TACOMA HARBOR, WA
FEASIBILITY STUDY
PIERCE COUNTY, WASHINGTON

APPENDIX E – PUBLIC COMMENTS

April 2022

US Army Corps of Engineers®
Seattle District

Port of Tacoma

1 Introduction

This document responds to comments received on the Tacoma Harbor, WA Draft Feasibility Report and Environmental Assessment (IFR/EA) by the U.S. Army Corps of Engineers (Corps). Comments were submitted verbally at the public meeting held in Tacoma, Washington, on January 15, 2020. Comments were also received in writing through letters and electronic mail. The Corps received a total of 72 comment submittals. Of those, 69 comments were received during the 60-day open public comment period of December 18, 2019, through February 16, 2020. One comment (E42) was submitted by the Puget Sound Pilots prior to this period with the request to consider it as their comment on the draft IFR/EA.

2 Environmental Review Process

On December 18, 2019, the Corps released the Draft Integrated Feasibility Report and Environmental Assessment for public review. Printed copies of the draft IFR/EA were available for public review at local public libraries. Additionally, the documents were available for public review on the Corps' website:

https://www.nws.usace.army.mil/Missions/Civil-Works/Programs-and-Projects/Projects/Tacoma-Harbor-Navigation-Improvement/

The public review and comment period on the draft IFR/EA began on December 18, 2019, and closed on February 16, 2020. The Corps held one public meeting with two sessions (early afternoon and evening) to receive public comment on the draft IFR/EA and appendices at the Moore Branch of the Tacoma Public Library in Tacoma, Washington, on January 15, 2020.

3 Document Organization and List of Commenters

This document contains copies of comments received during the comment period followed by the Corps' responses to those comments. Each comment is numerically coded in the margin of the comment letter, based on the order of the comments presented in the letter. The comments and responses are presented as follows:

- Master Responses (Section 4)
- Comments received at the public meeting with responses (Section 5)
- Comments by email with responses (Section 6)
- Comments by mail with responses (Section 7)

A total of 72 comment submittals were received on the Draft Feasibility Study and Environmental Assessment. Each comment submittal was given a comment identification code. 21 comments were provided verbally at the January 15, 2019, public meeting. These comment submittals are identified as PM1 to PM21. 42 comments were provided by email; these submittals are identified as E1 to E42. The remaining 9 comments were received by postal mail; these submittals are identified as M1 to M9. Each comment submittal is listed below in Table 1.

Table 1: Public Comment Submittals received on the Tacoma Harbor Navigation Improvement Project Draft Feasibility Report and Environmental Assessment

Comment Identification	Date Received	Commenter	Organization/Affiliation
Comments received at the November 5, 2019, public meeting			
PM1	15-Jan-2019	Kathy Lawhon	Private Citizen
PM2	15-Jan-2019	Michael Washington	Tacoma Water
PM3	15-Jan-2019	Marilyn Kimmerling	Private Citizen
PM4	15-Jan-2019	Nikie Walters	Private Citizen
PM5	15-Jan-2019	Diane Wahcup	Private Citizen
PM6	15-Jan-2019	Beverly Christie	Private Citizen
PM7	15-Jan-2019	Claudia Riedener	Private Citizen
PM8	15-Jan-2019	Valerie Chu	Private Citizen
PM9	15-Jan-2019	Claudia Riedener	Private Citizen
PM10	15-Jan-2019	Nikie Walters	Private Citizen
PM11	15-Jan-2019	Kathy Lawhon	Private Citizen
PM12	15-Jan-2019	Barbara Berntsen	Private Citizen
PM13	15-Jan-2019	Nikie Walters	Private Citizen
PM14	15-Jan-2019	Kathy Lawhon	Private Citizen
PM15	15-Jan-2019	Debbie Tome	Private Citizen
PM16	15-Jan-2019	Marlene Crumpton	Private Citizen
PM17	15-Jan-2019	Jacqueline Johnston	Private Citizen
PM18	15-Jan-2019	Larry Gverie	Private Citizen
PM19	15-Jan-2019	Charles Valdez	Private Citizen
PM20	15-Jan-2019	Nikie Walters	Private Citizen
PM21	15-Jan-2019	Kathy Lawhon	Private Citizen
Comments received via email			
E1	24-Dec-2019	Rachael Behrens	Private Citizen
E2	15-Jan-2020	Joyce Mercuri	Ecology Southwest Regional Office
E3	16-Jan-2020	Mark Miller	MacMillan-Piper
E4	16-Jan-2020	Monique Valenzuela	Tacoma Youth Marine Center
E5	28-Jan-2020	Linda Smith	Lakewood Chamber of Commerce

Comment Identification	Date Received	Commenter	Organization/Affiliation
E6	28-Jan-2020	Tony Belot	Schnitzer Steel
E7	3-Feb-2020	Patrick Demere	Private Citizen
E8	3-Feb-2020	Nancy Hausauer	Private Citizen
E9	3-Feb-2020	Mark Schuster	Lamb Weston
E10	11-Feb-2020	Michael Washington	Tacoma Water
E11	11-Feb-2020	Virginia Briggs	Private Citizen
E12	11-Feb-2020	Nancy Farrell	Private Citizen
E13	11-Feb-2020	Lynn Di Nino	Private Citizen
E14	11-Feb-2020	Elly Claus-McGahan	Private Citizen
E15	11-Feb-2020	Ron Park	Private Citizen
E16	11-Feb-2020	Chris Wooten	Private Citizen
E17	11-Feb-2020	Sharon Sheldon	Private Citizen
E18	12-Feb-2020	Penny Rowe	Private Citizen
E19	12-Feb-2020	Caroline Bently	Private Citizen
E20	12-Feb-2020	nanpeele@hotmail.com	Private Citizen
E21	13-Feb-2020	Maren Ellingson	Private Citizen
E22	13-Feb-2020	Kirk Kirkland	Tahoma Audubon Society
E23	13-Feb-2020	Tony Warfield	Northwest Seaport Alliance/Port of Tacoma
E24	14-Feb-2020	Lisa Anderson	Puyallup Tribe of Indians
E25	14-Feb-2020	Patrick Babbitt	Private Citizen
E26	14-Feb-2020	Catherine Killduff	Center for Biological Diversity
E27	14-Feb-2020	Barbara Berntsen	Private Citizen
E28	14-Feb-2020	Nicole Nowman	City of Tacoma
E29	14-Feb-2020	Andy Bartels	Private Citizen
E30	14-Feb-2020	Erin Dilworth	Citizens for a Healthy Bay, Tacoma Chapter of the Climate Reality Project, Puget Soundkeeper, Sierra Club, and Washington Environmental Council
E31	15-Feb-2020	Mtlandholm	Private Citizen
E32	15-Feb-2020	Derek Dexheimer	Private Citizen
E33	15-Feb-2020	Pam Beal	Private Citizen
E34	16-Feb-2020	Mark Knight	Private Citizen

Comment Identification	Date Received	Commenter	Organization/Affiliation
E35	16-Feb-2020	Dr. Louisa Beal and Dr. Pamela Beal	Private Citizens
E36	16-Feb-2020	Abby Barnes	WDNR
E37	16-Feb-2020	Mona Lee	Private Citizen
E38	16-Feb-2020	Barbara Menne	Private Citizen
E39	16-Feb-2020	Rayna Holtz	Private Citizen
E40	17-Feb-2020	Jacqueline Johnston	Private Citizen
E41	18-Feb-2020	Theo Mbabaliye	EPA
E42	18-Sept-2019	Capt. Eric vonBrandenfels	Puget Sound Pilots
Comments received via postal mail			
M1	10-Jan-2020	Gary Coy	Sperry Ocean Dock
M2	21-Jan-2020	Lisa Brown	WA Department of Commerce
M3	23-Jan-2020	Kris Johnson	Association of WA Business
M4	23-Jan-2020	Dan Gatchet	Freight Mobility Strategic Investment Board
M5	23-Jan-2020	Roger Millar	WA Department of Transportation
M6	3-Feb-2020	Norman Gollub	Foss Waterway Development Authority
M7	3-Feb-2020	Jared Faker	International Longshoremen's and Warehousemen's Union
M8	3-Feb-2020	Todd Fryhover	WA Apple Commission
M9	6-Feb-2020	Laurie Jinkins	State of WA House of Representatives

4 Master Responses

A review of the comment letters received on the draft IFR/EA and Appendices revealed some comments were made frequently, demonstrating a common concern among those submitting written comments. In some cases, the array of similar comments about a topic provided more clarity about a specific issue than any single comment. To allow the presentation of a response that addresses all aspects of these related comments, the Corps prepared master responses for those topics raised in several comments. These master responses are intended to allow a well-integrated response that addresses all facets of an issue, in lieu of piecemeal responses to individual comments that may not have portrayed the full complexity of the issue.

When applicable, the individual responses to comments cross-reference an applicable master response to provide additional explanation and information. In some cases, a master response may fully respond to the individual comment.

Master responses are provided for the following issues raised in comments received on the Draft IFR/EA and Appendices:

- Comments related to contaminated groundwater or sediment at Model Toxics Control Act (MTCA) sites (Master Response 1)
- Comments related to resuspension of unsuitable material and uptake by seafood and benthic organisms (Master Response 2)
- Comments related to sediment characterization and Dredged Material Management Program procedures (Master Response 3)
- Comments about the appropriate National Environmental Policy Act (NEPA) document (Master Response 4)
- Comments related to beneficial use of dredged material at Saltchuk (Master Response 5)
- Comments on vessel movement after deepening the Blair Waterway (Master Response 6)
- Comments related to Puget Sound Energy Liquified Natural Gas (LNG) facility (Master Response 7)

4.1 Master Response 1, Hazardous, Toxic, and Radioactive Waste (HTRW) sites, Management of Unsuitable Material, and contaminated groundwater or sediment

For contaminated sediments that the Corps considered hazardous, toxic, and radioactive waste (HTRW), a thorough Phase 1 Environmental Site Assessment was conducted during the feasibility study to identify those locations where HTRW material is present and documents potential impacts to known or suspected sources of environmental risk or liability on the proposed project site, and in the surrounding areas in accordance with ASTM Standard D6008, Standard Practice for Conducting Environmental Baseline Surveys (2014; see Appendix H).. The Corps is and will continue to coordinate with the appropriate regulatory agencies to ensure the federal action for proposed widening and deepening of the federal navigation channel would not disturb HTRW material. See Section 4.10 of the IFR/EA, and Appendix H for further

information regarding continuing assessment and coordination to address HTRW concerns as the design and project footprint is finalized as part of the Pre-construction, Engineering, and Design (PED) phase of the project. The Corps also proposes to conduct a Phase II Environmental Site Assessment during design for any areas that need further characterization regarding the nature and extent of HTRW material. For sediments that are characterized as unsuitable by the Dredged Material Management Program (DMMP), the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension.This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Dredged material that is characterized as unsuitable will be placed in an upland disposal facility. Additionally, the Corps will comply with water quality monitoring consistent with requirements of the Clean Water Act (CWA) and its implementing regulations, which will require water quality parameters to stay within a certain range to address applicable water quality standards.

4.2 Master Response 2, Resuspension of unsuitable material

In general, any dredging project will experience some degree of sediment resuspension into the water column. A full DMMP sediment characterization will be conducted in advance of conducting any dredging, which will provide extensive evaluation of sediments to be dredged, along with the potentially associated contamination. See Section 5.3.1 of the IFR/EA which sets forth recommendations and assumptions from the DMMP advisory determination that will be incorporated into the final design. Results of the full DMMP suitability sampling conducted in PED will be coordinated with EPA R10 and Toxics Cleanup Program at Ecology to determine if any results warrant regulatory action. Where sediments are found unsuitable for open-water disposal, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps will comply with water quality monitoring consistent with the requirements of the CWA and its implementing regulations, which will require water quality parameters to stay within a certain range to address water quality standards. Maintaining water quality standards limits the amount of turbidity and, therefore, the amount of suspended sediment.

4.3 Master Response 3, Sediment characterization and DMMP procedures

The IFR/EA addresses sediment characterization and the DMMP process at Section 5.3; and further coordination is identified in Section 5.9.3. Full sediment characterization of the proposed dredged material from the Blair Waterway will occur under the Dredged Material Management Program as part of the Pre-construction, Engineering, and Design (PED) phase of the project. The feasibility-level (i.e., early design stage) advisory characterization memorandum is available at https://www.nws.usace.army.mil/Missions/Civil-Works/Programs-and-Projects/Projects/Tacoma-Harbor-Navigation-Improvement/ and Appendix B. The most up-to-date DMMP User Manual, in combination with existing information on sources and past characterization data, will be used to determine project testing requirements during PED. The

DMMP User Manual is updated periodically through the Sediment Management Annual Review Meeting public process. For general information on the DMMP, please visit https://www.nws.usace.army.mil/Missions/Civil-Works/Dredging/.

4.4 Master Response 4, National Environmental Policy Act Process (NEPA) and Environmental Compliance

Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The Corps analyzed the effects of the proposed alternative during the three-year feasibility study and reported them in detail in the Feasibility Report/Environmental Assessment (IFR/EA). The purpose of the IFR/EA was to comply with NEPA requirements to identify and analyze environmental effects of the alternatives, incorporate environmental concerns into the decision-making process, and to determine whether any environmental impacts are significant and warrant the preparation of an EIS.

Corps Planning Policy and NEPA emphasize public involvement in government actions affecting the environment by requiring the benefits and risks associated with the proposed actions be assessed and publicly disclosed. In accordance with NEPA public involvement requirements (40 C.F.R. § 1506.6) and Corps Planning policy (ER 1105-2-100), the Corps presented opportunities for the public to provide oral or written comments on potentially affected resources, environmental issues to be considered, and the agency's approach to the analysis. Efforts to involve the public included a notice of preparation of an EA with a 60-day public comment period issued December 21, 2018, and a public information meeting with two sessions (morning and evening) held January 17, 2019, soliciting relevant scoping information from the public and explaining procedures of how interested parties can get information on the planning process. The Corps released the draft IFR/EA for a 60-day public comment period beginning December 18, 2019. The Corps held a public information meeting with two sessions (early afternoon and evening) on January 15, 2020, to present the TSP to the public and collect written and oral comments. The Corps, Public Affairs Office, notified more than 20 media outlets of scoping activities and public review opportunities. This level of documentation and public involvement is consistent with other navigation channel deepening studies.

An environmental impact statement (EIS) is not necessary because the Corps used information gathered during scoping, meeting with natural resource agencies, public comments, and research to identify resources evaluated in detail for potential effects of dredging the Blair Waterway in the EA. The Corps determined that the effects of the action will not be significant. The Corps will review the need for supplemental NEPA documentation as further analysis and design is refined during Pre-Construction, Engineering, and Design Activities (PED).

Section 6 (Compliance) of the IFR/EA main report lists how the preferred alternative complies with all applicable Federal laws, statutes, and executive orders. This includes the CWA, Endangered Species Act, Executive Order 13175 Consultation and Coordination with Indian

Tribal Governments, National Historic Preservation Act, and many others. The Corps has reaffirmed its long-standing commitment to environmental conservation by formalizing a set of Environmental Operating Principles (EOPs) applicable to decision-making in all programs. The EOPs outline the Corps' role and responsibility to sustainably use and restore our natural resources in a world that is complex and changing. The recommended plan meets the intent of the EOPs. In coordination with agencies, tribes, and stakeholders, the Corps proactively considered the environmental consequences of the proposed deepening project. The project will be constructed in compliance with all applicable environmental laws and regulations.

4.5 Master Response 5, Saltchuk

The purpose of placing material at Saltchuk is the beneficial use of dredged material to improve habitat conditions for Endangered Species Act-listed salmonids and benthic organisms. Placing dredged material at Saltchuk is not compensatory mitigation for deepening the Blair Waterway. The Corps has elected not to incorporate compensatory mitigation into the project design based on the Corps' determination that adverse effects of the proposed project would either be short-term and temporary, or, if permenant in nature, they would only have insignificant and discountable effects to environmental resources given existing conditions. There is no loss of wetlands, no significant adverse effects to ESA – listed species or their designated critical habitat, and no significant impacts to commercially important species or protected marine mammals based on the analysis in the IFR/EA and supporting documentation. While not the least cost for disposal, placement of dredged material at the Saltchuk site has the potential to produce a long-term beneficial effect on the Chinook salmon population and therefore SRKW prey resources because it would create and improve rare and highly valuable nearshore zone rearing and migrating habitat, which is lacking in Commencement Bay. Providing 64 acres of rearing habitat would increase survival of the Puyallup River Chinook salmon population in the future.

In recognition of the potential negative effects, although short-term and temporary, the Corps will avoid and minimize effects by incorporating all applicable Best Management Practices (BMPs) as described in section 4.7 (Water Quality), section 4.11 (Hazardous, Toxic, and Radiological Waste), and section 4.18 (Public Health and Safety) of the IFR/EA. Endangered Species Act (ESA) Section 7 consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) is complete (Section 6.2 and Appendix D of the IFR/EA). USFWS concurred with the Corps' effect determinations of "not likely to adversely affect" (NLAA) listed species on February 2, 2022 (Appendix D). NMFS issued a BiOp February 16, 2022 (Appendix D), which concurred with the Corps' effects determinations except NLAA for steelhead; instead, NMFS determined the action is likely to adversely affect steelhead. In addition, NMFS' action area extends farther into Puget Sound where Humpback whale, Central America DPS and Mexico DPS, could be present and determined the action is NLAA the species whereas the Corps determined the action would have no effect.

The Corps will continue to coordinate with the NMFS and USFWS as part of ESA Section 7 consultation. Sections 6.2 (ESA) and 6.9 (EFH) of the IFR/EA contain monitoring and coordination the Corps has committed to as a result of ESA consultation. A full sediment characterization will be conducted for all dredged material in PED to determine suitability for in-water placement, or upland disposal. Applicable BMPs would be implemented while dredging sediment unsuitable for open-water disposal to avoid and minimize effects of unsuitable sediment. Vessel effects to marine mammals appear in sections 4.14, 4.15, and 4.16 of the IFR/EA.

4.6 Master Response 6, Vessel Movement

There is inherent uncertainty involved in estimating total vessel calls at Tacoma Harbor over the study period. Variation in the market can lead to year-to-year changes in cargo volumes and vessel calls. As a result, the study focuses on long-term trends and includes sensitivity analyses to account for the full range of potential operations at Blair Waterway over the study period.

