there is a defined date when all of the fleet can set pots in the ocean, and a defined date on which they can start to pull their pots to retrieve crab. In 2018 for example, these dates were:

73 hr presoak begins (setting gear): January 12, 8:00AM

Start date (pulling gear): January 15, 9:00AM

Information at: [https://www.dfw.state.or.us/MRP/shellfish/commercial/crab/news\\_publications.asp](https://www.dfw.state.or.us/MRP/shellfish/commercial/crab/news_publications.asp)



It is advantageous for fisherman to “claim their space” by setting their gear as soon as possible and this means that this is a 24 hour a day process and boats cross the Coos Bay bar whenever weather conditions permit during this period. Many crab fisherman will take 4 – 10 trips out to sea during the 73 hour presoak period as their boats are not big enough to carry their pot limits (250 – 500 pots depending on permit) at one time. 63 crab boats fished out of the Charleston harbor in 2017 and it took 400 trips out to sea (800 bar crossings) to set their gear (pers. Comm. Nick Edwards, Owner F/V Carter John). As the season progresses boats will also leave and return at all times of the day and night to check gear for crabs, particularly those that have set pots far (10’s of miles) from the during the Coos Bay entrance. In talking with crab fisherman as part of my teaching experience I learnt that some Charleston crabbers set their pots north of Florence, a distance of at least 50 miles one way.

### **3. Nighttime use of the lower bay and Coos Bay bar by barge traffic and dredges.**

Several types of tug- towed barges use the Coos Bay Federal Navigation Channel and undertake transits at night. Maintenance dredging of the Coos Bay Federal Navigation Channel occurs on a regular basis and is carried out 24 hours a day. This will impact the transit of LNG vessels. It is not clear who would have priority over being in the channel when an LNG safety zone overlapped the two types of vessel. An example of how vessel use of the channel happens during maintenance dredging is occurring currently, although as there are no LNG tankers it is not clear how this would be impacted if there were. In 2019 \$9.7 million was allocated by the Army Corps of Engineers to Coos Bay to cover projects, including dredging River Mile 12 to 15 of Coos Bay. American Construction started dredging operations on July 1, 2019. The Coos Bay Port web site states, *“Work will be continuous 24 hours per day, 7 days a week. Contract completion date is set for October 31, 2019. They will be using a clamshell dredge “Patriot” to dredge and load the split hull scows “Liberty” and “Freedom.” This will then be towed by Pacific Tug Company’s “John Brix” to the designated disposal sight(sic)”*. For more information: <https://www.portofcoosbay.com/new-room/2019/6/14/channel-dredging-river-mile-12-to-15>. The designated disposal site is off-shore of Coos Bay and thus the tug and barge have to cross the bar at all hours of the day and night. Concurrent with this activity the Army Corps of Engineers hopper dredges Yaquina and Essayons have been in the lower bay this summer dredging the bar and lower Coos Bay. Both of these dredges work after daylight hours. They sit in the Federal Navigation Channel, suck up sediment and then cross the bar to dump it at the designated disposal site offshore of Coos Bay.

### **4. Number of LNG tanker Trips**

The January 15, 2019 minutes of the Coos Bay Harbor Safety committee provides further evidence that Jordan Cove anticipates 120 port arrivals = 240 transits = 4 to 5/week. (see page 2 of minutes in Exhibit B). The FERC DEIS page 4-597 echoes this number as you mention in your letter to the County, *“As described previously, numerous cargo ships (vessels and barges) would deliver materials to the terminal site during construction and, once in operation, the site would be called upon by up to 120 LNG carriers per year.”*

### **5. Transit Times through the Estuary.**

With the information that there are 240 LNG ship transits with the associated security zone, and that the inward journey can be as long as 180 minutes as you mention in your letter, and that not all tidal regimes are suitable for transit as I have shown above, it is clear that LNG tankers will have a

significant impact on commercial and recreational on-the-water users of Coos Bay. The cumulative impact of these transits is substantial and needs to be considered:

120 trips/year equals 240 transits, each at 180 minutes minimum, assuming no slowing to allow for other vessels to be cleared from the security zone, so the total time that Coos Bay will experience restrictions due to the LNG transits amounts to 30 days = one month each year!  
(240 transits X 180 minutes for transit and turning the vessel = 720 hours = 30 days.)

