March 27, 2014

Col. Bruce A. Estok
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PO Box 3755
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Re: Public Notice and Supplemental EIS Grays Harbor Navigation Improvement Project (NIP)
Via email: graysharborcomments@usace.army.mil

Mr. Joshua Jackson, Col. Estok et al,

Thank you for the opportunity to comment on this project proposed by the Port of Grays Harbor and the Army Corps of Engineers to modify and deepen the navigational channel in Grays Harbor. We hope our input will be of assistance in making decisions that will benefit the economy, environment, visitors and residents of the Chehalis Basin Watershed. We incorporate by reference comments from Brady Engvall, Arnie Martin, the Quinault Indian Nation and U.S. Fish and Wildlife Service.

FOGH is a broad-based 100% volunteer tax-exempt 501(c)(3) citizens group made up of crabbers, fishers, oyster growers and caring citizens. The mission of FOGH is to foster and promote the economic, biological, and social uniqueness of Washington's estuaries and ocean coastal environments. The goal of FOGH is to protect the natural environment, human health and safety in Grays Harbor and vicinity through science, advocacy, law, activism and empowerment.

As we know, the Chehalis basin drains 2,660 square miles and is broken into two separate WIRAs, the upper 23 and lower 22, both of which empty into the Grays Harbor Estuary and the Pacific Ocean. It goes without saying that what happens upstream affects the ecology of those waters downstream. As a result the water-quality, water-quantity and timing of flow are of significant importance to the health and economic vitality of the entire region.

The treaty tribes, such as the Quinault Nation depend on the delicate balance that nature provides to sustain their culture and subsistence. The natural flow of waters during flood events depends upon healthy and natural storage of wetlands and riparian areas. Any interruption of this natural process only exacerbates problems elsewhere - usually downstream or elsewhere in the estuary.

FOGH has considerable concerns about the true intent and need for this proposed project. We question whether the volumes of pages generated by the Supplemental EIS are merely a justification for spending scarce public dollars to benefit a few tenants of the Port.

We are concerned that the DRAFT Limited Reevaluation Report Appendix A: Economic Analysis spent 54 pages (61 PDF pages) discussing the coastwide economic benefits of the project without ever mentioning the word fish, crab, shellfish, clams or oysters. This is despite the fact that 31% of the Grays Harbor workforce depends on healthy marine resources. The percentage of jobs is even higher in Pacific County accounting for 36% of the workforce (Washington's Working Coast, Keystone Project - Spring 2013). The marine resource industries are significant assets to the area and to the State. Why was this important economic sector overlooked and/or ignored in the analysis?

The realignment of the shipping channel is purported to have "minor" impacts. However there doesn't seem to be a discussion on what would change in wave energy and vessel wave dynamics. For example, Sta.998+00 shows that the channel's edge will be approximately 250 - 300 feet closer to the shoreline edge of Bowerman Basin Airfield. The effective width of the channel would increase by about 250 feet (Draft Limited Reevaluation Report Appendix B: Engineering Analysis Page 54, Page 56 PDF). What effect would vessel wake have on the shoreline along the shoreline of Bowerman Field? What differential impacts would this have at various tide heights, during king tide and storm events? How would sea level rise affect the reflective waves from the passing vessel? If the deepened channel allows either for larger vessels or for vessels to be loaded to a greater DWT, what will this change do to the dynamics of energy and force in the channel? Reviewers note: The scale used in the drawings is very difficult to understand and is not user-friendly to the general public.

The EIS admits that the dredge and tugs will emit carbon dioxide and water vapor, but makes light of it saying that it will not be greater than large ocean going ships that call upon the Port of Grays Harbor. However, the dredging to the additional depth is justified to allow greater and more frequent vessels into and out of the Harbor. What would be the increased greenhouse gas (GHG) and noise emissions compared to existing vessel/dredge traffic?

Dredging can also create disturbance to aquatic ecosystems, often with adverse impacts. In addition, dredge spoils may contain toxic chemicals that may have an adverse effect on the disposal area; furthermore, the process of dredging often dislodges chemicals residing in benthic substrates and injects them into the water column, thus impairing water quality.

A study, "Critical Habitat Green Sturgeon Final Biological Report" (October 2009 Grays Harbor, WA) points out that like the lower Columbia River estuary and Willapa Bay, Grays Harbor provides important over-summering habitat for both adult and sub-adult Northern Distinct Population Segments (DPS) and Southern DPS green sturgeon. The essential habitat present in this area include food resources, water flow, water quality, depth, and migratory corridors to support feeding, migration, and aggregation and holding by green sturgeon adults and sub-adults. Some individual green sturgeon spend the entire summer in Grays Harbor, whereas others move between estuaries. The estuary is believed to provide refuge and abundant food resources to support optimal growth potential in green sturgeon (Moser and Lindley 2007). Fishes take up suspended or dissolved metals via their gills, their skin, or their food (Bury et al. 2003). Saltwater species may be more sensitive to environmental contaminants because they drink seawater to maintain osmotic balance, thus adding a pathway for exposure to environment contaminants (Helfman 2007).