The vessel forecast developed for this study focuses on future containership trade and containership calls. The study estimates significant growth in both containerized trade volumes and containership vessel calls. The proposed project of deepening from -51 feet MLLW to -57 feet MLLW works to improve containership loading efficiency by allowing containerships to load more cargo on import and export legs. When containerships load vessels with more cargo, fewer total trips are required to transport the same containerized tonnage. This represents a reduction in total transportation costs, which leads to a national economic development benefit.

The Corps does not anticipate that channel deepening in the Blair Waterway from -51 MLLW to -57 MLLW will change the frequency of large, Post-Panamax vessel calls (+12,000 TEU capacity). These vessels are capable of transiting the waterway without channel deepening. The Blair Waterway already receives vessel calls with TEU capacity exceeding 13,000 TEUs. With or without a project, these vessels will continue to call. The project allows these vessels to call more efficiently with more tonnage onboard per call, potentially leading to fewer overall calls at Port of Tacoma. Given the assumption of no change in call frequency of the largest vessel classes (12,000 TEU capacity and larger)(as they will be more efficiently loaded) combined with fewer smaller-class vessels (less than 10,000 TEU capacity)(as there will be a reduced need for these smaller vessels), the Corps expects this project to reduce overall long-term vessel noise and ship strike frequency with an assumed decrease of 27% in overall vessels calling on the port by 2035, and therefore reduce negative effects to marine mammals from container ships.

In all scenarios, the study team anticipates a reduction in total vessel calls to the Port of Tacoma with the proposed widening and deepening. Channel deepening from -51 MLLW to -57 MLLW does not change the market forces that drive commodity demand. Additionally, vessel deployment is a firm-level decision based on fleet availability, new builds, vessel scrap rates, and utilization rates by trade lane. As a result, the proposed project does not change the long-

term trend toward large vessel use at Tacoma Harbor, and the study team does not anticipate that the channel deepening will induce vessel movement to Blair Waterway. Instead, the project allows carriers to load vessels more efficiently, leading to the potential for fewer overall vessel calls. This results in transportation cost savings and reduced channel congestion at Tacoma Harbor.

4.7 Master Response 7, Puget Sound Energy Liquified Natural Gas (LNG) facility

Several comments raised questions about an association and timing of the feasibility study of navigation improvements to Tacoma Harbor and the Puget Sound Energy liquefied natural gas (LNG) facility. Puget Sound Energy is building a (LNG) facility at the Port of Tacoma. The permitting process for that facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor feasibility study evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility.

Coordination of feasibility studies can begin years in advance when the non-Federal sponsor sends a letter to the Corps to request planning assistance. A feasibility study does not begin until Congress appropriates funding (i.e., sets money aside for a specific purpose) for the Corps to perform the study, and the Corps and non-Federal sponsor execute a feasibility cost-share agreement to conduct the study. Although the Port of Tacoma may have sent requests for the Tacoma Harbor Navigation Improvement Project to the Corps several years ago, the feasibility study itself and, therefore, public involvement through the NEPA process for the feasibility study did not begin until 2018.

Puget Sound Energy's LNG facility will be used to fuel ships and provide natural gas to residential and commercial customers during peak cold weather demands. While concerns were raised about the possibility of the LNG facility being used to export fuel, it will not be used for exports. The facility is too small to produce enough LNG for export. After Totem Ocean Trailer Express (TOTE) Maritime Alaska's use is taken into account, it would take six months to fill a small, 90,000-cubic-meter tanker and more than a year and a half to fill a 220,000-cubic-meter Q-Max LNG carrier. It takes about a week for a typical LNG carrier load and unload. Therefore, LNG export would not be an efficient use of the LNG facility.

About 6 million of the 8 million gallons of liquid natural gas will be set aside to provide natural gas to local customers during winter's peak demand. TOTE's contract calls for about 900,000 gallons of LNG each week for its two ships. Additional information about Puget Sound Energy's LNG facility is here: https://www.portoftacoma.com/puget-sound-energy-lng-facility.

5 Comments Received at the January 15, 2019, Public Meeting and Responses

A full transcript of the public meeting is attached at the end of this document (Attachment 1). The following includes clipped images of the comments in which the questions have been labeled and the correspondingly labeled responses.

5.1 Public Comment PM1—Kathy Lawhon

MS. LAWHON: So from my personal study and understanding of the geopolitical situation with LNG, I believe this is all about PSE and LNG and export. In the last meeting a year ago, I asked someone, I believe it was somebody from the Corps that answered, how far back did these discussions go? And they go back -- basically at that point 2007 and 2008 and that's about when things really started to crank up, and, you know, we were still kept in the dark because of course everything about LNG is just lying and obfuscating and dismissing from the news because we were right, and they know it and they can't get away with this stuff. The can't keep doing what they are doing.

The fire department ran a model of what would happen in an earthquake, tsunami, lahar, and some of the possible things that could happen there, and they found the interruption zone to be 12.6 miles. And the city withheld that information for three years without telling anybody. So we are not being protected. We are being

PM1-1

Page 6

lied to constantly. I don't believe this is, you know, bigger and better or whatever. By the way, at some point the environment can't keep taking bigger and better all the time. That's one thing.

PM1-2

Another thing is the Tribe initially -- the Puyallup Tribe did express concern about digging up all of these toxins that you want to put over there at Saltchuk and call it, I don't know, roses. They expressed concern about that, so I would like to know what's going on with that.

PM1-3

I want to know why the media is not here. I want to know why he has not answered questions. This is odious, and the whole thing has been all along.

PM1-4

This has got to be about export and LNG. The geopolitical situation demands it. The prince of LNG has plummeted. It's not been profitable for ten years, even though it's gone all over the world which tells you it's probably corrupt, number one.

And then the second thing is that it's -- they've lost almost 50 percent, 40 to 50 percent of the value in one year alone of LNG. It's not profitable. It's crazy dangerous. It comes from fracking which is killing our planet. Enough is enough. And expand, expand, expand, at some point becomes something that this climate and our world cannot sustain anymore. The young people are

PM1-5

Page 7

saying this and we need to listen, and this is bullshit.

PM1-6

5.1.1 Responses to Comment Letter PM1

PM1-1: Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for this facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study has evaluated potential cumulative impacts to include existing and known planned facilities and activities, which include the Puget Sound Energy LNG facility (see IFR/EA main report, Chapter 4).

Coordination of feasibility studies can begin years in advance when the non-Federal sponsor sends a letter to the Corps to request planning assistance. The feasibility study does not begin until Congress appropriates funding (i.e., sets money aside for a specific purpose) for the Corps to perform the study, and the Corps and non-Federal sponsor execute a feasibility cost-share agreement to conduct the study. Although the Port of Tacoma may have sent requests for the Tacoma Harbor Navigation Improvement Project to the Corps several years ago, the study and, therefore, public involvement did not begin until 2018.

PM1-2: Please see Master Responses 4 and 6.

PM1-3: Coordination with the Puyallup Tribe of Indians, including Government-to-Government consultation, has been ongoing and will continue through the PED phase and construction.

PM1-4: Corps Planning Policy and NEPA emphasize public involvement in government actions affecting the environment by requiring the benefits and risks associated with the proposed actions be assessed and publicly disclosed. In accordance with NEPA public involvement requirements (40 C.F.R. § 1506.6) and Corps Planning policy (ER 1105-2-100), the Corps presented opportunities for the public to provide oral or written comments on potentially affected resources, environmental issues to be considered, and the agency's approach to the analysis. Efforts to involve the public included a notice of preparation of an EA with a 60-day public comment period issued December 21, 2018, and a public information meeting with two sessions (morning and evening) held January 17, 2019, soliciting relevant scoping information from the public and explaining procedures of how interested parties can get information on the planning process. The Corps released the draft IFR/EA for a 60-day public comment period beginning December 18, 2019. The Corps held a public information meeting with two sessions (early afternoon and evening) on January 15, 2020, to present the TSP to the public and collect written and oral comments. The Corps, Public Affairs Office, notified more than 20 media outlets of scoping activities and public review opportunities.

PM1-5: Please see response to PM1-1.

PM1-6: Please see response to PM1-1 and Master Response 6.

5.2 Public Comment PM2—Michael Washington

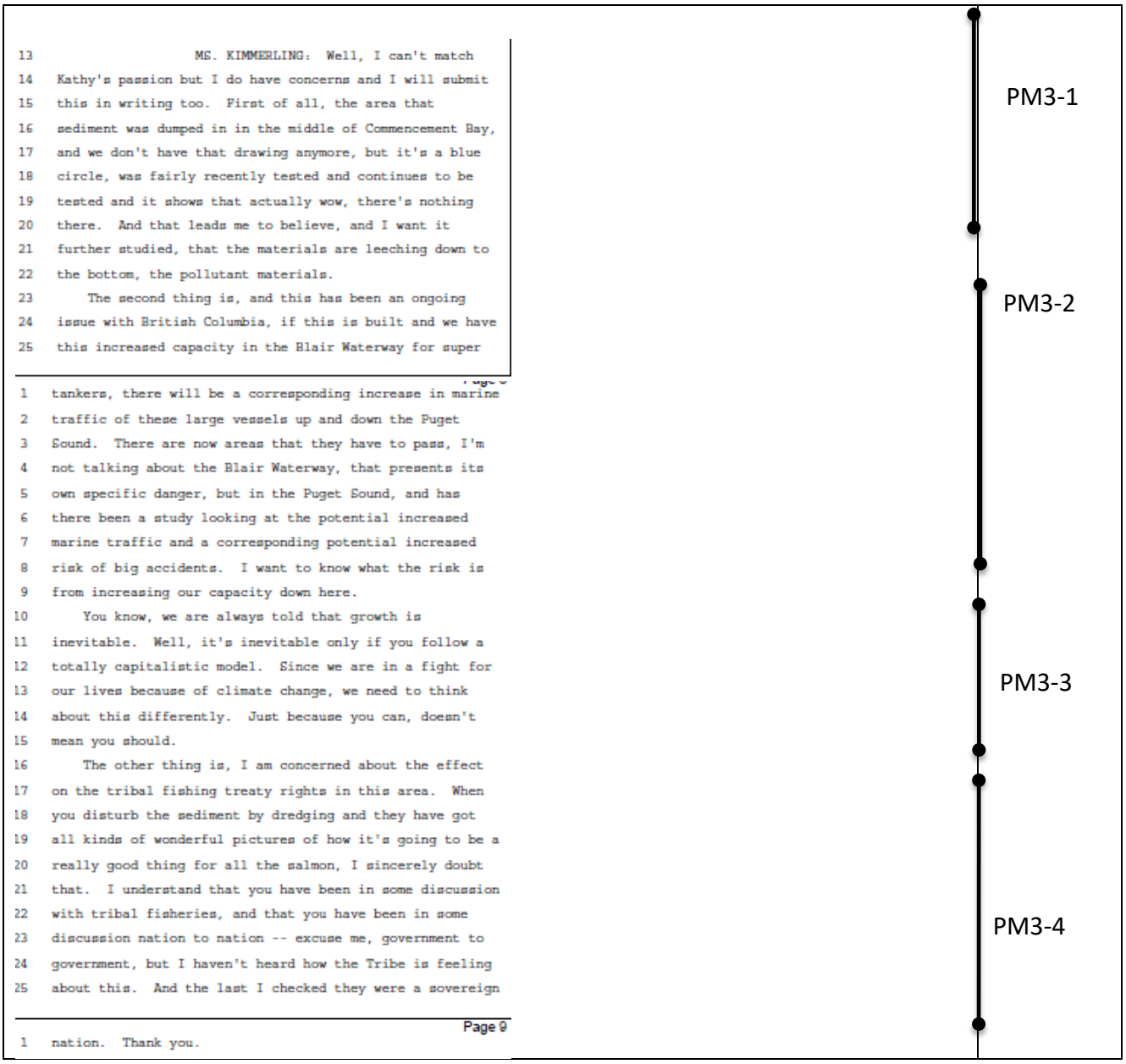
MR. WASHINGTON: So Michael Washington with Tacoma Water, and I'm just here to inform the Corps that we do have some facilities in that area and we just want to be a part of the process and that is it. Thank you.

PM2-1

5.2.1 Response to Comment Letter PM2

PM2-1: Thank you for your comments regarding the Tacoma Harbor Navigation Improvement Project. The Corps and Port of Tacoma will engage Tacoma Water and other local utilities during Pre-construction Engineering and Design Phase.

5.3 Public Comment PM3—Marilyn Kimmerling



MS. KIMMERLING: Well, I can't match Kathy's passion but I do have concerns and I will submit this in writing too. First of all, the area that sediment was dumped in in the middle of Commencement Bay, and we don't have that drawing anymore, but it's a blue circle, was fairly recently tested and continues to be tested and it shows that actually wow, there's nothing there. And that leads me to believe, and I want it further studied, that the materials are leeching down to the bottom, the pollutant materials.

The second thing is, and this has been an ongoing issue with British Columbia, if this is built and we have this increased capacity in the Blair Waterway for super tankers, there will be a corresponding increase in marine traffic of these large vessels up and down the Puget Sound. There are now areas that they have to pass, I'm not talking about the Blair Waterway, that presents its own specific danger, but in the Puget Sound, and has there been a study looking at the potential increased marine traffic and a corresponding potential increased risk of big accidents. I want to know what the risk is from increasing our capacity down here.

You know, we are always told that growth is inevitable. Well, it's inevitable only if you follow a totally capitalistic model. Since we are in a fight for our lives because of climate change, we need to think about this differently. Just because you can, doesn't mean you should.

The other thing is, I am concerned about the effect on the tribal fishing treaty rights in this area. When you disturb the sediment by dredging and they have got all kinds of wonderful pictures of how it's going to be a really good thing for all the salmon, I sincerely doubt that. I understand that you have been in some discussion with tribal fisheries, and that you have been in some discussion nation to nation -- excuse me, government to government, but I haven't heard how the Tribe is feeling about this. And the last I checked they were a sovereign nation. Thank you.

PM3-1

PM3-2

PM3-3

PM3-4

5.3.1 Response to Comment Letter PM3

PM3-1: The Commencement Bay DMMP disposal site was established in 1988 and has been used consistently since that time. All material that is taken to the disposal site is evaluated by the DMMP agencies (Corps, EPA, Washington State Department of Ecology, and Washington State Department of Natural Resources) and determined to be suitable for unconfined open-water disposal. Monitoring of the disposal site occurs periodically based on the amount of sediment that has been disposed. The Commencement Bay site has been monitored ten times since 1988. The most recent monitoring occurred in 2017 and found that the sediment

concentrations on the disposal site were within the expected range, and effects to benthic organisms on the site were not more than minor, as determined by bioassay testing. There is no evidence for leaching of sediment contaminants into deeper sediments.

PM3-2: Please see Master Response 6. The feasibility study is focused on the immediate vicinity of Tacoma Harbor, specifically the Blair Waterway. Increased vessel sizes have translated into fewer transits, which will decrease the frequency of container ships sailing through Puget Sound to Tacoma.

PM3-3: Please see Master Responses 4 and 6.

PM3-4: Please see Master Response 5. Coordination with the Puyallup Tribe of Indians, including Government-to-Government consultation, has been ongoing and will continue through the PED phase and construction.

5.4 Public Comment PM4—Nikie Walters

MS. WALTERS: Hi. I was going to speak a little bit about some things that Marilyn just talked about. The dead zone that's out there, out in the water, I would like to know if that's where -- specifically where -- I don't know who I'm supposed to look at for these questions, but I don't know if -- I'm really concerned about that.

Anyway, I have heard that larger ships are already coming in and scraping the bottom of the ocean or the waterway right there. And so I'm also concerned about process because those big cranes were put in before these studies even started so there's that.

I'm wondering if that Saltchuk site that you guys are talking about is where all the rotting boats that are being kept afloat with foam is, all the sea lions and stuff gather in that area right there, I'm wondering if that is the Saltchuk site you guys are referring to.

I want to add that this will not replace smaller containerships but will just add to them. And the dangers that the ships pose to the orca and other marine animals. The orcas, as we all know, are facing

extinction right now, and we are trying to stop that not help them get extinct. And there's -- there was just another whale that got hit by a ship just a couple weeks ago. It was not an orca, but I believe it was a gray whale or a humpback but it's still happening. So when we increase the ship traffic then these kind of occurrences are more likely to occur. I'm trying to think if I had anything else to add to this.

I'm really concerned -- oh, I want to talk about that California has made it illegal to dredge for heavy metals. California -- this law came about because of mining for gold and it's actually illegal to mine out there. And we know that there's heavy metals in that bay right there, and so disturbing them, you know, it's just very concerning to me when other states are banning these kind of practices and we are looking into doing them or doing it.

I'm concerned about the dump site out there where you want to put the stuff. Like Marlin was saying -- or I was explained by Kelsey that when it was -- the last time you guys dredged and placed the soil or whatever the sands there, the levels of toxicity was higher than it is now, and so that tells me that the toxicity is sinking and I have seen a map where it's also spreading out. Thank you.

PM4-1
PM4-4
PM4-2
PM4-3
PM4-5
PM4-6

5.4.1 Response to Comment Letter PM4

PM4-1: The EIS that established the Commencement Bay disposal site expected that disposal of dredged material would have some minor adverse impacts to the benthic invertebrates living on the site, due to disturbance and possible burial when large quantities of material are placed on the site. Post-disposal monitoring of the benthic infaunal successional stage over the last 30 years has demonstrated that the benthic community in and around the site recovers fairly quickly. Data collected from the 2017 monitoring event, which was collected 5 months after the end of the disposal window, showed that "overall, recolonization and/or re-establishment of high-order successional infauna, i.e., larger, subsurface deposit feeders, is widespread at the disposal site outside the disposal zone".

PM4-2: Sediment movement in the Blair Waterway during vessel transit is due to propeller wash, not from ships scraping the bottom of the channel. Northwest Seaport Alliance installed four new Super Post-Panamax cranes at Husky Terminal in March 2019. This allows the terminal to more efficiently load and unload large, Post-Panamax vessels (12,000 TEU capacity and greater). These vessels are expected to call Blair Waterway with or without the proposed channel deepening from -51 feet MLLW to -57 feet MLLW. Vessels with capacity above 13,000 TEUs already call Pierce County Terminal. Channel deepening does not allow for these large, Post-Panamax vessels to call, it only increases the efficiency of vessels that are expected to call by allowing carriers to load more cargo per trip. This reduces the total number of vessel calls required at Blair Waterway, reducing waterway congestion and leading to transportation cost savings for the nation.