Even if the outward transit does not require the additional 90 minute turn into the terminal the time that Coos Bay will experience restrictions amounts to 22.5 days each year.  
(120 transits at 90 mins +120 transits at 180 mins = 540 hours = 22.5 days).

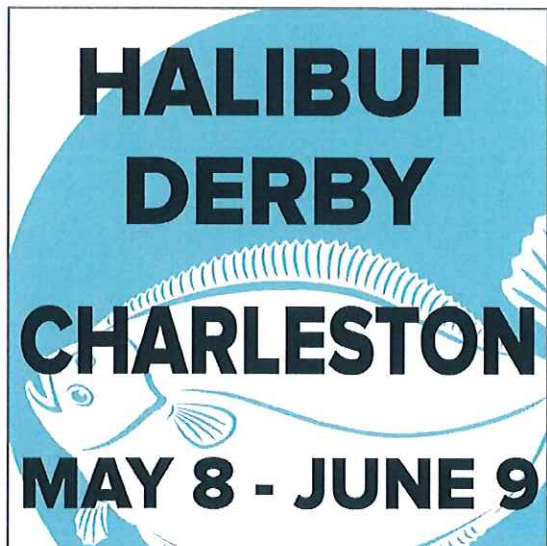
This is a serious amount of time when it will not be possible for those of us who fish, kayak, sail etc. on the lower bay to continue to do so. It will restrict commercial fishing activities and has serious implications for trade and transportation, commerce, employment, tourism and recreational activities. The loss (30 days' worth of time per year) of use and of access to Coos Bay by the public is unreasonable and violates the public's right to access a public waterway that the public already fully utilizes and expects to fully utilize in the future.

## 6. Recreational Use of Coos Bay

Coos Bay is increasingly recognized as a popular site for recreation activities and is being marketed as such by several organizations. Some examples are:

### a. Fishing Derbies

These draw scores of vessels from all over Oregon and many would not be familiar with Coast Guard regulations. Boats launch at the Charleston marina and head out over the bar in a constant stream lasting hours and then return to register their catch by a certain time.

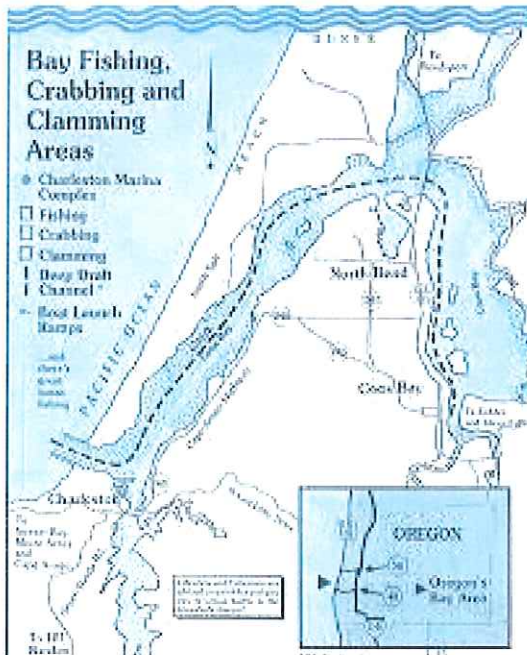


b. Promotion of recreational fishing, crabbing and clamming

In late summer and early fall recreational salmon fishers spend considerable time fishing for salmon in the area of the Coos Bay bar. Just this weekend there were a dozen or more small recreational boats “mooching the bar”. The Afishionados web site explains that this is a popular and productive method for Chinook Salmon Fishing on the Coos River Bar:

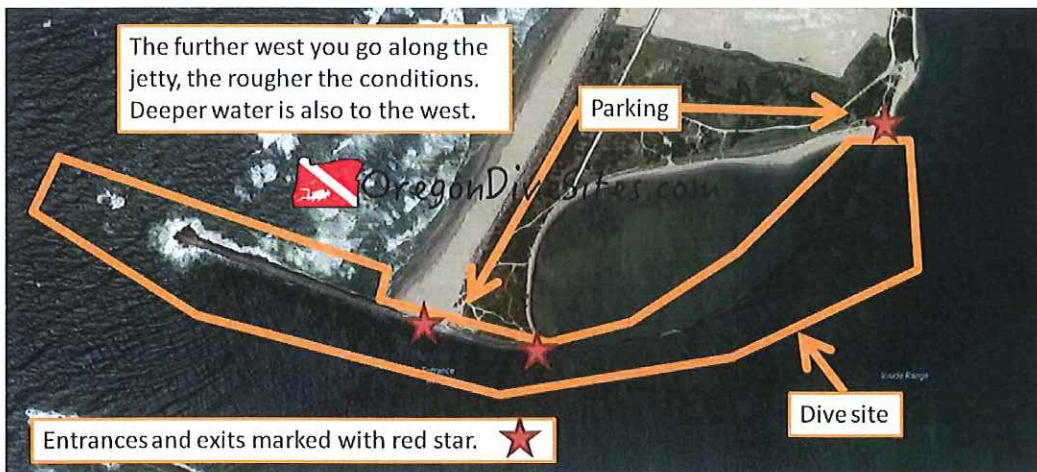
<https://afishionados.net/chinook-salmon/204-trolling-and-mooching-the-coos-river-bar>

Another such example of promotion of recreational fishing by the Port of Coos Bay:



c. Promotion of the Coos Bay bar as a dive site

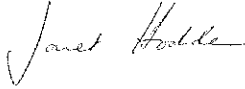
The Oregon Dive web site highlights diving on the north jetty of Coos Bay This is a noted as a shore dive implying there would be no associated boats with diver flags. This would make it very difficult for the Coast Guard to regulate this activity. See: <https://www.oregondivesites.com/coos-bay-north-jetty/>



Hodder response to the August 2019 open record period for County Remand File No. REM-19-001/LUBA Case No. 2016-095

With these comments I have provided further evidence and made it clear that the applicant's proposal to construct an LNG facility in Coos Bay will unreasonably interfere with public trust rights and should be denied by the County.

Sincerely,

A handwritten signature in cursive script that reads "Janet Hodder".

Janet Hodder Ph.D.

Exhibit A: Copy of the June 27, 2019 I mailed to the USCG Commander of the Port 13th Coast Guard District asking about the safety issues

Exhibit B: Minutes of the Coos Bay Harbor Safety Committee January 2019 – sent as a pdf attached to email transmission.

Hodder response to the August 2019 open record period for County Remand File No. REM-19-001/LUBA  
Case No. 2016-095

EXHIBIT A

Jan Hodder  
63840 Fossil Point Road  
Coos Bay  
OR 97420

USCG Commander of the Port  
13th Coast Guard District  
915 Second Ave  
Seattle, WA 98174

June 27, 2019

Dear Commander:

At the recent FERC public hearing for the Jordan Cove project I asked the FERC representatives about the plans for announcing the arrival and departure of the LNG tankers. The FERC representatives informed me that they are not responsible for this aspect of the project and told me the USCG is the cooperating agency that can provide this information and that I should request this information from them.

I live on the eastern shore of Coos Bay almost opposite of the entrance to the Federal navigation channel. I have heard rumors that when an LNG ship enters or leaves the bay there will be several ways in which the public will be informed. They include reader boards at various locations and patrol boats on the bay. Additional I have heard that there will be drone surveillance of the Coos Bay shoreline. I am writing to find out if this is the case. I consulted the waterway suitability analysis that was provided in FERC's draft EIS but could not find anything about how the ship transit will be undertaken.

I would appreciate hearing from you as to this issue.

Yours sincerely,

Jan Hodder  
541-297-0664