The 2012 Grays Harbor Vessel Calls by Design Draft showed a graph indicating that -36 feet easily accommodated 92 vessels, but that 85 vessels called that required a greater dead weight capability. However, only 9 of those would truly benefit from the extra 2 feet dredge depth. The remaining 77 of them still would not be able to fill to their capacity unless the channel was dredged much deeper. What were the commodities of the 85 vessels which required a deeper draft. What was the maximum of product available to them during their visit?

The depth of dredge is not explained well to the reader. Figures like -36 +2 +2 and similar -38 +2 +2 don't explain to the average reader that the effective depth of the channel at -36 is really -40 or that the effective depth of -38 is really -42 feet. If the channel is dredged annually how will this additional depth affect the size of vessels calling to the Port?

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One of the most important fisheries in Washington is the commercial Dungeness crab fishery which has an ex-vessel value of approximately $20 million dollars. Crab mitigation has been a part of the dredging process for several decades. According to a 1992 crab mitigation report it was estimated that 161,561 Dungeness crab (Cancer magister) were entrained and killed by the dredges. The mitigation was to place oyster shells in certain areas of the estuary to provide habitat for developing crab. What has been the success of the mitigation? What additional loss is expected due to the increased depth and the reach into previously undisturbed areas during the modification of the channel? What is the rationale that mitigation can be abandoned or reduced if the cost is too great? Was this the reasoning behind excluding marine resources from the economic analysis?

Oysterlands have been lost due to shifting of sands and overtopping of specific areas within the Harbor. This has become particularly apparent to the shellfish growers since the 1990 straightening of the shipping channel. The DNR has reported that shellfish growers because of losses of shell and seed have abandoned leases totaling at least $57,000 per year. A deeper draft and larger more frequent vessels will undoubtedly exacerbate this problem. What mitigation has been established to help the oystergrowers? What studies have been made to develop baselines for oysterlands and oyster production in the Harbor?

A discussion from the DRAFT Limited Reevaluation Report Appendix B: Engineering Analysis talks about Design Vessel at 4.2 on page 50 (Page 52 PDF) and states: "...Thus the original design intent for representing the majority of the cargo to and from Grays Harbor is still valid." Average departing vessels has a maximum draft of 40.5 feet according to design considerations at 4.1. Since the effective depth of the channel is already at 40 feet (-36 +2 +2) what is the justification for deepening the channel other than to allow larger vessels to accommodate a new commodity? Is this a justification to dig it and they will come?

Appendix A - Economic Analysis presents a discussion about the proposed crude oil terminals that are to be located at the edge of the estuary. Over 2 billion gallons of crude oil from the Bakken Formation and possibly Alberta Tar Sands are planned to be delivered via rail to 3 separate storage facilities. Crude oil railcars traveling from Centralia to Hoquiam would follow the path of the Chehalis River and cross over 100 streams, tributaries, creeks and sloughs along there way. The Chehalis River Flood Plain alone host over 136 miles of shoreline in that 10-mile crossing. The trains would emit carbon dioxide and water vapor along the trip and as they wait to unload their content at the destination. What would be the added impact of greenhouse gas (GHG) emissions from the trains that would be encouraged to head to the Port with the deeper draft?

Channel deepening, widening, regrading and/or realignment alter the physical characteristics of a water body and therefore change the velocity and variability of flows. How will this impact the sediment regime, for example flushing sediment through a straightened system and reducing diversity, or increasing sedimentation in over-widened or deepened reaches? What measures will be taken to maintain/restore the physical forms and processes? What changes can be expected which might adversely affect in-channel habitats for macrophytes, aquatic invertebrates and fish?

In summary

1) Why was the significant sector of marine resources (fish, crab, shellfish, clams, and oysters) not made part of the discussion and comparison of economic benefit to the Harbor and the State?

2) Modification of the channel doesn't discuss impacts of moving the channel closer to the shoreline, nor of allowing vessels to carry greater loads. What is the effect of this to shoreline dynamics? What is the effect of this on riparian zones?

3) What are the GHG emissions expected over today's baseline? What is that baseline? We encourage that before any structural solutions are considered that a long view of the problem and its solutions are instituted for the long-term. Enforcement of existing wetland and forestry rules should be augmented by reviewing culverts, blockages and improper practices.

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4) A deeper draft appears to benefit only a small number of vessels? What commodities require deeper draft?

5) What is the real depth of the channel? If this accommodates only 8 additional ships what is the cost to the public per ship?

6) What is the success of the crab mitigation? What is the additional loss expected as a result of channel modifications in undisturbed areas and deepening?

7) What mitigation is planned for shellfish growers in the harbor? What baseline studies have been made?

8) If the design vessel intent is still valid, what is the justification to dig?

9) Channel deepening, widening and straightening results in altered flows. What is the effect of these changes on macrophytes, aquatic invertebrates and fish? What is the effect of these activities on adjacent riparian zones?

Quite simply we do not see the need for this deepening other than to facilitate the introduction of larger vessels and the movement of crude oil by rail to three proposed terminals. This is not in the best interests of our marine resource industries, the ecology of the waters of the Washington Coast and its estuaries and poses an increased risk to those ecosystems. We believe that trading jobs is not creating jobs

Sincerely,

Arthur (R.D.) Grunbaum
President

Cc: Knoll Lowney

FOGH
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CLEAN WATER HEALTHY ESTUARY

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