PM4-3: The Saltchuk site is next to the Marina at Brown's Point and Tyee Marina. Log rafting was the former purpose of Saltchuk and was discontinued several years ago. Marine mammals used the logs as resting areas in the past and now use other structures.

PM4-4: Please see Master Response 6. Estimating total vessel calls at Tacoma Harbor over the study period involves uncertainty. Variation in the market can lead to year-to-year changes in cargo volumes and vessel calls. As a result, the study focuses on long-term trends and includes sensitivity analyses to account for the full range of potential operations at Blair Waterway over the study period.

In all scenarios, the study team anticipates a reduction in total vessel calls. Channel deepening from -51 MLLW to -57 MLLW does not change the market forces that drive commodity demand. Additionally, vessel deployment is a firm-level decision based on fleet availability, newbuilds, vessel scrap rates, and utilization rates by trade lane. As a result, the proposed project does not change the long-term trend toward large vessel use at Tacoma Harbor, and the study team does not anticipate that the channel deepening will induce vessel movement to Blair Waterway. Instead, the project allows carriers to load vessels more efficiently, leading to the potential for fewer overall vessel calls. This results in transportation cost savings and reduced channel congestion at Tacoma Harbor. When there are fewer vessels, long-term vessel

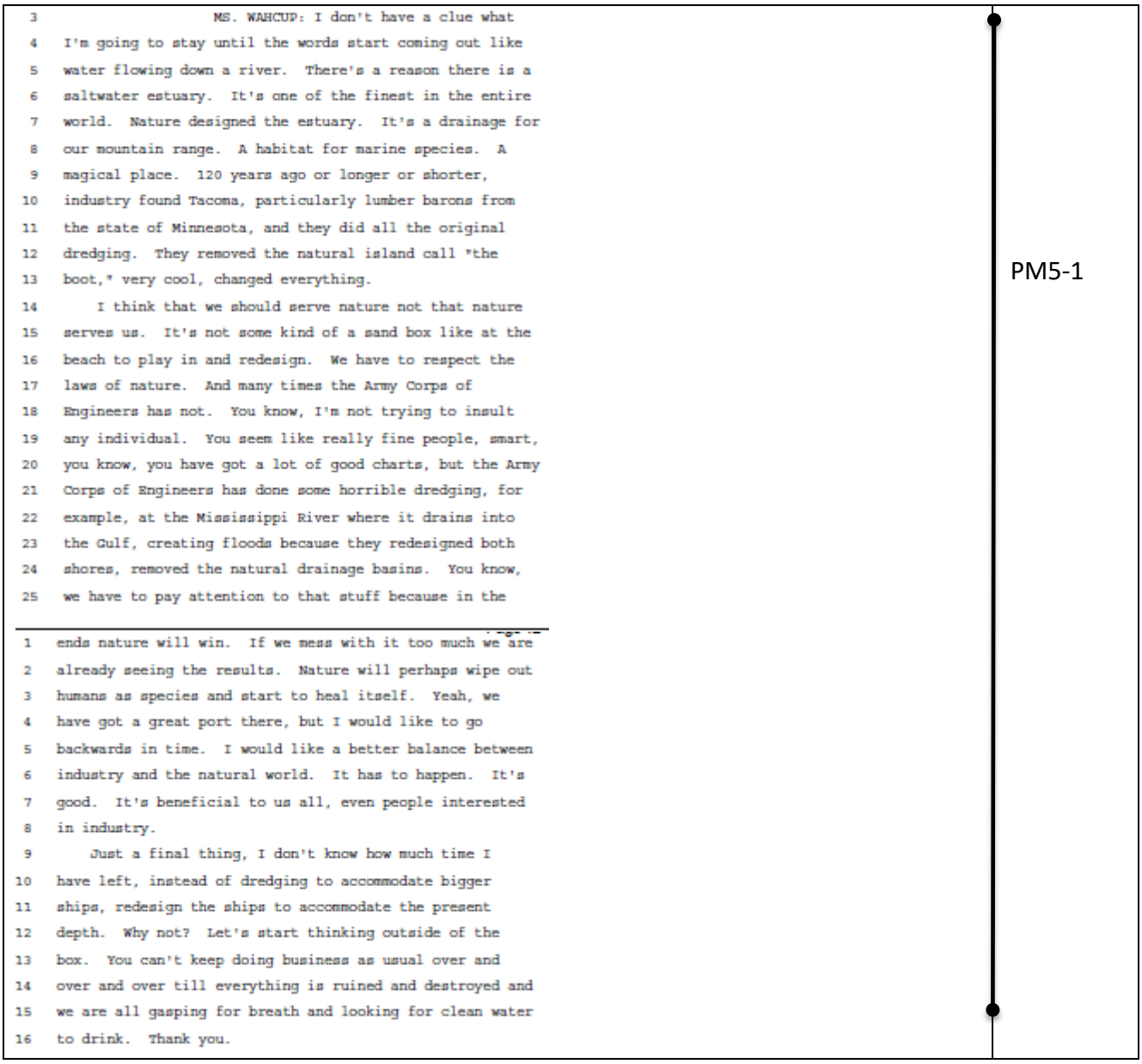
noise and marine mammal ship strike frequency is expected to be reduced compared to the no action alternative as a result of the project.

PM4-5: There are no plans to mine metals from the sediments in the Blair waterway. All heavy metals analyzed for in the DMMP advisory-level characterization were well below DMMP screening levels.

PM4-6: The Commencement Bay DMMP disposal site was established in 1988 and has been used consistently since that time. All material that is taken to the disposal site is evaluated by the DMMP agencies (Corps, EPA, Washington State Department of Ecology, and Washington State Department of Natural Resources) and determined to be suitable for unconfined open-water disposal. Monitoring of the disposal site occurs periodically based on the amount of sediment that has been disposed. The Commencement Bay site has been monitored ten times since 1988. The most recent monitoring occurred in 2017 and found that the sediment concentrations on the disposal site were within the expected range, and effects to benthic organisms on the site were not more than minor, as determined by bioassay testing. There is no evidence for leaching of sediment contaminants into deeper sediments.

Migration of disposed sediments along the sea floor after disposal on the site is a concern of the DMMP. Past monitoring events, especially in 2001, have shown that dredged material has drifted off-site. This is most likely to occur when large volumes of material are disposed in a short period of time. In 2009, the DMMP agencies finalized a supplemental EIS for the continued use of the Commencement Bay disposal site, and as part of the study for that report, they evaluated a range of options that could be implemented to keep dredged material on-site if off-site material was a problem in the future. Options such as barge positioning during disposal increased monitoring, and limiting disposal to a portion of the tidal cycle were considered. All disposal site monitoring at Commencement Bay since 2009 has found that the dredged material has remained on-site.

5.5 Public Comment PM5—Diane Wahcup



MS. WAHCUP: I don't have a clue what I'm going to stay until the words start coming out like water flowing down a river. There's a reason there is a saltwater estuary. It's one of the finest in the entire world. Nature designed the estuary. It's a drainage for our mountain range. A habitat for marine species. A magical place. 120 years ago or longer or shorter, industry found Tacoma, particularly lumber barons from the state of Minnesota, and they did all the original dredging. They removed the natural island call "the boot," very cool, changed everything.

I think that we should serve nature not that nature serves us. It's not some kind of a sand box like at the beach to play in and redesign. We have to respect the laws of nature. And many times the Army Corps of Engineers has not. You know, I'm not trying to insult any individual. You seem like really fine people, smart, you know, you have got a lot of good charts, but the Army Corps of Engineers has done some horrible dredging, for example, at the Mississippi River where it drains into the Gulf, creating floods because they redesigned both shores, removed the natural drainage basins. You know, we have to pay attention to that stuff because in the ends nature will win. If we mess with it too much we are already seeing the results. Nature will perhaps wipe out humans as species and start to heal itself. Yeah, we have got a great port there, but I would like to go backwards in time. I would like a better balance between industry and the natural world. It has to happen. It's good. It's beneficial to us all, even people interested in industry.

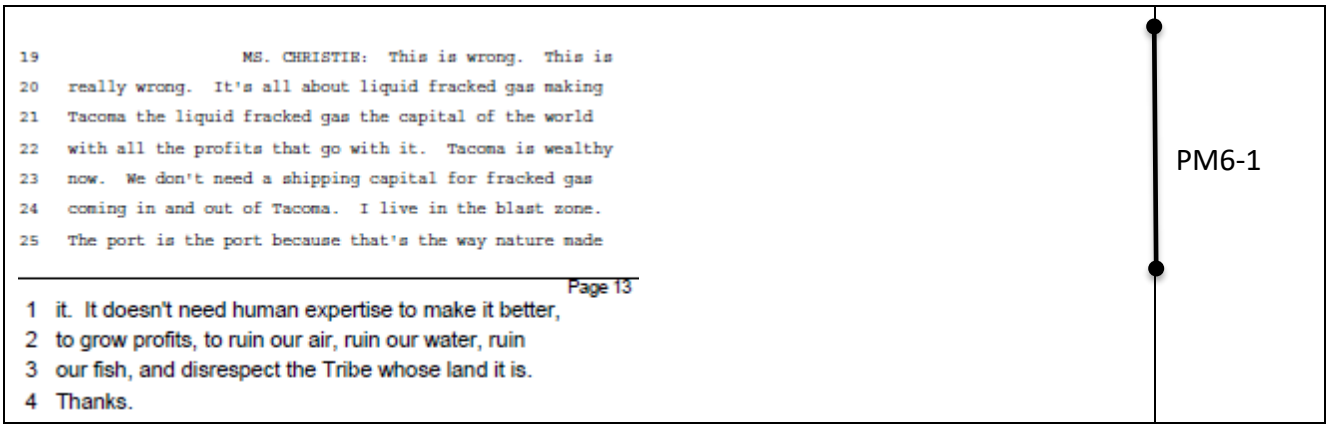
Just a final thing, I don't know how much time I have left, instead of dredging to accommodate bigger ships, redesign the ships to accommodate the present depth. Why not? Let's start thinking outside of the box. You can't keep doing business as usual over and over and over till everything is ruined and destroyed and we are all gasping for breath and looking for clean water to drink. Thank you.

PM5-1

5.5.1 Response to Comment Letter PM5

PM5-1: Please see Master Responses 4 and 6.

5.6 Public Comment PM6—Beverly Christie



MS. CHRISTIE: This is wrong. This is really wrong. It's all about liquid fracked gas making Tacoma the liquid fracked gas the capital of the world with all the profits that go with it. Tacoma is wealthy now. We don't need a shipping capital for fracked gas coming in and out of Tacoma. I live in the blast zone. The port is the port because that's the way nature made

Page 13

it. It doesn't need human expertise to make it better, to grow profits, to ruin our air, ruin our water, ruin our fish, and disrespect the Tribe whose land it is. Thanks.

PM6-1

5.6.1 Response to Comment Letter PM6

PM6-1: Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for that facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility.

5.7 Public Comment PM7—Claudia Riedener

MS. RIEDENER: Thank you. My name is Claudia Riedener. I do want to first acknowledge that we are on soil in Puyallup's land right here, right now. Always remember that.

Yeah, process, I have a question about process, too. So the port first went ahead and bought some giant cranes from China and brought them over here and now we are forced to deepen the bay to get the ships in. It's a little bit like somebody buying a giant Hummer and then forcing the whole neighborhood to widen the road so they can get through. That's not a good way to plan things. PM7-1

Other issues I have have to do with protected sea level rise, and the Port of Tacoma is already supposed to be flooded by 2050 and those are really conservative estimates, so why not wait? The water is going to come to us. PM7-2

And then we cannot continue to consume the way we do because we know already by the middle of August we have already consumed resources for the whole year, so we are PM7-3

really losing our ability of the world being able to feed us at all, so consuming that is not a good idea. PM7-4

And then I just also wanted to quickly speak to the Corps of Engineers themselves. I had been looking for just one single document that the Corps had created sometime and tired to ask people, staff, and some at the hearing and got no answer, and they said I need a public records request. It got completely ignored for weeks and weeks and then I asked again. And then I got told that it costs $800 an hour to go through the documents. I just want to say I'm not paid to be here like many other support staff are paid to be here. A lot of people here we are never paid to be here. So just consider that, consider the public good, and please protect the bay. We need to restore it back to how it was and not just hit it over the head again and again. PM7-5

We went to Swan Creek over Christmas. Swan Creek used to be a creek that had salmon coming in and we walked the entire length of the creek and there was not a single salmon come back this year, not even chum are coming back to Tacoma. So is that going to wake us up at some point I hope?

5.7.1 Response to Comment Letter PM7

PM7-1: Northwest Seaport Alliance installed four new Super Post-Panamax cranes at Husky Terminal in March 2019. This allows the terminal to more efficiently load and unload large, Post-Panamax vessels (12,000 TEU capacity and greater). These vessels are expected to call Blair Waterway with or without the proposed channel deepening from -51 feet MLLW to -57 feet MLLW. Vessels with a capacity above 13,000 TEUs already call PCT. Channel deepening does not allow for these large, Post-Panamax vessels to call; it only increases the efficiency of vessels that are expected to call by allowing carriers to load more cargo per trip. This reduces the total number of vessels calls required at Blair Waterway, reducing waterway congestion and leading to transportation cost savings for the nation.

PM7-2: Deepening of the Blair Waterway is proposed in response to global circumstances. The shipping industry has progressively seen increases in vessel sizes to provide for better efficiency in global trade, forcing local service facilities around the world to evolve and adapt in order to keep relevant. The rate at which sea level is rising is not enough to provide the necessary depths that will allow the increased size ships to keep calling on the Blair Waterway terminals.

PM7-3: Please see Master Response 4.

PM7-4: While there is no initial fee to make a Freedom of Information Act (FOIA) request, the Corps is authorized by law to recover the direct costs of providing information. Unfortunately, that means that sometimes it can be expensive to request documents through the FOIA process. The following is the fee schedule with some explanations of how charges are determined. This information can be found with a more detailed explanation at https://www.usace.army.mil/FOIA/Fees.aspx

Duplication charges: 15 cents per page

Computer tapes and print-outs: direct costs and labor costs

Search charges:

- $20.00 per hour for clerical staff
- $44.00 for professional staff
- $75.00 for executive staff

Review charges:

- $20.00 per hour for clerical staff
- $44.00 for professional staff
- $75.00 for managerial staff

For the purpose of fees, there are three categories of requestors:

- Commercial use
- News media, educational, or scientific
- And all others.

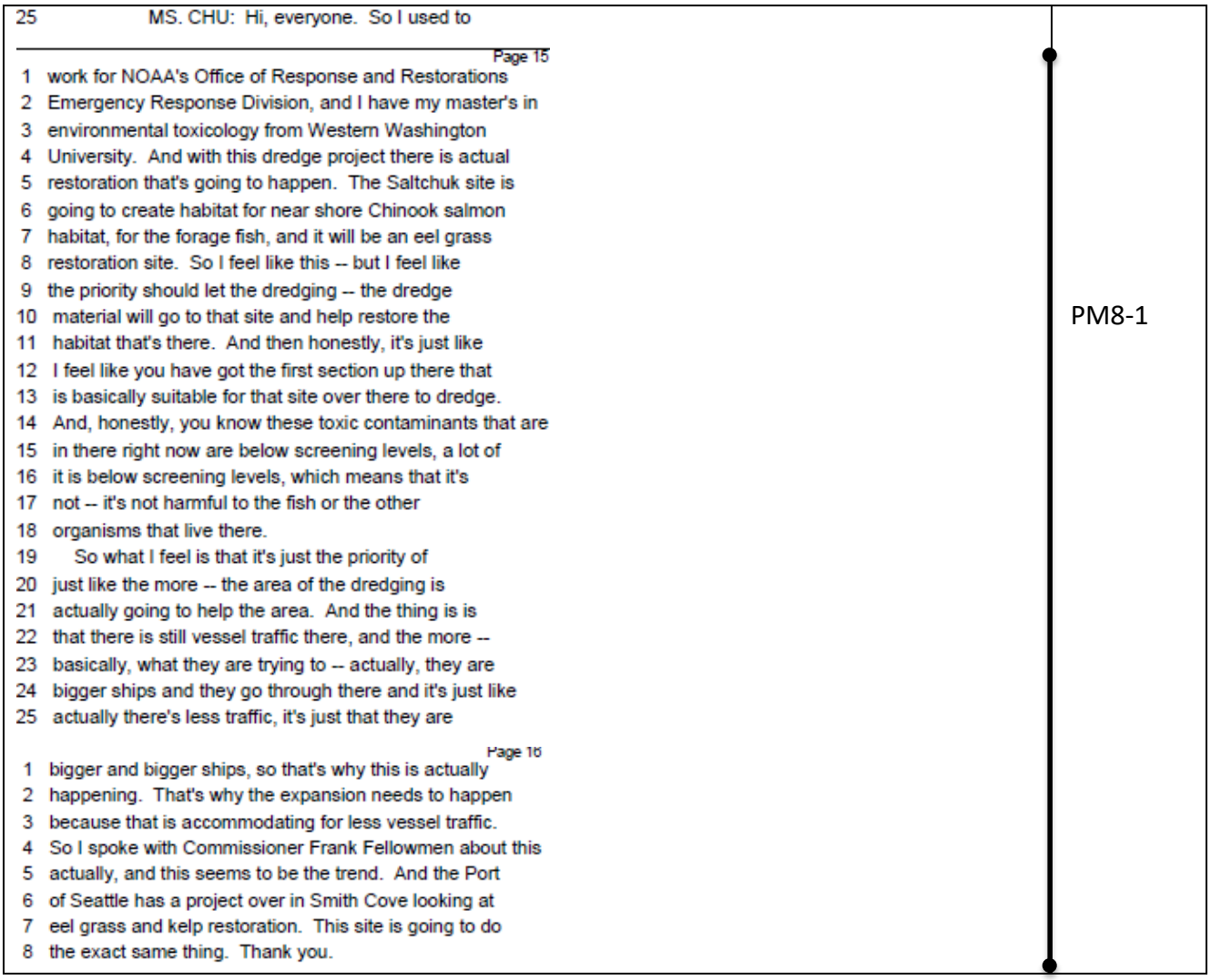
Commercial use requestors are charged for search time, document review, and duplication. News media, educational, and Scientific requestors are charged for duplication only, after the first 100 pages. All other requesters are charged for search time after two hours and duplication after 100 pages.

