

I am an estuary scientist who has lived, worked, and conducted research in the Coos Bay Port district for over 50 years. I'm currently retired after serving for nearly 30 years as the Manager of the South Slough National Estuarine Research Reserve (SSNERR). The SSNERR is located in the South Slough inlet of the Coos Estuary and lies within the port of Coos Bay's district boundaries. During my career I served as an active member of the National Estuarine Research Reserve Association and the Coastal and Estuarine Research Federation, national and international scientific professional organizations focused on improving the management and understanding of estuaries.

I urge you to reject HB 3382 and the proposed amendments to the bill.

CRITIQUE OF WHAT THE AMENDED BILL INCLUDES

Section 2 (1) relating to goal exemption requirements.

Amendment references ORS 197.732 (2)(c)(A) but does not reference sections (B) through (D) of that section or any other sections in the goal exceptions chapter 197.732. The reason for this limited reference to the exemption process in the amendment language is not justified and should not be accepted without explicit language that explains the rationale for not including sections (B) through (D).

Section 2 (1) (a) relating to mitigation requirements.

The mitigation stipulation in the amendment is a red herring! Including a mitigation stipulation implies that mitigating the effects of the dredging work covered under a proposed "exemption" will be practicable or even possible. I submit to you that it will be *impossible* to rationally apply the five-step mitigation hierarchy in ORS 196.800 to the types of activities covered under the provisions of this bill.

The highest priority of the five tier mitigation policies outlined under ORS 196.800 is to avoid the effect of the proposed activity altogether. The existing land use regulations which the sponsors of the bill seek to be exempted from were established for that very reason; to avoid impacts altogether. Therefore, any exemption granted under the provisions of HB 3382 will violate the first, highest mitigation priority standard of ORS 196.800.

Similar arguments can be made for why the four other mitigation standards outlined in ORS 196.800 will be impossible to accomplish. **The point here is that no meaningful mitigation mechanisms exist for the types of effects that will result from the activities outlined in this bill. The bill and the amendments should be rejected for this reason alone.**

Here are two examples to illustrate why mitigation will not be possible.

1. Expanding the width and depth of the navigation channel will irreversibly alter the fundamental movements of sediments and water into and out of these estuaries. Deepening and widening the navigation channel will enhance the inflow of Ocean water during each tidal cycle with ramifications for organisms throughout the estuary that are sensitive to salinity and submergence. Alterations to the salinity and tidal circulation by the types of dredging targeted by this bill means that the salinity characteristics in Oregon's largest estuaries that are presently suitable for organisms such as clams or oysters may no longer be suitable for those organisms

after the dredging work and its associated hydrological modifications is accomplished. There is no mechanism known to mitigate these effects.

2. Deepening and widening the channel and dredging new approaches between the shoreline and the channel will permanently change how sediments move in these estuaries. The activities outlined in the amendment will cut off sources and along shore movements of sediments necessary to maintain the elevations of the tideflats adjacent to the dredged channels. The sediment starving processes resulting from the dredging activities laid out in the amendment will have the effect of gradually drowning the tideflats by lowering them deeper and deeper into the intertidal and subtidal. This is a situation of particular concern in light of the fact that these tideflats are already faced with keeping pace with accelerated rates of sea level rise. Among other things, “drowning” the areas adjacent to navigation channels that run the length of the estuary has serious consequences for rooted vegetation such as eelgrass because eelgrass is highly sensitive to depth and light levels. There is no viable mechanism known to mitigate these effects.

Section 2 (1) (c) (A-E) relating to who is eligible to apply for an exemption.

This amendment reads like a Christmas wish list of eligible applicants. Why have public bodies other than ports such as municipalities been excluded? For example, why have telecommunications projects or seafood processing enterprises or private shipyards or marina operations been excluded? The prescriptive approach taken by the amendment clearly picks winners and losers. A list of this kind should not be developed in the absence of substantial public input. This amendment was developed by a closed group of insiders and clearly lacks the evidence of input from a broader range of interests.

Section 2 (1) (c) (C) excludes fossil fuel exports. Does this mean that fossil fuel imports will be eligible for an exemption? It is highly questionable that NOAA will approve the prohibition of a specific use or activity such as “fossil fuel exports” as an enforceable policy consistent with the provisions of the US Coastal Zone Management Act. The focus of an enforceable policy should be on the effect of an activity not the activity itself. Should the committee choose to move forward with this amendment, the amendment should be modified to exclude both fossil fuel imports and exports.

Section 2 (2) (a) (C) relating to establishing turning basins.

This section of the amended bill is totally unnecessary and should be struck from the language of the amendment. The existing federal navigation channels are already equipped with turning basins. It is not necessary to “establish” a turning basin because navigation channels already have established turning basins that have been designed to for the safe navigation of vessels using the channel.

CRITIQUE OF WHAT THE BILL DOES NOT SAY

The bill lacks mention of or reference to any criteria that will be used to determine if dredging is necessary in the first place. As written, it appears that a determination of need to undertake dredging

will be vested in the judgement of eligible applicants. This is insufficient and wholly unacceptable. This bill should include standards or criteria that must be satisfied in order to establish a need. The standards should also specify who will stand to judge the sufficiency of the statement of need.