You can state that you are only willing to pay a certain amount and will be given the opportunity to narrow your request in order to reduce the fees or commit to paying the larger amount.

It is possible to request a waiver for the fee if you can show that disclosure of the requested information is in the public interest because it is likely to contribute significantly to public understanding of the operations and activities of the government and is not primarily in the commercial interest of the requester.

PM7-5: The Corps evaluated effects to salmon in the IFR/EA and consulted with NMFS and USFWS on effects to ESA-listed species (Section 6.2 of the IFR/EA; Master Response 5). USFWS concurred with the Corps' effect determinations of "not likely to adversely affect" (NLAA) listed species on February 2, 2022 (Appendix D of the IFR/EA). NMFS issued a BiOp February 16, 2022 (Appendix D of the IFR/EA), which concurred with the Corps' effects determinations except NLAA for steelhead; instead, NMFS determined the action is likely to adversely affect steelhead. In addition, NMFS' action area extends farther into Puget Sound where Humpback whale, Central America Distinct Population Segment (DPS) and Mexico DPS, could be present and determined the action is NLAA the species whereas the Corps determined the action would have no effect. Several BMPs will be used to avoid and minimize effects to natural resources, and additional BMPs will be evaluated as needed when the design is more fully developed in PED.

5.8 Public Comment PM8—Valerie Chu



25 MS. CHU: Hi, everyone. So I used to

Page 15

1 work for NOAA's Office of Response and Restorations
2 Emergency Response Division, and I have my master's in
3 environmental toxicology from Western Washington
4 University. And with this dredge project there is actual
5 restoration that's going to happen. The Saltchuk site is
6 going to create habitat for near shore Chinook salmon
7 habitat, for the forage fish, and it will be an eel grass
8 restoration site. So I feel like this -- but I feel like
9 the priority should let the dredging -- the dredge
10 material will go to that site and help restore the
11 habitat that's there. And then honestly, it's just like
12 I feel like you have got the first section up there that
13 is basically suitable for that site over there to dredge.
14 And, honestly, you know these toxic contaminants that are
15 in there right now are below screening levels, a lot of
16 it is below screening levels, which means that it's
17 not -- it's not harmful to the fish or the other
18 organisms that live there.
19 So what I feel is that it's just the priority of
20 just like the more -- the area of the dredging is
21 actually going to help the area. And the thing is is
22 that there is still vessel traffic there, and the more --
23 basically, what they are trying to -- actually, they are
24 bigger ships and they go through there and it's just like
25 actually there's less traffic, it's just that they are

Page 16

1 bigger and bigger ships, so that's why this is actually
2 happening. That's why the expansion needs to happen
3 because that is accommodating for less vessel traffic.
4 So I spoke with Commissioner Frank Fellowmen about this
5 actually, and this seems to be the trend. And the Port
6 of Seattle has a project over in Smith Cove looking at
7 eel grass and kelp restoration. This site is going to do
8 the exact same thing. Thank you.

PM8-1

5.8.1 Response to Comment Letter PM8

PM8-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

5.9 Public Comment PM9—Claudia Riedener

MS. RIEDENER: I forgot one point but it's not going to take three minutes.

So this dredging will happen right next to the Tote dock, and the Tote dock is where Tote would be fuelled with LNG because there's a cryogenic pipeline that would come from the LNG refinery.

Now it's not just Tote because what we have learned from the Puget Sound Clean Air Agency is that up to 74 percent of all the LNG would be barged so it's more traffic to Seattle for use up in Seattle, so we already know there's going to be a drastic shipping increase

right across from these new cranes. And so 74 percent that's over 81 billion gallons of liquid methane per year being shipped through the Salish Sea. So when you are saying it's going to be less traffic, that's impossible because we know it's going to increase on the other side, and just because the ships are bigger does not mean that's shipping. We know it's not going down, it's only going up. So it's not economical and it's not an ecological solution. Thank you.

PM9-1

5.9.1 Response to Comment Letter PM9

PM9-1: The forecast developed for this study focuses on future containership trade and containership calls. The study estimates significant growth in both containerized trade volumes and containership vessel calls. The proposed project of deepening from -51 feet MLLW to -57 feet MLLW works to improve containership loading efficiency by allowing containerships to load more cargo on import and export legs. When containerships load vessels with more cargo, fewer total trips are required to transport the same containerized tonnage. This represents a reduction in total transportation costs, which leads to a national economic development benefit.

Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for this facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility (see IFR/EA main report, Chapter 4).

5.10 Public Comment PM10—Nikie Walters

MS. WALTERS: So if the project is all about restoration then why don't we just focus on restoration rather than like capitalism? Thank you.	PM10-1

5.10.1 Response to Comment Letter PM10

PM10: This comment is outside the scope of this feasibility study. This deep draft navigation feasibility study is undertaken to identify and evaluate alternatives to improve the efficiency of the navigation system in Tacoma Harbor. The purpose of the proposed Federal action is to achieve transportation cost savings (increased economic efficiencies) at Tacoma Harbor.

5.11 Public Comment PM11—Kathy Lawhon

MS. LAWHON: The young people are telling us that we need to stop thinking about everything's that's always glowing all the time about everything and just start thinking about just life on earth and preserving life on earth because we are getting to the point many scientists now think we are at the point of no return.

So let's talk about LNG, liquified natural gas. Most of it is 70 percent, up to 70 percent coming from fracking, and that's the part that PSE will never tell you about because fracking is literally probably the

vehicle that is charging us over a cliff because fracking is methane, methane is 86 times worse than greenhouse gas. We know that a great deal of it escapes at the wells, and escapes along the pipelines and some stations and whatever, that's if you are lucky enough to not have an explosion, of course.

There are numerous accidents. There's another one reported today it could be LNG. I don't know. It's in Tarragona, Spain, in the Port of Tarragona south of Barcelona, and you hear a guy say chemical, or they won't say anything, you know, just a really weird report when there's an explosion in the port, but then I start doing research and last year there was an LNG tanker in the Houston ship channel that sunk one barge, sliced the other within -- almost in half, and that was an LNG tanker. If that had exploded, if it had been full, I don't know if it was full or not, if that had exploded it would have been pretty damn bad on the Houston ship channel because of the catastrophic effects.

We have the same issue in Tacoma. What used to be called the Terminal is now Seaport Sound Terminal, that's probably no more than half a mile away from the LNG plant. So where is any of this protecting the people? Where -- at what point, let's see, what do we have? Well, cost savings and benefits, whatever, right? It's

always about -- it's not always about money. At what point is human rights and life on earth and the children and grandchildren that I'm sure some of you have, at what point does their habitat become more important than one more penny, one more dime?

PM11-1

5.11.1 Response to Comment Letter PM11

PM11: Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for this facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility (see IFR/EA main report, Chapter 4).

5.12 Public Comment PM12—Barbara Berntsen

MS. BERNTSEN: Hi, my name is Barb. I have lived for 40 years on Marine View Driver where the Saltchuk disposal is supposed to be and I am against it because I don't think we will be able to come and go in our boats anymore. I don't know how we can guarantee

that the sediment is totally clean. And I don't know how we are going to keep it from moving.

We have really strong tides. Everything moves into our beach. We have seen restoration projects already move boulders, move logs. There's a great big one that the port did south of us that is totally destroyed. It was destroyed the first two winters. So I am not against at all salmon restoration. I'm not against the port dredging Blair Waterway. I think that's all great. I just don't want the Saltchuk disposal in front of my house.

PM12-1

5.12.1 Response to Comment Letter PM12

PM12: The Saltchuk beneficial use site is one alternative that is being considered for placement of dredged material, and modeling efforts will continue throughout the design process to ensure adequate understanding of the fate of placed materials to avoid impacts on existing infrastructure. In addition, pleasure boats commonly associated with residential-type docks usually have very low draft requirements. The Corps would thoroughly evaluate any material to be placed at Saltchuk to determine it is suitable for open-water placement and beneficial use.

5.13 Public Comment PM13—Nikie Walters

MS. WALTERS: I just want to add to some of my comments that I made when I came in here a little bit ago. I spoke to you about these but I want to make sure that these comments are on the record about the port being manmade with fill, and the Puyallup Tribe was here first, thousands of thousands of years before everybody else. And there is a very good likelihood that there's things under there, and so I just want to make sure that there's proper things that are -- not -- maybe not things, but ways that this is being looked at, so not necessarily under the water but under the sand, and, you know, under the water some kind of -- I forget what we talked about, sonar or the like tunnel x-raying what's under the sand looking for any kind of like archaeology, things like that,and that the archaeology department is in contact with the Tribe about this, and that's about it, I think. Thanks.

PM13-1

5.13.1 Response to Comment Letter PM13

PM13: The Corps is actively engaged in consultation with federally recognized tribes that may be affected by this undertaking in an effort to help identify places of cultural or religious significance. The consultation is ongoing throughout the extent of the project. The Corps has conducted different levels of archaeological investigation, including the archaeological monitoring of the underwater ground disturbance during geotechnical testing. This level of investigation will continue.

5.14 Public Comment PM14—Kathy Lawhon

MS. LAWHON: It's Kathy Lawhon, L-A-W-H-O-N, Kathy with a K.

I am following up with the whole big picture as far as LNG. And I have in my backpack I can show you that the LNG prices are down almost 50 percent over the last year. They are now down maybe 40 percent because all of this war thing and I'm trying to help clear some of this up. It's a big money loser. It's crazy dangerous. They have totally lied to us about what they are doing there. There is every indication, and I believe this is another one they intend to export, and now here's the thing about -- since you talked about economic or national plan or something like that, Igor and Rudy have not -- were not only in the Ukraine and the thing about Ukraine is Ukraine is about gas, corrupt gas, and they travel the world actually working on this gas thing. And so now we find out last night that Lev was talking with somebody

PM14-1

about -- what it sounded like it was a planned hit on Ambassador Yovanovitch, and that was on Rachel Maddow. So it's corrupt and they will do anything for money. I think this is more of something for money regardless of what the outcome is and what the dangers are. And clearly the super tankers what they carry is like 55 atomic bombs in energy. It's nuts what they are doing.

We found out, as I said before, the City of Tacoma and the fire department ran a model in 2016, I think, and found that the possible incineration zone of the LNG in the case of a lahar, tsunami, that the tsunami can be ten feet high from the Cascadia, from a lahar, from the Department of -- wherever they are, consider the LNG plant a prime terrorist target. It's insane what's happening. I consider it corporate sociopathy is what I think it is. And PSE has completely liked to us. We don't need the LNG gas. That is bullshit. Sorry I didn't mean to say bullshit again. But I call BS. This is insane. I can't believe what's going on here. The news is not going to tell us because LNG is a big secret because if we all knew what they were doing we would all rise up and they would have no chance. They know that, so this time around they are trying to make it top, top secret all over the country, all over the world.

By the way, it could be related and I don't know, this coup stuff that's going on, they have discovered the largest shale formation from where they do fracking, which is where LNG comes from, liquified natural gas, they discovered the largest shale formation, or one that is larger than the one in Texas. By the way, I'm sure it has nothing to do with the coup, right? Thank you.

PM14-2

5.14.1 Response to Comment Letter PM14

PM14-1: Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for this facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility (see IFR/EA main report, Chapter 4).

PM14-2: Please see the response to PM14-1. In addition, this comment is outside the scope of this feasibility study. This deep draft navigation feasibility study is undertaken to identify and evaluate alternatives to improve the efficiency of the navigation system in Tacoma Harbor. The purpose of the proposed Federal action is to achieve transportation cost savings (increased economic efficiencies) at Tacoma Harbor.

5.15 Public Comment PM15—Debbie Tome

MS. TOME: I'm Debbie Tome. I am a homeowner on Marine View Drive. I have 300 feet of waterfront at the 5300 block of Marine View Drive, which is a large parcel for private ownership down there. I believe it's only one of about eight of us. I have been there 19 years. I live there because I enjoy the sea life. Like Barba said, I appreciate the salmon and I respect all the wildlife there, and that's the reason I invested there. I personally have probably a million dollar investment on Marine View Drive so, of course, my concern is the impact that this is going to have on my property.

At 62 years old, I probably won't be there in 50 years, but I do have family. I have been there for 19. I have made considerable investments in my property, and I have also spent lot of money protecting my property, as

PM15-1

Page 25

hence tidal damage like Barb has talked about, it's like living on a boat. I chose that lifestyle and I am not here to complaint about it, but I am concerned about what's going on in front of me.

In 2009 when they were doing the reconstruction of the Narrows Bridge, I was the victim of a barge that got loose in the storm, and I also had a 200 and some foot barge hit my home, so it's a lifestyle and I get that, but I also am concerned about my security.

I'm concerned about the security of my property, meaning the ground, the stability of the ground. I have watched in 19 years the embankment basically disintegrate. Once a home is removed it doesn't take long for the erosion to take place. The person next to me is not stable and I'm concerned about my investment there.

So I'm not opposed to what is potentially going to happen, but I am concerned about obviously how it's going to impact myself and I do have a big investment. I'm pretty close to positive that I probably have the largest parcel down there. And 300 feet is a lot to maintain on the waterfront. I definitely will be seeking more information in regards to this. I don't want a bunch of toxic waste because I don't want, as I said, my investment to be determined invalid when I possibly do go

PM15-2

Page 26

to retire or move or relocate. I don't want it to come up in my property as far as this as an issue. The erosion is probably my biggest concern down there, and is this going -- if this is beneficial to me, obviously, I will be all for it. If it's going to be where they can't make it clear to me to where I can understand it, this isn't the first hearing I have been to where something was going to be dredged, removed, moved around, and a habitat built that never happened. So I don't know why it never happened, but I have seen the survey crews pretty much right under my kitchen window for about the last 90 days so I'm assuming it might have something to do with this.

5.15.1 Response to Comment Letter PM15

PM15-1: The Saltchuk beneficial use site is one alternative considered for the placement of dredged material. Modeling efforts will continue throughout the design process to ensure an adequate understanding of the fate of placed materials to avoid impacts on existing infrastructure.

PM15-2: The Corps would thoroughly evaluate any material to be placed at Saltchuk to determine it is suitable for open-water placement and beneficial use. Preliminary evaluation by the Corps has shown that a large fraction (> 50%) of the total volume of material to be dredged is clean native material, that is, material that has been buried at depth for centuries to millennia and away from any possible influence from anthropogenic activities.

5.16 Public Comment PM16—Marlene Crumpton

MS. CRUMPTON: Good evening. I had not anticipated speaking, however, I think I do recognize some people. So before 2016 people in Tacoma are aware of the degradation of our city. And I can appreciate you homeowners on the waterway because of all of the pollution that they tried to put that new methanol plant in under our nose, wanting us to conserve our water, don't water our grass, thousands and thousands of gallons of fresh water, and when we tried to protest get the

Page 27

lawyer. Tell you you can't do that. They start prosecuting people. Right now the current administration is trying to do away with any kind of quality regulation through the EPA and the other organizations that were put in place to implement our safety, our health, and wellbeing. They try to mask everything. Part of this is the city council. It has to do with the Port of Tacoma and other entities that have to do with money, money, money.

And they are putting that LNG in there illegally, any disturbing of the waters around there will totally undue the past 40 years the Port of Tacoma and the Puyallup Tribes and other groups have tried to clean up. Owens Beach in 1980 was full of crud. When the tide washed in there was grease and oil. That's just Owens Beach down here at Pt. Defiance. My husband and I were expecting my first daughter. We walked along the beach. **A lot of effort that was put into helping to create a livable city seems to be going down the drain. The current administration is trying to get rid of any pitiful power the EPA may still have for regulations. And so some of what is claimed, like the -- where they will be putting any dredge they can't put in the water in a suitable site, where might that be? It's pretty scary.**

And I was just blessed to have a granddaughter and

Page 2

her future and the rest of all of our futures will be grimmer and grimmer every day. We had so much air pollution, at least this past summer, it was a cooler summer than the two years before when we couldn't breat in August from all the fires, not in Tacoma but in outlying areas. Coming from Canada. Coming in from California. Australia is burning down. No one before the 2016 election would even put on local -- I don't have television reception because you can't really believe what they say, but they would not talk about the climate change and now everybody is frantically talking about it. Time is up, okay.

PM16-1

PM16-2

PM16-3

PM16-4

5.16.1 Response to Comment Letter PM16

PM16-1: Please see Master Response 4.

PM16-2: Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for this facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility (see IFR/EAI main report, Chapter 4).

PM16-3: Please see Master Response 4.

PM16-4: Please see Master Response 4. Climate change was considered in IFR/EA main report section 4.9 (Greenhouse Gas Emissions) and other resource sections as applicable in the IFR/EA. When compared to the total GHG emissions in Washington State and global emissions, the minor contribution of the proposed dredging and Saltchuk construction would not constitute a measurable or meaningful effect among the impacts of climate change and sea level rise.

5.17 Public Comment PM17—Jacqueline Johnston

MS. JOHNSTON: Hi, there. I am a homeowner with my boyfriend on Marine View Drive. We recently purchased the home at 4606, and we have about 60 feet of property that we own the land as well as the house, and it's on piers over the water, and we have a dock. And I'm -- I guess the part of all of this that is concerning me the most is the Saltchuk disposal site because that makes me think our dock isn't going to be accessible. So, yeah, I'm really concerned about that because I feel like that will be a huge loss to our property.

I guess other parts of it that I'm just curious about would be also how that's really going to stay in place and why it wouldn't move. If you keep going like south or east rather, past our house, there's a lot of sediment there. The Puyallup doesn't feed into it right there, so I'm not exactly sure how the sediment got there except for by the tide, so it makes me think that if you put something and it's all just going to get pushed back in the mud flats, and like when you walk on it it's actually quite dangerous and it turn into like a -- like you sink into it.

Homelessness is illegal as far as I understand in Tacoma, however, if you have access to the beach right there -- we have had our house broken into and I have had to call the police several times because there's a turnout near our house where if people can access the beach and then the beach is higher, it makes me feel like we are going to be in a mud flat, an even less protected mud flat. Anyway, I'm totally not for it. I don't -- this is the first I have heard about it. I'm really grateful that Barbara brought it to my attention. I hope that they don't settle on that, and if they do, are they going to compensate us for the massive loss in what we would be losing? So anyway I look forward to finding out more. Thanks.

PM17-1

5.17.1 Response to Comment Letter PM17

PM17-1: The Saltchuk beneficial use site is one alternative that is being considered for the placement of dredged material. Modeling will continue throughout the design process to ensure an adequate understanding of the fate of placed materials to avoid impacts on existing infrastructure.

5.18 Public Comment PM18—Larry Gverie

MR. GVERIE: Larry Gverie. Port of Tacoma, there's a lot of history that goes back to living there. The property used to belong to Foss Tug, the old tug company in Tacoma. And they sold out to Foss Holdings which became -- we are no longer a name, we became a number, and just an address and a dot on the ledgers.

Then Port of Tacoma comes along and they wanted to try to and buy everybody's land, or they tried -- it came up for sale. Foss Holdings just wanted to get out of that land business because the lumber industry was declining. Anyway we couldn't believe Port of Tacoma back then. They pulled the wool over our eyes a number of times and what they are proposing now is more of the same. You just can't trust the Port of Tacoma. When it comes down to financial things it takes a lot to make this happen. It happened a little bit too fast. There's more studies that need to be done, environmental studies, global warming, earthquake, a lot of things.

Right now Port of Tacoma is still a welfare state. They don't make enough money to support themselves. They have to have it be funded by the taxpayers, and this is another one that the Port of Tacoma and their employees and the oil companies may win, but it's the citizen,

PM18-1

everyday citizens that got to pay the taxes to support this organization. I say let the big ships go to Seattle or Portland. Let them go to the grain terminal at the deep ports, at least make it a lot smaller where they just go in a little way and not the whole 2.3 miles. Thank you.

5.18.1 Response to Comment Letter PM18

PM18-1: Large, Post-Panamax vessels (12,000 TEU capacity and greater) will call Port of Tacoma with or without the recommended channel deepening from -51 feet MLLW to -57 feet MLLW. The study team anticipates both Husky, and WUT Terminals will receive calls from vessels up to 18,000 TEU capacity with or without channel deepening. PCT already receives calls with a capacity greater than 13,000 TEUs. The project attempts to provide carriers the opportunity to more efficiently load the vessels that are expected to call Port of Tacoma. Providing the opportunity for increased efficiency potentially reduces the number of calls required to transport future commodity volume to and from Blair Waterway.

The recently completed Seattle Harbor Navigation Improvement Project revealed a high likelihood that the Port of Seattle will reach capacity in the next 20 years. As a result, it is not likely feasible or economical to divert larger vessels to Seattle. The Port of Portland has very limited container operations, especially since the 2015 shutdown. The terminal is unlikely to be a viable port of call for Transpacific routes that serve the Port of Tacoma.

The study evaluated the benefits of only deepening through Husky Terminal. While this alternative has a high benefit-to-cost ratio, there is significantly more benefit gained from full channel deepening. Specifically, vessels calling WUT and PCT will not be able to increase loading efficiency and will require more total calls, increasing waterway congestion, and transportation costs.

5.19 Public Comment PM19—Charles Valdez

MR. VALDEZ: My name is Charles Valdez. I moved here about four years ago and, you know, this city has this historic, you know, everybody knows about Tacoma and it being polluted. And all the people that live down there, I would be scared if you were, you know, if I was you guys living down there. There's so much toxic stuff in there. I have been going to the Port of Tacoma to the meeting of their -- what do you call it? I'm a little nervous right now. The port commissioners meeting and I have gone to quite a few of these meetings and seen all of the little areas that are Superfund sites, and they are toxic areas. That whole front part there, that's all Asarco slag. It's all, you know, lead

PM19-1

Page 32

and arsenic, and that's not land. That's an estuary. That's all fill. That's all toxic fill. How can that be good? You disturb that you kill the salmon, the shellfish, anything that's living in that water.

PM19-3

PM19-2

Vessels, you know, the traffic. They say it's not going to go up. I bet you it's going to go up. I mean, we are trying to save the last killer whales here. You know, they can't hunt. If we bring bigger ships in that messes with their sonar. They can't hunt here. We are destroying their food source. We are destroying their, you know -- they can't hunt. The ships, you know, they mess up the sonar for the whales and all kinds of different stuff.

It's a bad idea. And, you know, global warming too, especially the LNG site. Thirty years from now it's all going to be under water. The sea level rise is coming. You know, the tribes on the coast they are already moving half of their citizens. The Quinault, they are moving half the tribe away from the coast because they know, you know, it's coming. The sea level rise is coming. It's a waste of money.

PM19-4

PM19-5

They already bought the cranes for this too. They already bought the cranes, put them in, and now they want to dredge but they don't have the approval to dredge yet. Well, put the, you know, the cart in front of the horse,

PM19-6

Page 33

why? Why? Waste of money. This is a waste of money. Global warming is going to mess up this waste of money anyway. Thank you.

5.19.1 Response to Comment Letter PM19

PM19-1: The Blair Waterway sediments were formerly a part of the Superfund program but were partially delisted. Further, the Corps will follow the requirements of the DMMP to ensure sediments are adequately characterized before dredging. See Master Response 1 for additional information.

PM19-2: The Corps is coordinating with Federal and State natural resource agencies and proposed several BMPs for the protection of salmon and shellfish. Please see Master Response 4 for additional information.

PM19-3: Please see Master Response 6.

PM19-4: Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for this facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility (see IFR/EA main report, Chapter 4).

PM19-5: Please see Master Response 4. Climate change was considered in section 4.9 (Greenhouse Gas Emissions) and other resource sections as applicable in the IFR/EA. When compared to the total GHG emissions in Washington State and global emissions, the minor contribution of the proposed dredging and Saltchuk construction would not constitute a measurable or meaningful effect among the impacts of climate change and sea level rise.

PM19-6: The Northwest Seaport Alliance installed four new Super Post-Panamax cranes at Husky Terminal in March 2019. This allows the terminal to more efficiently load and unload large, Post-Panamax vessels (12,000 TEU capacity and greater). These vessels are expected to call Blair Waterway with or without the proposed channel deepening from -51 feet MLLW to -57 feet MLLW. Vessels with a capacity above 13,000 TEUs already call PCT. Channel deepening does not allow for these large, Post-Panamax vessels to call; it only increases the efficiency of vessels that are expected to call by allowing carriers to load more cargo per trip. This reduces the total number of vessels calls required at Blair Waterway, reducing waterway congestion and leading to transportation cost savings for the nation.

5.20 Public Comment PM20—Nikie Walters

MS. WALTERS: Nikie Walters. So I wanted to just comment on this board right here, the national transportation cost savings benefits. We are going to dredge to bring in the bigger ships as Chuck just pointed out even though we are facing a sea level rise. And this -- like in the spirit of all this, you know, yes, maybe it would be -- it sounds like a good idea, you know, to say, hey, let's -- we are having orca and salmon problems, so let's bring less ships in and we will just put more cargo on them, but this isn't going to do that. This is going to give a free pass to bring more of those ships in on top of what we are already doing.

And, you know, I was down at a friend's house at Point Ruston one day, and she was showing me out the window all the ships that were lined up waiting to, you know, get into the port. They were sitting there for like a week, so this is going to pile up. A situation like this is going to pile up more ships just sitting there in the water for weeks at a time, when it's just -- if there's no limits on how many ships we are calling to the port then it's not going to limit -- it's not going to put anything that says we are going to have bigger ships instead of smaller ships, like these ship owners are not going to say, oh, I need to buy a bigger ship now. These ships are millions and millions and millions of dollars, so, I mean, I just wanted to comment on that too. Thank you.

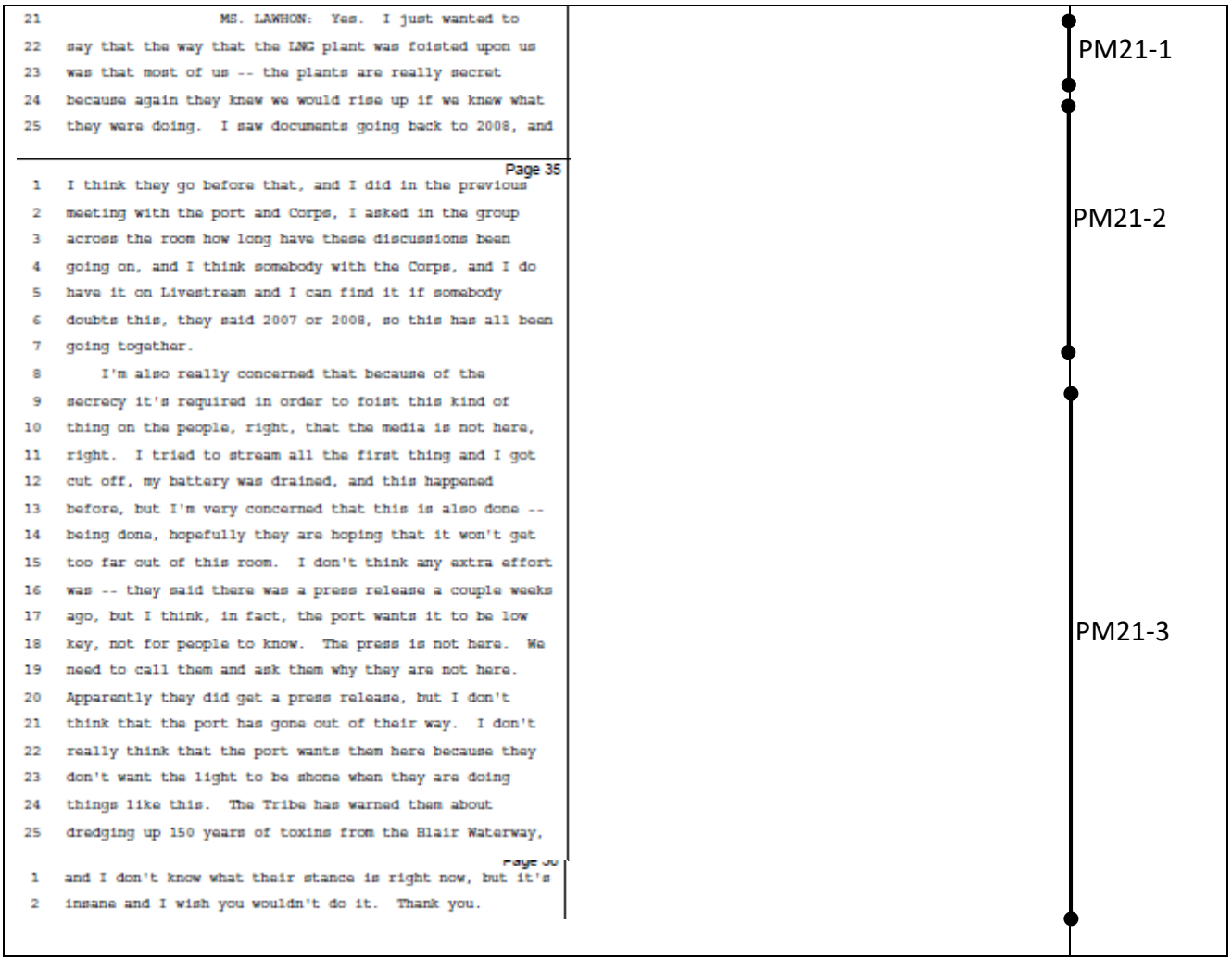
PM20-1

5.20.1 Response to Comment Letter PM20

PM20-1: The rate at which the sea level is rising is not enough to provide the necessary depths that will allow the increased size ships to keep calling on the Blair Waterway terminals. Please see Master Response 6 for information about anticipated vessel traffic with and without deepening.

Vessels with a capacity above 13,000 TEUs are already calling at PCT. Channel deepening does not allow for these large, Post-Panamax vessels to call; it only increases the efficiency of vessels that are expected to call by allowing carriers to load more cargo per trip. This reduces the total number of vessels calls required at Blair Waterway, reducing waterway congestion and leading to transportation cost savings for the nation.

5.21 Public Comment PM21—Kathy Lawhon



MS. LAWHON: Yes. I just wanted to say that the way that the LNG plant was foisted upon us was that most of us -- the plants are really secret because again they knew we would rise up if we knew what they were doing. I saw documents going back to 2008, and

Page 35

I think they go before that, and I did in the previous meeting with the port and Corps, I asked in the group across the room how long have these discussions been going on, and I think somebody with the Corps, and I do have it on Livestream and I can find it if somebody doubts this, they said 2007 or 2008, so this has all been going together.

I'm also really concerned that because of the secrecy it's required in order to foist this kind of thing on the people, right, that the media is not here, right. I tried to stream all the first thing and I got cut off, my battery was drained, and this happened before, but I'm very concerned that this is also done -- being done, hopefully they are hoping that it won't get too far out of this room. I don't think any extra effort was -- they said there was a press release a couple weeks ago, but I think, in fact, the port wants it to be low key, not for people to know. The press is not here. We need to call them and ask them why they are not here. Apparently they did get a press release, but I don't think that the port has gone out of their way. I don't really think that the port wants them here because they don't want the light to be shone when they are doing things like this. The Tribe has warned them about dredging up 150 years of toxins from the Blair Waterway,

and I don't know what their stance is right now, but it's insane and I wish you wouldn't do it. Thank you.

PM21-1

PM21-2

PM21-3

5.21.1 Response to Comment Letter PM21

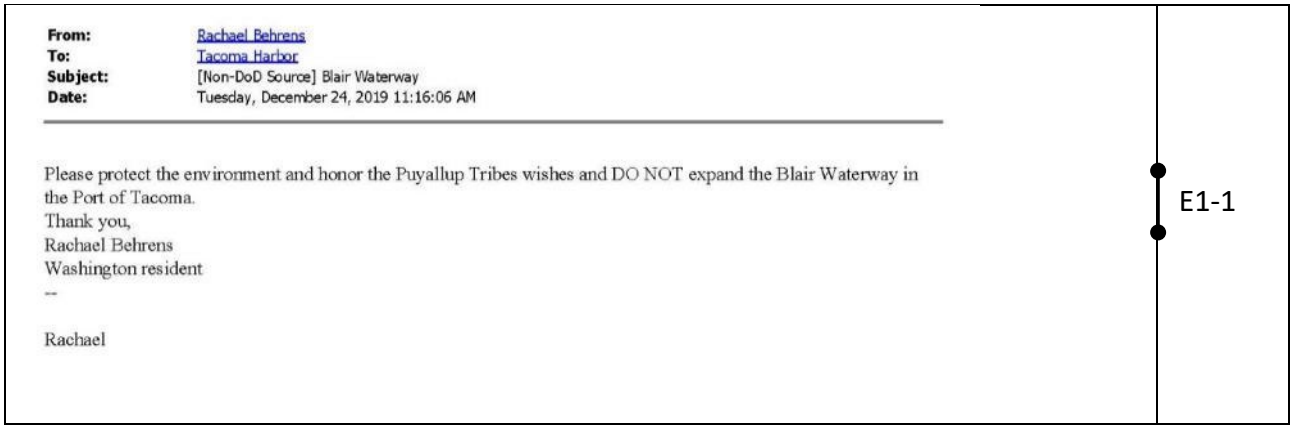
PM21-1: Puget Sound Energy is building a liquefied natural gas (LNG) facility at the Port of Tacoma. The permitting process for this facility is a separate action from the Tacoma Harbor navigation improvement study. However, the Tacoma Harbor study has evaluated potential cumulative impacts to include existing and known planned facilities and activities, which includes the Puget Sound Energy LNG facility (see IFR/EA main report, Chapter 4).

PM21-2: Coordination of feasibility studies can begin years in advance when the local sponsor sends a letter to the Corps to request planning assistance. The feasibility study process does not begin until Congress appropriates funding (i.e., sets money aside for a specific purpose) for the Corps to perform the study, and the Corps and non-Federal sponsor execute a feasibility cost-share agreement to conduct the study. Although the Port of Tacoma may have sent requests for the Tacoma Harbor Navigation Improvement Project to the Corps several years ago, the study and, therefore, public involvement did not begin until 2018.

PM21-3: The Corps, Public Affairs Office notified more than 20 media outlets of scoping activities and public review opportunities. Please see Master Response 4 and comment response PM1-4 for additional information on public outreach.

6 Individual Email Comments and Responses

6.1 Comment Letter E1—Rachel Behrens



From: Rachael Behrens
To: Tacoma Harbor
Subject: [Non-DoD Source] Blair Waterway
Date: Tuesday, December 24, 2019 11:16:06 AM

Please protect the environment and honor the Puyallup Tribes wishes and DO NOT expand the Blair Waterway in the Port of Tacoma.
Thank you,
Rachael Behrens
Washington resident
--

Rachael

E1-1

6.1.1 Response to Comment Letter E1

E1-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. Corps coordination with the Puyallup Tribe of Indians, including Government-to-Government consultation, has been ongoing and will continue through the PED phase and construction.