The applicant should not be the party to judge need. To demonstrate the insufficiency of placing the applicant in the role of judging the need for new dredging, I offer that the Port of Coos Bay has an unblemished record dating back to April 1921 advocating for more dredging to expand the navigation channel to accommodate ever bigger vessels and increased commerce. Prior to the last “navigational channel improvement” in Coos Bay the Port argued once again that expanding the channel was needed in order to increase shipping volume and increase use by more deep draft vessels. Despite the massive effort and expense invested to expand the channel, the number of vessels and the level of commerce *declined* following the channel expansion project,. This bill should establish criteria that will be used to judge if a need truly exists to expand the channel before any exemption to dredge in Natural Aquatic or Conservation Aquatic zones. HB 3382 presently lacks any criteria to determine need. It should be modified to include standards designed to clearly articulate thresholds that must be met in order to justify an exemption.

The area affected by the dredging work requiring mitigation is not specified.

In soft sediment environments, dredging has telegraphic impacts that go beyond the cut line of the dredged footprint. One process to illustrate this is called “side slope equilibration”. Any person who has attempted to dig a hole in the sand at the beach only to have sand at the margins of the hole being excavated fill in their hole has experienced this phenomenon. The mitigation statute referenced in this amendment is silent on how the aerial extent of the work subject to the mitigation requirements of the exemption will be determined. Will the mitigation be calculated based on the aerial extent of the dredged footprint or on the footprint as well as the telegraphic impacts of the dredging work? This is yet one more example of the inadequacy of the mitigation section and is another reason why the committee should for reject HB 3382.

The time frame used to determine the extent of impacts requiring mitigation is not specified.

The spectrum of impacts on estuarine processes and habitats tied to dredging plays out over varying time scales. For example, the most obvious impacts of underwater blasting are immediate but other response times to dredging disturbance such as the “side slope equilibration” described in the previous paragraph play out over year-long and decadal time scales. HB 3382 should not be passed until it includes stipulations framing the time period/s for which impacts of the work covered by an exemption will be identified as requiring mitigation.

Request for additional amendments to HB 3382

The highly prescriptive amendments to HB 3382 presented to date were developed without thoughtful or thorough vetting and read more like a Christmas wish list for the ports than a rational well consider legislative proposal. If the committee chooses to move HB 3382 forward, I request that the committee adopt additional prescriptive amendments designed to place some meaningful sideboards on the activities this bill seeks to authorize. The following amendment requests are designed to reverse the

longstanding trend in Oregon's estuaries where each new "navigational improvement project" and each new shoreline development project further degrades estuarine habitats and functions.

1. I have made a demonstrable case above that "conventional" mitigation as specified in ORS 196.800 is unattainable in this case. Before any exemption is granted, I propose that HB 3382 be amended to stipulate the kind/s of actions that will be required in situations where no meaningful means of mitigation is possible. Recognizing that over 90% of the tidal wetlands in the three estuaries identified in HB 3382 have already been lost or altered and, further recognizing that the areas lost are the very areas that will be impacted by sea level rise, I propose that the committee adopt an amendment that requires new projects to make regular, ongoing payments to finance implementation of climate resilience plans for every deep draft estuary subject to an exemption. The "climate resilience payments" imposed as a condition of each exemption should be indexed to payroll or gross receipts of the projects requiring an exemption.
2. I request that the committee introduce an amendment requiring recipients of an exemption to restore five acres of historic estuary habitat for each acre of new dredging impact. This amendment will require all applicants granted an exemption to restore an area of historically lost habitat that is five times the aerial extent of the impact area of the dredging.
3. I request that the committee introduce an amendment requiring new dredging that requires all exemptions to include a risk assessment demonstrating the climate impact of each exempt project granted an exemption as well as an earthquake/tsunami risk assessment and hazard mitigation plan for the employees and the facility tied to the exemption.
4. **No exemptions should be granted for new dredging projects that require underwater bedrock blasting in Oregon estuaries.** I request that the committee introduce an amendment that excludes underwater blasting as an eligible "reason" for an exemption.

When the Coos Bay federal navigation channel was last expanded in the late 1990's to a depth of -37' and a width of 300', it was necessary to blast bedrock from significant portions of the channel bottom to achieve the desired depth and width. Any further expansion of the depth and width of the navigation channel authorized by HB 3382 will involve even more extensive bedrock blasting than occurred when the channel was expanded to the current depth and width. A 2022 grant application submitted by the Port of Coos Bay to the US Department of transportation requested \$459,974,650 for "Channel Modification Costs". Of that total, \$258,227,000 is designated as "Rock Dredging."

The dredging activities sanctioned by passage of HB 3382 will involve bedrock blasting in areas presently zoned "Natural Aquatic" and "Conservation Aquatic" in the federally approved Coos Bay Estuary Management plan. These areas have been recognized as being the most significant areas in the estuary since the plan was adopted in the 1980's. Passage of HB 3382 will have the effect of authorizing bedrock blasting in areas that, for the past 50 years have been recognized as having the highest biological significance in the entire estuary. The habitats that are subject to HB 3382 are some of the last remaining vestiges of undisturbed habitats in the estuary. There is no means available to mitigate the impact of blasting habitats that have been undisturbed for the entirety of the Coos Estuary's 10,000-year history.