6.2 Comment Letter E2—Washington Department of Ecology, Southwest Regional Office

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

January 15, 2020

Kristine Ceragioli, Project Manager
U.S. Army Corps of Engineers, Seattle District
Planning, Environmental, & Cultural Resources Branch
PO Box 3755
Seattle, WA 98124-3755

RE: Draft FR/EA Comments for Tacoma Harbor, WA Navigation Improvement Project (Reference No. CENWS-PMP-18-22)

Dear Kristine Ceragioli:

Thank you for the opportunity to comment on the integrated draft Feasibility Report and Environmental Assessment (FR/EA) for the "Tacoma Harbor, WA Navigation Improvement Project" as proposed by U.S. Army Corps of Engineers, Seattle District (Corps). The Department of Ecology (Ecology) reviewed the information provided and has the following comment(s):

TOXICS CLEANUP PROGRAM / SOUTHWEST REGION:
Joyce Mercuri, Cleanup Project Manager

As is stated in the Feasibility Study, Tru Grit Abrasives Inc, cleanup site identification #1294, is an Ecology-led cleanup site located on the Blair Waterway. Ecology agrees that the next steps in the deepening study design must confirm that the side slopes of the planned dredge do not intersect with contamination at the site, nor create a situation where buried contaminated sediments at the site could be disturbed or released through erosion, construction activities, or ship wakes. Please contact Joyce Mercuri at (360) 407-6260 or Joyce.Mercuri@ecy.wa.gov to include Ecology in any upcoming discussions concerning the proposed modified navigation channel relationship to this site. E2-1

The Earley Business Center cleanup site (cleanup site identification #2395) is located at the northwest tip of the Blair-Hylebos peninsula. Studies have shown that waste materials such as wood debris and metallic slag are present along the southwest shore of the site. It is not known how far toward the Blair deep waters these materials extend. The dredging project design evaluation should include testing in that area to determine if the new channel sideslopes might intersect with potentially contaminated wastes. E2-2

Section 3.2 of the Phase I Environmental Assessments (Appendix H to the Feasibility Study report) states that fifteen sites with contaminated groundwater are located immediately next to Blair Waterway, and there are other sites with contaminated groundwater nearby. This section states: "As design progresses for the deepening project, potential side slope impacts should be evaluated relative to groundwater. The depth and flow regime of any adjacent groundwater plumes should be evaluated to determine if adverse impact...result from actions in the waterway". Ecology agrees with this statement. However, the feasibility study report does not appear to include this recommendation. Section 5.8.3, # 8 and 9 of the Feasibility Study describes the need for additional investigations related to the former Lincoln Avenue Ditch site and coordination related to the Occidental Site and TruGrit Abrasives site, but it does not include the need to understand the groundwater regimes at the remaining sites as is recommended in the site assessment report. Ecology believes this recommendation should be added to the main Feasibility Study Report and carried out in the next steps of the project planning and investigations.

E2-3

Table 4-1 of the feasibility study discusses effects to benthic organisms and to fish. Removing 6 feet of sediment will remove all benthic organisms and all subsurface, head down, deposit feeders. It could take several years for the benthic community to recover after the dredging. Demersal flat fish, which feed on benthic community, would likely be the most affected fish species. Their recovery would likely also be slow because their primary food source would have been removed.

E2-4

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact Joyce Mercuri with Ecology's Toxics Cleanup Program.

Department of Ecology
Southwest Regional Office

(MLD: 201907124)

cc: Katie Whitlock, Corps Environmental Coordinator
Joyce Mercuri, Ecology Toxics Cleanup Program

6.2.1 Response to Comment Letter E2

E2-1: Agree. The Corps is aware of the TruGrit Abrasives Inc. cleanup site and has conducted preliminary evaluations to assess the proximity of the side slopes with the footprint for remediation. The Corps will coordinate with the Department of Ecology as both studies progress to ensure compatibility between the two projects.

E2-2: Agree. The Corps will conduct full scale suitability sampling in the design phase of the project, as part of DMMP requirements, which will include characterization of dredged materials near this area of concern. Additionally, the Corps will consider during design whether additional sampling in this area is necessary to better characterize the nature and extent of the contamination.

E2-3: Agree. The final feasibility report was revised to include this text in the main report.

E2-4: Dredging for deepening is expected to temporarily displace the bottom-dwelling resident fishes such as flounder, sole, and sculpins. Dredging activity affects only a small area at any given time of the total construction project, and the benthic fishes are expected to return the area as the dredge moves to each sequential portion of the channel. The dredge equipment operates in a very small footprint compared to the 214.5 acres of the Blair Waterway channel; therefore, the mobile and migratory fish have a broad area for the avoidance of the dredge equipment.

Dredging causes direct mortality to benthic invertebrates that are incapable of avoiding the disturbance, including prey items of demersal fishes. The dredging will take up to three years to complete; therefore, the areas in which the benthic organisms are eliminated will not be the total surface area in a single dredging event. This will allow organisms to migrate from undisturbed areas into the deepened segments. Recovery begins with the early colonizers and takes less than a year for the short-lived organisms that have rapid growth and re-population strategies; this is followed by the longer-lived species that generally grow larger but have a slower recovery time of two to three years (Newell et al. 1998).

6.3 Comment Letter E3—MacMillan-Piper

From: Suzanne Tilley
To: Tacoma Harbor
Cc: Gary Gieser; Mark Miller; greidburn@nwseaportalliance.com
Subject: [Non-DoD Source] In support of the Tacoma Harbor Navigation Improvement Project
Date: Thursday, January 16, 2020 2:44:24 PM
Attachments: image001.png
Support for Blair Waterway deepening.pdf

Good afternoon, Ms. Ceragioli.

Attached is MacMillan-Piper's letter in support of the U.S. Army Corps of Engineers' proposal for deepening the Blair Waterway in Tacoma's harbor. We believe that the channel deepening project is necessary to keep the port strong and ensure that larger container ships continue to call Tacoma. Ours and our customers' businesses are dependent on import and export shipping through the Northwest Seaport Alliance, and we would no longer be able to bring agricultural and other products to market if larger vessels were unable to call the port. MacMillan-Piper has been in business since 1969 and employs about 100 people. Please help keep us in business for another 50 years.

E3-1

We appreciate your consideration.

Sincerely,

Suzanne Tilley

Suzanne Tilley | Compliance & Assets Manager

P.O. Box 3514 | Seattle WA 98124-3514

Tel: 206.624.5135 | Fax: 206.624.2449

stilley@macpiper.com <mailto:stilley@macpiper.com>

Blockedwww.macpiper.com <Blockedhttp://www.macpiper.com>

MacMILLAN-PIPER
1762 Sixth Avenue South
PO Box 3514, Seattle, WA 98124-3514
PH: 206 624-5135 FAX: 206 624-2449
www.macpiper.com

January 16, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle WA 98124-3755

Dear Ms. Ceragioli:

On behalf of MacMillan-Piper, Inc., I am writing to support the U.S. Army Corps of Engineers' proposal for deepening the Blair Waterway in Tacoma's harbor. Our region's world class ports have long helped the Pacific Northwest occupy a prominent position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container vessel activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships calling North America, protect U.S. jobs, and enhance the infrastructure that allows our region's farmers and manufacturers to connect to global markets.

As the largest freight transloader in the Pacific Northwest, MacMillan-Piper depends on a state-of-the-art port system. A major part of our business consists of transloading whole grains, grain products, and legumes for our agricultural customers into containers for export through the NWSA. We and our customers rely on a deep draft port to ensure that key steamship lines continue to call in Puget Sound.

The largest container vessels calling at West Coast ports today have roughly twice the container capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities of more than 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest container port complex in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to load fewer containers or delay vessel departures based on the tides. This increases costs, especially for exports, which tend to be heavier than imports. The agricultural industry faces intense competition in overseas markets. In this business environment, it is critical that we and our ag customers be able to access efficient, reliable supply chains. We also recognize that failing to provide adequate channel depths can have financial implications for ocean carriers and induce them to discontinue services to a port. The NWSA has lost cargo to the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound ports, it will have serious repercussions for our industry and the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. MacMillan-Piper strongly supports the plan the Corps of Engineers has proposed for the Tacoma Harbor Navigation Improvement Project.

Sincerely,

Mark Miller
President & CEO
mmiller@macpiper.com

E3-1

6.3.1 Response to Comment Letter E3

E3-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

6.4 Comment Letter E4—Tacoma Youth Marine Center

January 16, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle WA 98124-3755

Dear Ms. Ceragioli:

On behalf of the Tacoma Youth Marine Center, I am writing to support the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world-class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

The Tacoma Youth Marine Center (TYMC) is the only youth-focused waterfront maritime campus with its own vessels and small fleet in the South Sound. It is operated by the Youth Marine Foundation, a recognized 501(c)3 whose mission is to provide an opportunity for youth to experience quality maritime skills training through our programs and hands-on activities year-round. TYMC has served hundreds of youth, providing a cluster of programs including intensive navigation, safe boating, small engine repair, diesel mechanics, fiberglass repair and other related maritime skills. All of this is completed real time, on the water.

Many of our youth depend on the continued success of the Port of Tacoma and NWSA for educational and career opportunities once they have successfully completed our programs.

E4-1

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound it will reduce transportation options and market access for many US businesses and have serious repercussions for the economy.

253-572.2666 820 East D Street, Tacoma WA 98421 youthmarinefoundation.org

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. The Tacoma Youth Marine Center enthusiastically supports the alternative the Corps of Engineers has proposed for Tacoma Harbor Navigation Improvement Project. We look forward to ongoing career opportunities to place our youth and engaging them in the strong maritime heritage unique to us. *In a time when family-wage jobs are in demand, we recognize the Port of Tacoma's role in providing those for years to come with the ability to compete with ports throughout North America.*

Sincerely,

Monique Valenzuela
Executive Director, YMF

E4-1 cont'd

6.4.1 Response to Comment Letter E4

E4-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

6.5 Comment Letter E5—Lakewood Chamber of Commerce

Lakewood
CHAMBER of COMMERCE

January 20, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle WA 98124-3755

Dear Ms. Ceragioli:

On behalf of the Board of Directors of the Lakewood Chamber of Commerce, I am writing to support the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world-class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect U.S. jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 twenty-foot equivalent units, with even larger vessels expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound it will reduce transportation options and market access for many US businesses and have serious repercussions for the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. The Lakewood Chamber of Commerce supports the alternative the Corps of Engineers has proposed for Tacoma Harbor Navigation Improvement Project.

Best regards,

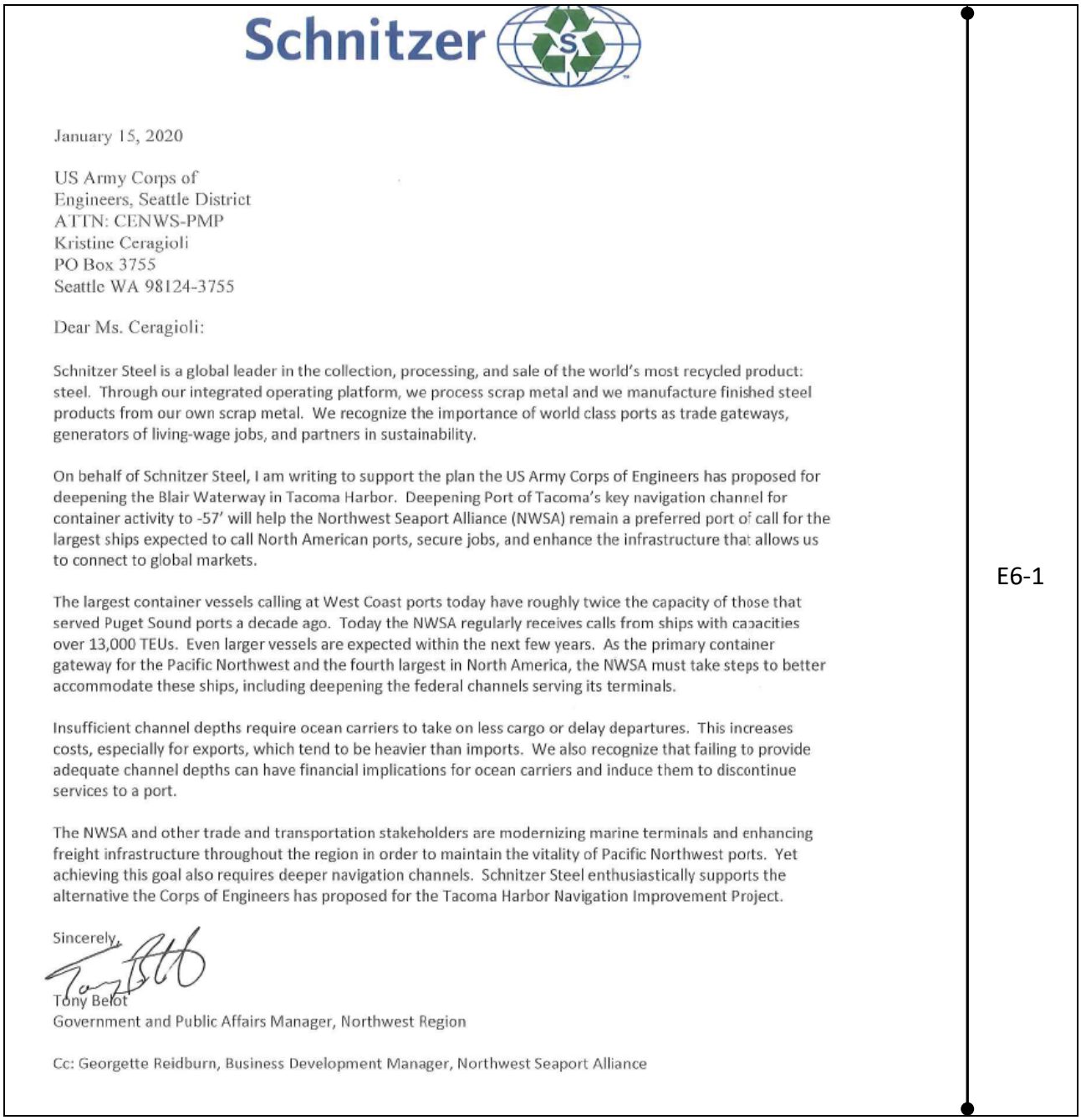
Linda K. Smith
President/CEO

E5-1

6.5.1 Response to Comment Letter E5

E5-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

6.6 Comment Letter E6—Schnitzer Steel



Schnitzer

January 15, 2020

US Army Corps of
Engineers, Seattle District
ATTN: CENWS-PMP
Kristine Ceragioli
PO Box 3755
Seattle WA 98124-3755

Dear Ms. Ceragioli:

Schnitzer Steel is a global leader in the collection, processing, and sale of the world's most recycled product: steel. Through our integrated operating platform, we process scrap metal and we manufacture finished steel products from our own scrap metal. We recognize the importance of world class ports as trade gateways, generators of living-wage jobs, and partners in sustainability.

On behalf of Schnitzer Steel, I am writing to support the plan the US Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, secure jobs, and enhance the infrastructure that allows us to connect to global markets.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases costs, especially for exports, which tend to be heavier than imports. We also recognize that failing to provide adequate channel depths can have financial implications for ocean carriers and induce them to discontinue services to a port.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. Schnitzer Steel enthusiastically supports the alternative the Corps of Engineers has proposed for the Tacoma Harbor Navigation Improvement Project.

Sincerely,

Tony Bellot
Government and Public Affairs Manager, Northwest Region

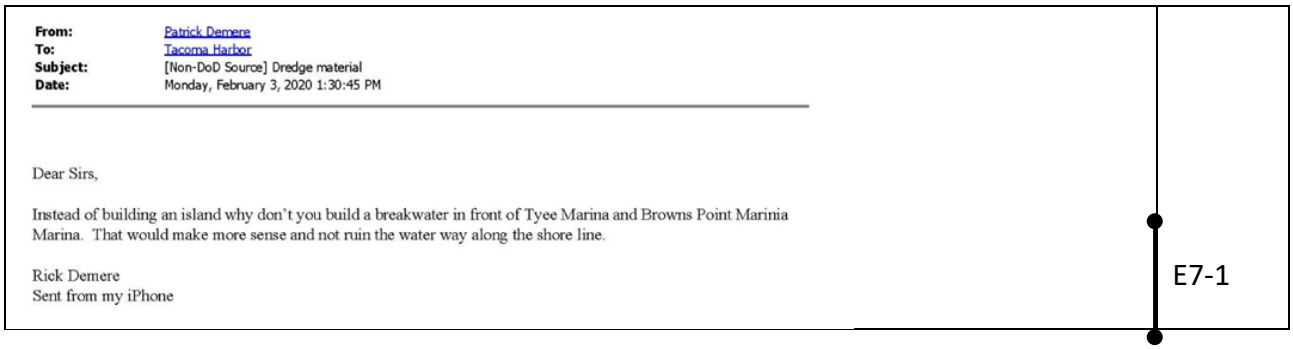
Cc: Georgette Reidburn, Business Development Manager, Northwest Seaport Alliance

E6-1

6.6.1 Response to Comment Letter E6

E6-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

6.7 Comment Letter E7—Patrick Demere



From: Patrick Demere
To: Tacoma Harbor
Subject: [Non-DoD Source] Dredge material
Date: Monday, February 3, 2020 1:30:45 PM

Dear Sirs,

Instead of building an island why don't you build a breakwater in front of Tyee Marina and Browns Point Marinia Marina. That would make more sense and not ruin the water way along the shore line.

Rick Demere
Sent from my iPhone

E7-1

6.7.1 Response to Comment Letter E7

E7-1: The purpose of placing material at Saltchuk is the beneficial use of dredged material to improve habitat conditions for Endangered Species Act-listed salmonids and benthic organisms. A breakwater would not provide the anticipated environmental benefits and would not use dredged material. Construction of a breakwater is outside the scope of this study of potential improvements to the Federal navigation features at Tacoma Harbor.

6.8 Comment Letter E8—Nancy Hausauer

From: Nancy Hausauer
To: Tacoma Harbor
Subject: [Non-DoD Source] Comments of proposed dredging of Blair Waterway by Port of Tacoma
Date: Monday, February 3, 2020 3:06:14 PM

Dear Army Corps of Engineers,

I am writing to express my strong opposition to the Port of Tacoma' proposal to dredge the Blair Waterway. We don't need further environmental degradation in the Tacoma Tideflats.

E8-1

The Blair Waterway is surrounded by dozens of industrially polluted sites, many of which still contain contaminated groundwater that could be leeching into the waterway. Rather than sharing the cost of the Port of Tacoma's proposed project, I (and I believe most Tacoma residents) would rather see the Federal government spend $242 million to clean up our Tideflats, rather than cause further environmental degradation.

If the project moves forward, approximately 2.4 million cubic yards of dredged material could wind up in Commencement Bay and the rest would be dumped at an upland facility. What about all this dredged material? Is it toxic, as so much in the Port is? What exactly is this "upland facility?"

E8-2

Item 2.5 "Planning Constraints" of the Draft Integrated Feasibility Report and Environmental Assessment cites the need to observe Treaty Rights of the Puyallup and Muckleshoot Tribes. But is the Port really going to do this? It seems not, since the Puyallup Tribe of Indians has voiced serious concerns about this project negatively impacting water quality, treaty fishing rights, and fisheries. Puyallup Tribal Council Chairman Bill Sterud has said this, as quoted in the Tacoma News Tribune: "The Puyallup Tribe has produced 2.5 million chum, 1 million Chinook and 50,000 steelhead annually. Our fish are already exposed to high levels of contaminants within the Commencement Bay estuary. Improving survival rates of Puyallup River and all Puget Sound origin salmon is key to the recovery of these iconic Northwest species. ... Dredging the contaminated sediment could harm this habitat, our treated-protected resources and homelands."

E8-3

The Executive Summary of the Draft Integrated Feasibility Report And Environmental Assessment says:

"The purpose of the proposed Federal action is to achieve transportation cost savings (increased economic efficiencies) at Tacoma Harbor. . . . Tide restrictions, light loading, or other operational inefficiencies created by inadequate channel depth result in economic inefficiencies that translate into costs for the national economy. "

That is way too vague for something that is going to violate Treaty Rights and pollute our local waterways even more. I want to know, exactly what are these "costs for the national economy"? Exactly how much? Will the average citizen be hurt by these "costs for the national economy"? I doubt it. So exactly who is this waterway dredging going to benefit?

E8-4

As a citizen and a resident of Tacoma, I am especially insulted by the vagueness of the Port's objectives for this project, when weighed against the possible harms it will cause.

Sincerely,

Nancy Hausauer

Tacoma, WA

nancy@nancyhausauer.com <mailto:nancy@nancyhausauer.com>

<Blockedhttp://www.the-energy-healing-site.com> <Blockedhttp://www.the-energy-healing-site.com/>

6.8.1 Response to Comment Letter E8

E8-1: The allocation of Federal dollars is specific to navigation deepening by the Corps of Engineers in partnership with the Port of Tacoma. As a component to this project, the Corps conducted an environmental site assessment to evaluate the presence and potential impacts to contaminated sites within the immediate project footprint. The Corps only identified one site, Occidental Chemical Corporation, where additional evaluation during design is needed to ensure there are no adverse impacts from the navigation deepening study that would alter the groundwater flow regime. The Occidental Chemical Corporation Site is regulated by the Washington State Department of Ecology, and the Corps plans to continue coordination with them throughout the design process. Separately, the Washington State Department of Ecology, along with the US Environmental Protection Agency, continue to identify, characterize, and remediate contaminated sites throughout the area surrounding Blair Waterway under the respective remediation authorities.

E8-2: The final disposal location of the dredged material will be determined by a comprehensive testing program that would occur during the PED phase of the project. Sediment that is determined to be suitable for unconfined open-water disposal would be taken to the Commencement Bay disposal site or used for beneficial use at Saltchuk. Sediment that is not suitable for open-water disposal would be taken to an approved upland facility such as a landfill. The appropriate facility will be determined by the testing results. Also, see master comment response #3.

E8-3: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. Coordination by the Corps and Port of Tacoma with the Puyallup Tribe of Indians, including Government-to-Government meetings, has been ongoing and will continue through the Corps Planning process.

E8-4: The base economic benefit of a navigation project is the reduction in the value of resources required to transport commodities. In the case of the potential channel deepening at Tacoma Harbor described in the Draft Integrated Feasibility Report, deeper channel depth allows for more efficient loading of containerships. As container ships load more cargo in every trip to Tacoma Harbor due to deeper channel depth, fewer total vessel calls are necessary. Fewer total vessel calls allows the economy to import and export the same volume of commodities for less cost. This releases resources for more productive use elsewhere in the economy.

Tacoma Harbor is a lead exporter of Pacific Northwest agricultural products. Imports include industrial machinery and computers, electronics, and intermediate products. Reducing the costs of transporting these commodities increases efficiency throughout the national economy. Additionally, the project estimates significant regional benefits associated with project construction (Main Report Section 3.6.3).

The study team estimates that without channel deepening (i.e., -51 feet MLLW channel depth), total transportation costs expressed in average annual equivalent (AAEQ) costs will be $136 million dollars more per year than with channel deepening to -57 feet MLLW. A summary of estimated benefits and costs is available in Section 5.5 of the Main Report, and a detailed summary of economic benefit estimates is provided in Appendix A.

6.9 Comment Letter E9—Lamb Weston

Lamb Weston
599 South Rivershore Lane
Eagle, ID 83616

T +1 208 938 1047
F +1 208 388 4299

www.lambweston.com

January 31, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle WA 98124-3755

Dear Ms. Ceragioli:

On behalf of Lamb Weston, I am writing to support the plan the US Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases costs, especially for exports, which tend to be heavier than imports. The frozen potato industry faces intense competition in overseas markets. In this business environment, it is critical that our industry can access efficient, reliable supply chains. We also recognize that failing to provide adequate channel depths can have financial implications for ocean carriers and induce them to discontinue services to a port. The NWSA has lost cargo to the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound it will have serious repercussions for our industry and the economy.

E9-1

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. Lamb Weston enthusiastically supports the alternative the Corps of Engineers has proposed for the Tacoma Harbor Navigation Improvement Project.

Sincerely,

Mark Schuster
Vice President Supply Chain Lamb Weston

6.9.1 Response to Comment Letter E9-1

E9-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

6.10 Comment Letter E10—Tacoma Water

From: Washington, Michael
To: Tacoma Harbor
Subject: [Non-DoD Source] CENWS-PMP-18-22 - Tacoma Harbor, WA Navigation Improvement Project
Date: Tuesday, February 11, 2020 9:51:53 AM
Attachments: 17-43-02.pdf

To whom it may concern,

In regards to the proposed dredging and widening operations near the Port of Tacoma, Tacoma Water has both active and abandon water mains under the Blair Waterway crossing at East 11th Street (See the attached drawing 17-43-2). In a couple of the proposed alternatives, an abandoned transmission main is in the footprint of the operations so it will need to be removed. The two other transmission mains located in crossing (one abandoned and one active) do not appear to be impacted, however, we would like to understand the impacts more as the design progresses. Please include me as stakeholder so that Tacoma Water can be better informed of our risk as the design progresses through its phases.

E10-1

Thank you.

Michael L. Washington, P.E.
Principal Engineer
Tacoma Water
Water Supply Section
Phone (253) 502-8862
Cell (253) 377-0957
Fax (253) 396-3377

6.10.1 Response to Comment Letter E10

E10-1: Thank you for your comments regarding the Tacoma Harbor Navigation Improvement Project. The Corps and the Port of Tacoma will engage Tacoma Water by contacting Michael Washington and other local utilities during Pre-construction Engineering and Design Phase when additional design details are available.

6.11 Comment Letter E11—Virginia Briggs

From: Virginia V Briggs
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Tuesday, February 11, 2020 4:52:40 PM

Army Corps of ,

Hello,
I am sending this letter due to the grave concern I have regarding many of the environmental decisions that will affect all residents of Tacoma and surrounding areas. As a resident of Pierce county, I am writing to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis. All decisions being made, if without a real focus on the environmental effects, will be extremely detrimental now and to all future generations. E11-1

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay. E11-2

As a concerned community member, I feel as though the port must do an environmental impact study so people like me can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca. E11-3

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

Virginia V Briggs
briggsv@gmail.com
1306 Boise St
Fircrest , Washington 98466

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/EQE/ni0YAA/t.2z7/j7zTttkQTLOPZbd34otrQQ/ho.gif>

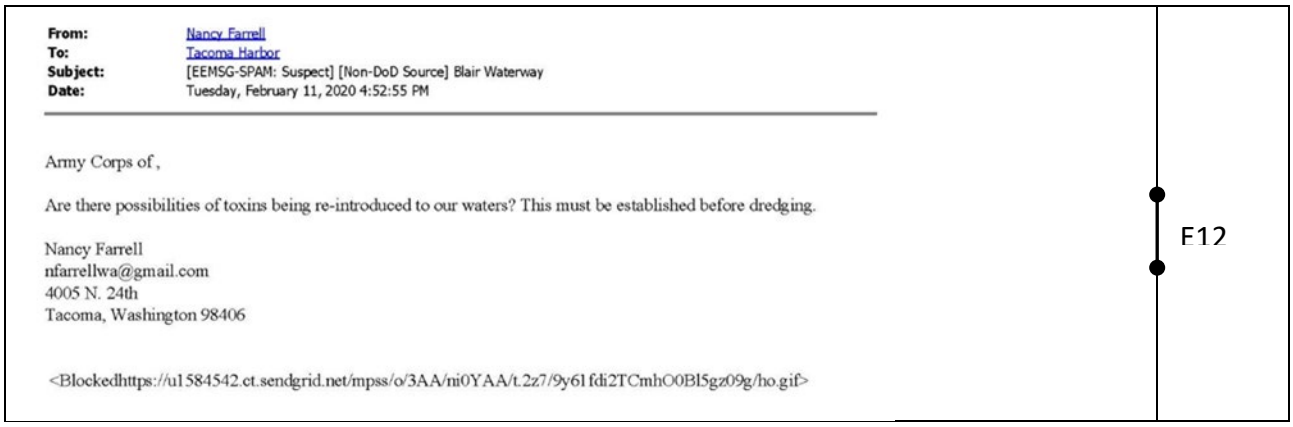
6.11.1 Response to Comment Letter E11

E11-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E11-2: For sediments that have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway (i.e., disturbing the waterway) in the Environmental Assessment and determined that the effects of the action area is not significant.

E11-3: Please see responses to E11-1 and E11-2. The Corps analyzed the effects of dredging during the three-year feasibility study. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.12 Comment Letter E12—Nancy Farrell



From: Nancy Farrell
To: Tacoma Harbor
Subject: [EEMSG-SPAM: Suspect] [Non-DoD Source] Blair Waterway
Date: Tuesday, February 11, 2020 4:52:55 PM

Army Corps of ,

Are there possibilities of toxins being re-introduced to our waters? This must be established before dredging.

Nancy Farrell
nfarrellwa@gmail.com
4005 N. 24th
Tacoma, Washington 98406

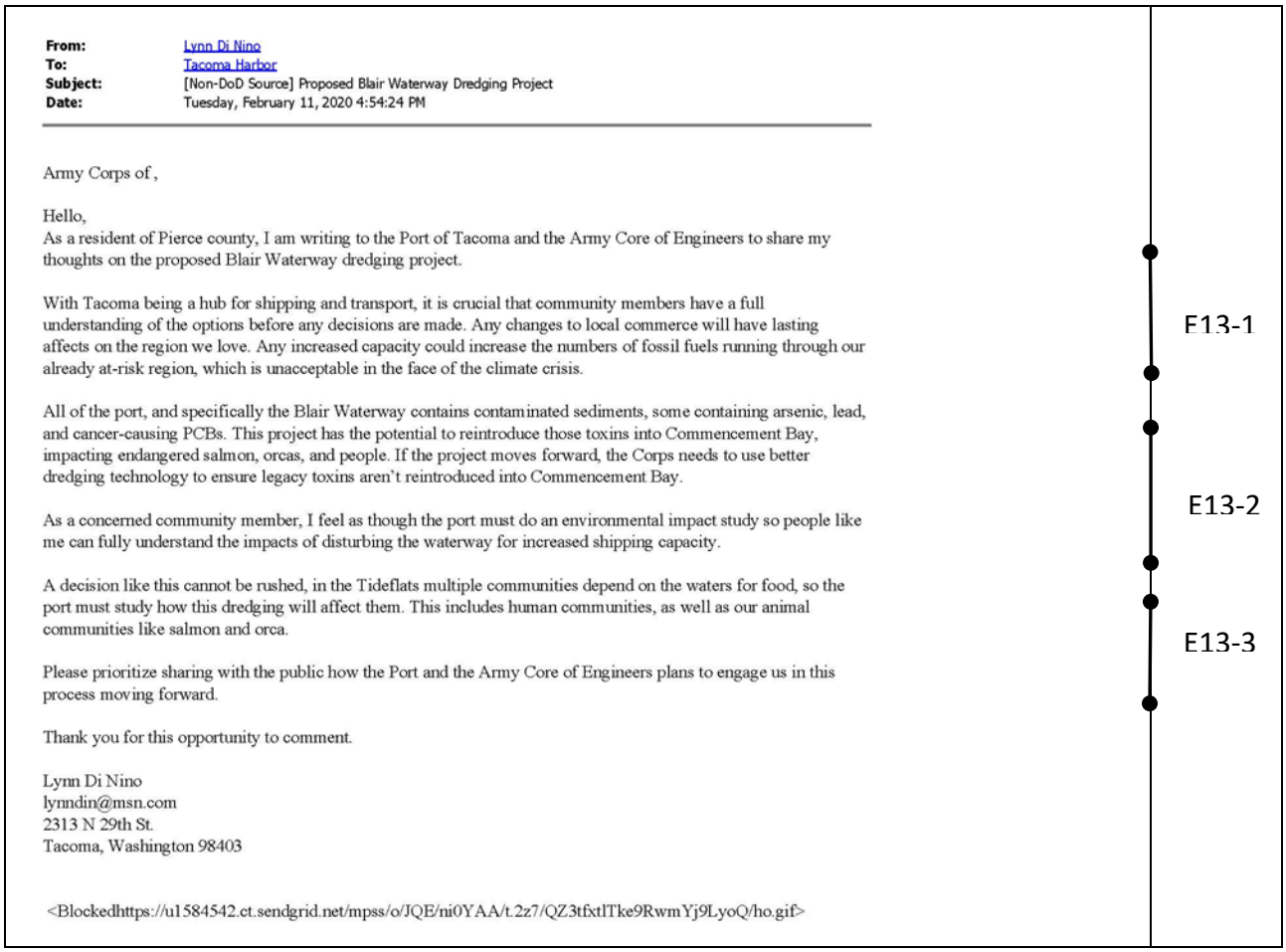
<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/3AA/ni0YAA/t.2z7/9y61fdi2TCmhO0Bl5gz09g/ho.gif>

E12

6.12.1 Response to Comment Letter E12

E12-1: In general, any dredging project will experience some degree of sediment resuspension into the water column. Extensive evaluation of sediments to be dredged, along with the potentially associated contamination, will be conducted prior to construction. For sediments that have higher levels of contamination associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts.

6.13 Comment Letter E13—Lynn Di Nino



From: Lynn Di Nino
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Tuesday, February 11, 2020 4:54:24 PM

Army Corps of ,

Hello,
As a resident of Pierce county, I am writing to the Port of Tacoma and the Army Core of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis.

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay.

As a concerned community member, I feel as though the port must do an environmental impact study so people like me can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca.

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

Lynn Di Nino
lynndin@msn.com
2313 N 29th St.
Tacoma, Washington 98403

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/JQE/ni0YAA/t.2z7/QZ3tfxtlTke9RwmYj9LyoQ/ho.gif>

E13-1

E13-2

E13-3

6.13.1 Response to Comment Letter E13

E13-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E13-2: See Master Response 1 and 2. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway in the Environmental Assessment and determined that the effects of the action are not significant.

E13-3: Please see responses to E13-1 and E13-2. The Corps analyzed the effects of dredging during the three-year feasibility study. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.14 Comment Letter E14—Elly Claus-McGahan

From: Elly Claus-McGahan
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Tuesday, February 11, 2020 5:53:45 PM

Army Corps of ,

Hello,
As a resident of Tacoma and living near the Port, I am writing to the Port of Tacoma and the Army Corps of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis. The speculated reduction in GHG emissions because we would have larger but fewer ships is unlikely to remain true for long as we are always seeking to increase economic growth which means more shipping. E14-1

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay. E14-2

As a concerned community member, I request the port do an environmental impact study so we will all fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca. The Puyallup tribe must be consulted as part of our obligation to honor their treaty with our government. As a nation we are required to protect salmon harvest so that tribe can collect its lawful salmon harvest to eat. Dredging at this level with strong potential of poisoning salmon that swim up the Puyallup cannot be decided on without the tribes input and approval. E14-3

Please prioritize sharing with the public how the Port and the Army Corps of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

Elly Claus-McGahan
drelly@sound-decisions.org
4301 N Frace Ave
Tacoma, Washington 98407

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/1wA/ni0YAA/t.2z7/Z712b7imSfOCXg5MavKlZg/ho.gif>

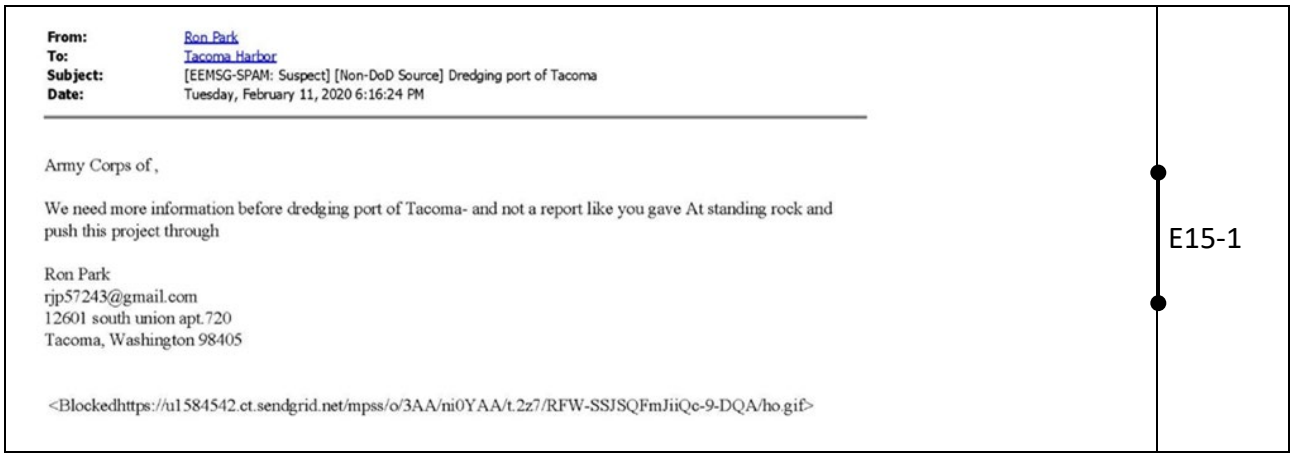
6.14.1 Response to Comment Letter E14

E14-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E14-2: For sediments that have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway (i.e., disturbing the waterway) in the Environmental Assessment and determined that the effects of the action area will not be significant.

E14-3: Please see responses to E14-1 and E14-2. The Corps analyzed the effects of the proposed alternative during the three-year feasibility study. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments. Coordination by the Corps and Port of Tacoma with the Puyallup Tribe of Indians, including Government-to-Government meetings, has been ongoing and will continue through PED and construction.

6.15 Comment Letter E15—Ron Park



From: Ron Park
To: Tacoma Harbor
Subject: [EEMSG-SPAM: Suspect] [Non-DoD Source] Dredging port of Tacoma
Date: Tuesday, February 11, 2020 6:16:24 PM

Army Corps of ,

We need more information before dredging port of Tacoma- and not a report like you gave At standing rock and push this project through

Ron Park
rjp57243@gmail.com
12601 south union apt.720
Tacoma, Washington 98405

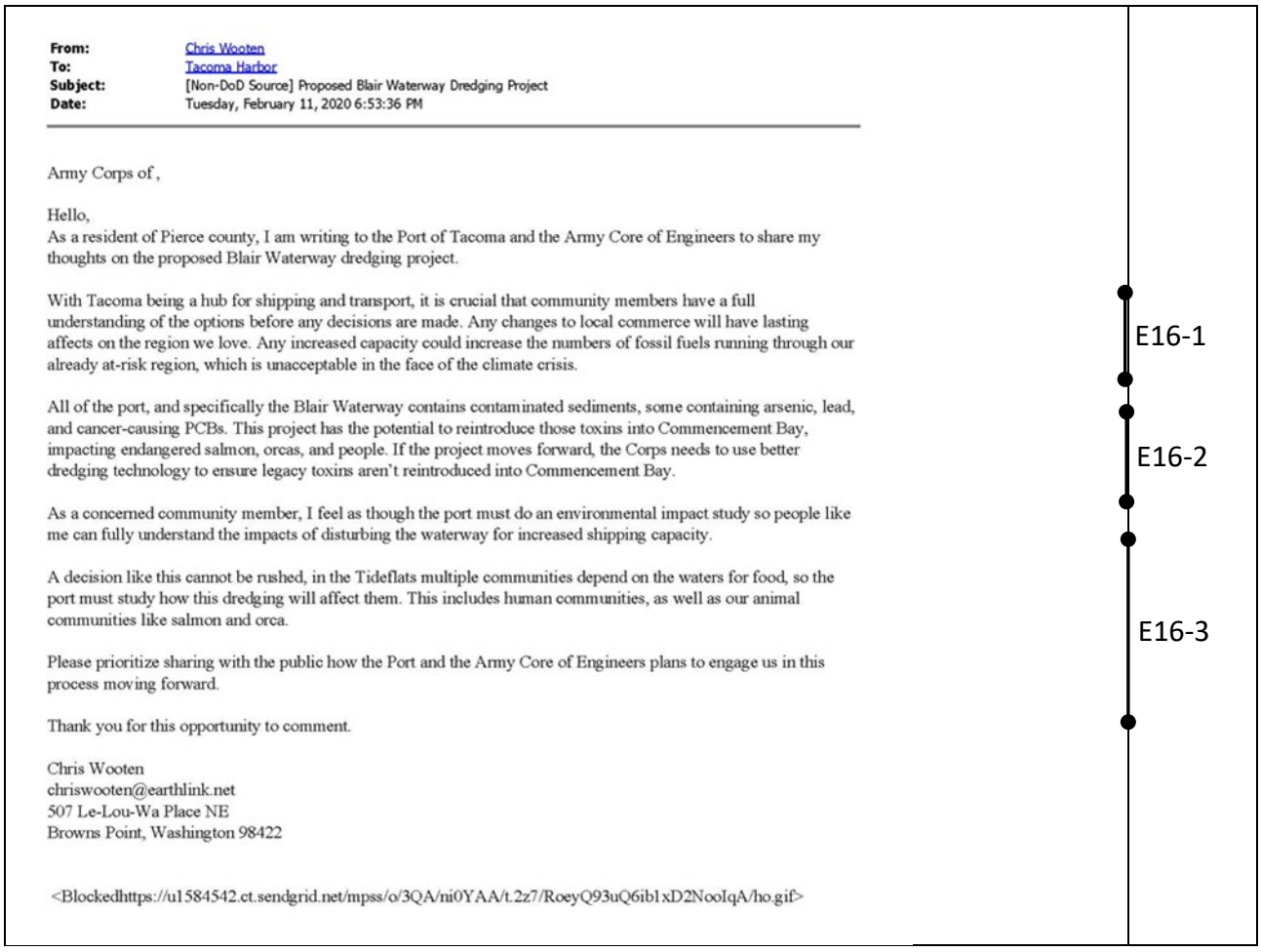
<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/3AA/ni0YAA/t.2z7/RFW-SSJSQFmJiiQc-9-DQA/ho.gif>

E15-1

6.15.1 Response to Comment Letter E15

E15-1: The Corps analyzed the effects of the proposed alternative during the three-year feasibility study period. The public had opportunities to give comments during project scoping and on the draft IFR/EA. In addition, the Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.16 Comment Letter E16—Chris Wooten



From: Chris Wooten
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Tuesday, February 11, 2020 6:53:36 PM

Army Corps of ,

Hello,
As a resident of Pierce county, I am writing to the Port of Tacoma and the Army Core of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis.

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay.

As a concerned community member, I feel as though the port must do an environmental impact study so people like me can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca.

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

Chris Wooten
chriswooten@earthlink.net
507 Le-Lou-Wa Place NE
Browns Point, Washington 98422

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/3QA/ni0YAA/t.2z7/RoeyQ93uQ6ib1xD2NooIqA/ho.gif>

E16-1

E16-2

E16-3

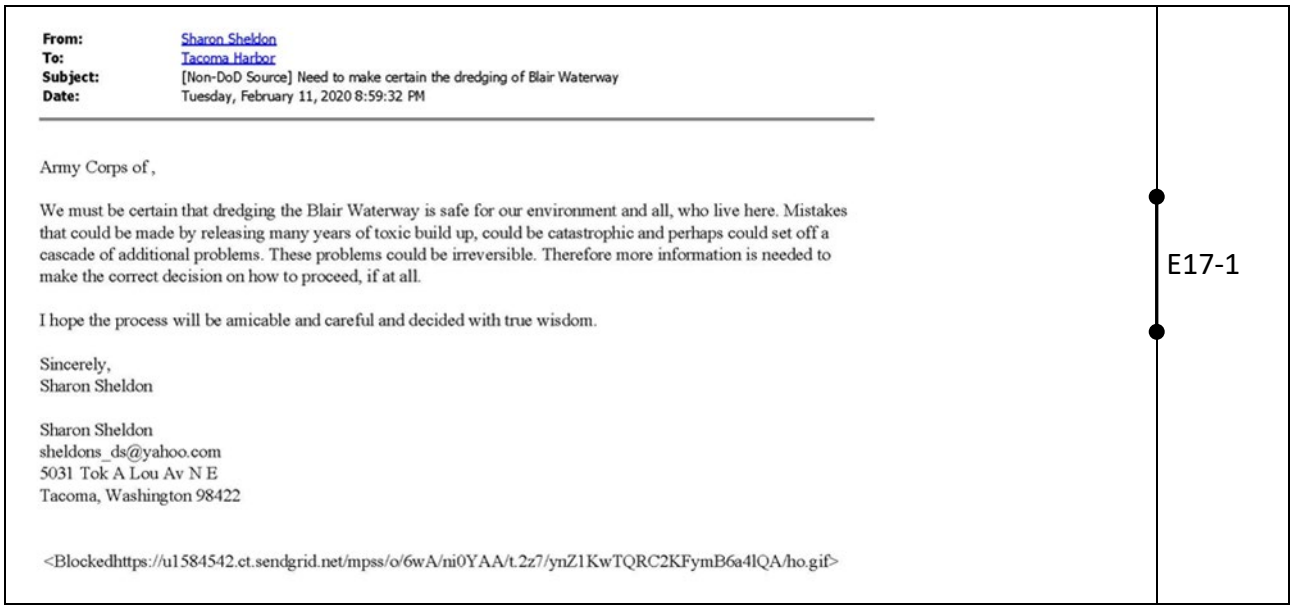
6.16.1 Response to Comment Letter E16

E16-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E16-2: For sediments that have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway (i.e., disturbing the waterway) in the Environmental Assessment and determined that the effects of the action area will not be significant.

E16-3: Please see responses to E16-1 and E16-2. The Corps analyzed the effects of the proposed alternative during the three-year feasibility study and reported them in detail in the Environmental Assessment. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.17 Comment Letter E17—Sharon Sheldon



From: Sharon Sheldon
To: Tacoma Harbor
Subject: [Non-DoD Source] Need to make certain the dredging of Blair Waterway
Date: Tuesday, February 11, 2020 8:59:32 PM

Army Corps of ,

We must be certain that dredging the Blair Waterway is safe for our environment and all, who live here. Mistakes that could be made by releasing many years of toxic build up, could be catastrophic and perhaps could set off a cascade of additional problems. These problems could be irreversible. Therefore more information is needed to make the correct decision on how to proceed, if at all.

I hope the process will be amicable and careful and decided with true wisdom.

Sincerely,
Sharon Sheldon

Sharon Sheldon
sheldons_ds@yahoo.com
5031 Tok A Lou Av N E
Tacoma, Washington 98422

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/6wA/ni0YAA/t.2z7/ynZ1KwTQRC2KFymB6a4lQA/ho.gif>

E17-1

6.17.1 Response to Comment Letter E17

E17-1: See Master Response 1

6.18 Comment Letter E18—Penny Rowe

From: Penny Rowe
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Wednesday, February 12, 2020 9:18:29 AM

Army Corps of ,

Hello,
As a resident of Pierce county, I am writing to the Port of Tacoma and the Army Core of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis. E18-1

All of the port, and specifically the Blair Waterway, contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay. E18-2

As a concerned community member, I feel it is essentially that the port have an environmental impact study done so we can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed. In the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca. E18-3

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

Penny Rowe
prowe@harbornet.com
1515 N. Prospect St.
Tacoma, Washington 98406

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/5wA/ni0YAA/t.2z7/l_Pi6Ac7RxW0r3FLc7B-ew/ho.gif>

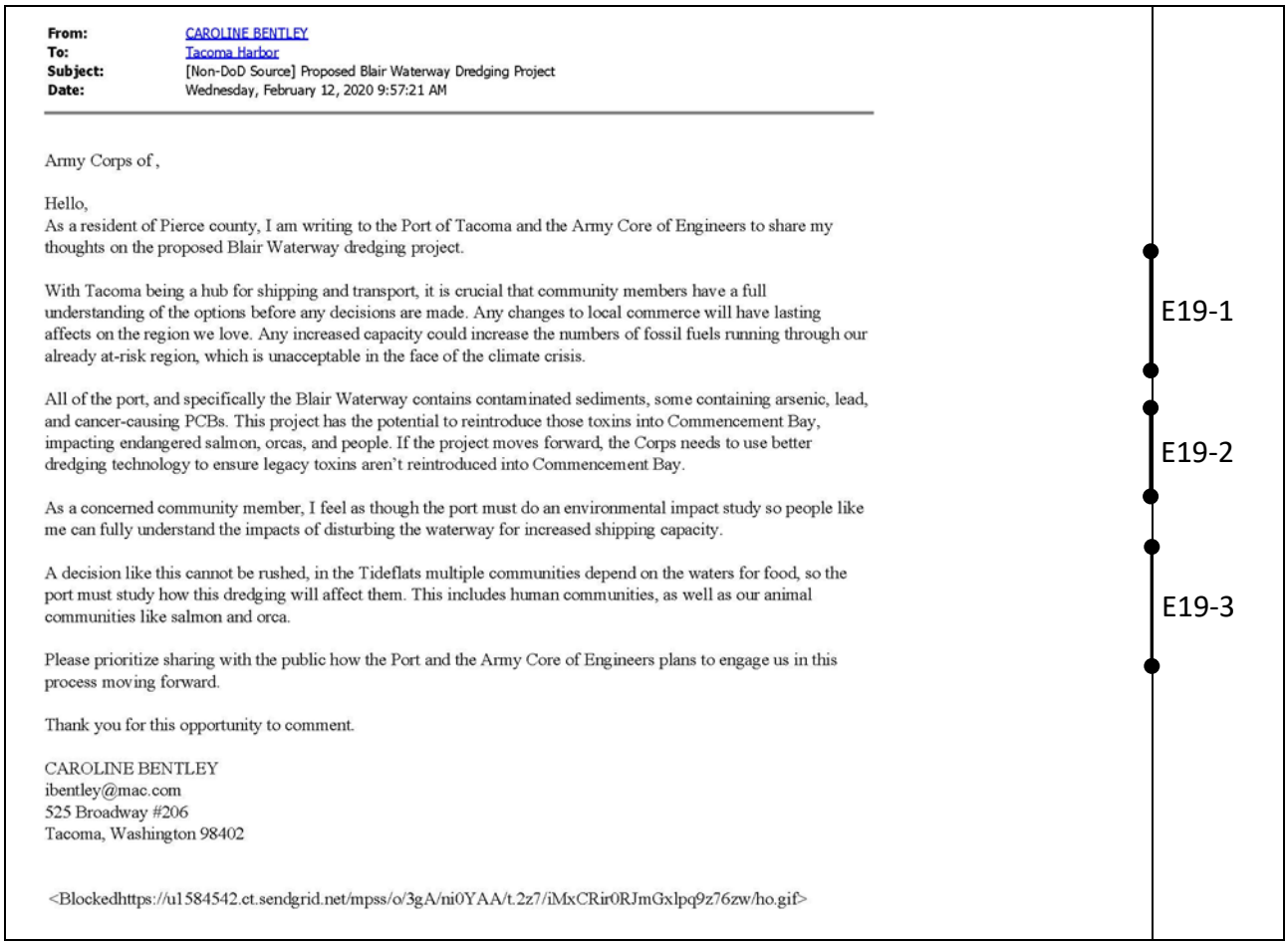
6.18.1 Response to Comment Letter E18

E18-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E18-2: For sediments that have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway (i.e., disturbing the waterway) in the Environmental Assessment and determined that the effects of the action area will not be significant.

E18-3: Please see responses to E18-1 and E18-2. The Corps analyzed the effects of the proposed alternative during the three-year feasibility study and reported them in detail in the Environmental Assessment. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.19 Comment Letter E19—Caroline Bentley



From: CAROLINE BENTLEY
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Wednesday, February 12, 2020 9:57:21 AM

Army Corps of ,

Hello,
As a resident of Pierce county, I am writing to the Port of Tacoma and the Army Core of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis.

E19-1

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay.

E19-2

As a concerned community member, I feel as though the port must do an environmental impact study so people like me can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca.

E19-3

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

CAROLINE BENTLEY
ibentley@mac.com
525 Broadway #206
Tacoma, Washington 98402

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/3gA/ni0YAA/t.2z7/iMxCRir0RJmGxlpq9z76zw/ho.gif>

6.19.1 Response to Comment Letter E19

E19-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E19-2: For sediments that have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway (i.e., disturbing the waterway) in the Environmental Assessment and determined that the effects of the action area will not be significant.

E19-3: Please see responses to E19-1 and E19-2. The Corps analyzed the effects of the proposed alternative during the three-year feasibility study and reported them in detail in the Environmental Assessment. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.20 Comment Letter E20—nanpeele@hotmail.com

From: nanpeele@hotmail.com
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Wednesday, February 12, 2020 2:24:59 PM

Army Corps of ,

Hello,
As a resident of Pierce county, I am writing to the Port of Tacoma and the Army Core of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis. E20-1

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay. E20-2

As a concerned community member, I feel as though the port must do an environmental impact study so people like me can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca. E20-3

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

nanpeele@hotmail.com
2321 S Cedar St
Tacoma, Washington 98405

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/IQE/ni0YAA/t.2z7/hJ_ya7F6RnuuA041PFOjig/ho.gif>

6.20.1 Response to Comment Letter E20

E20-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E20-2: For sediments that have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway (i.e., disturbing the waterway) in the Environmental Assessment and determined that the effects of the action area will not be significant.

E20-3: Please see responses to E20-1 and E20-2. The Corps analyzed the effects of the proposed alternative during the three-year feasibility study and reported them in detail in the Environmental Assessment. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.21 Comment Letter E21—Maren Ellingson

From: Maren Ellingson
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Thursday, February 13, 2020 12:22:45 AM

Army Corps of ,

Hello,
As a resident of Pierce county, I am writing to the Port of Tacoma and the Army Core of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis. E21-1

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay. E21-2

As a concerned community member, I feel as though the port must do an environmental impact study so people like me can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca. E21-3

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

Maren Ellingson
maren.ellingson@comcast.net
3840 A Street
Tacoma, Washington 98418

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/3wA/ni0YAA/t.2z8/wBCTXciaSxGYj9SRYk2Ifw/ho.gif>

6.21.1 Response to Comment Letter E21

E21-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. The proposed alternative is expected to reduce the number of vessels calling at Tacoma Harbor.

E21-2: For sediments that have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension. Additionally, the Corps is required to conduct water quality monitoring to comply with the requirements of the CWA, which will require water quality parameters to stay within a certain range to ensure no adverse environmental impacts. An environmental impact statement (EIS) is not necessary because the Corps evaluated the effects of dredging the Blair Waterway (i.e., disturbing the waterway) in the Environmental Assessment and determined that the effects of the action area will not be significant.

E21-3: Please see responses to E21-1 and E21-2. The Corps analyzed the effects of the proposed alternative during the three-year feasibility study and reported them in detail in the Environmental Assessment. Public comments were accepted during project scoping and on the draft IFR/EA. The Corps held two public meetings to inform the public of the project, preferred alternative, and to accept comments.

6.22 Comment Letter E22—Tahoma Audubon Society

tahoma audubon society

2917 Morrison Road, W. University Place Wa. 98466 (253) 565 9278

February 14, 2020

U.S. Army Corps of Engineers, Seattle District,
PO Box 3755,
Seattle, WA 98124-3755.

<tacomaharbor@usace.army.mil>

Regarding: Port of Tacoma proposed Dredging:

At Tahoma Audubon Society we are concerned that the Environmental Assessment (EA) for the Port of Tacoma dredging proposal does not adequately address the risks associated with the project. At risk is Tribal Fishery, the impact on surrounding residential neighborhoods, the employees of the Port of Tacoma and the migratory birds that pass through commencement bay and feed in the dredged fingers of the Port. We ask that the Corp of Engineers publish a Environmental Impact Statement that E22-1

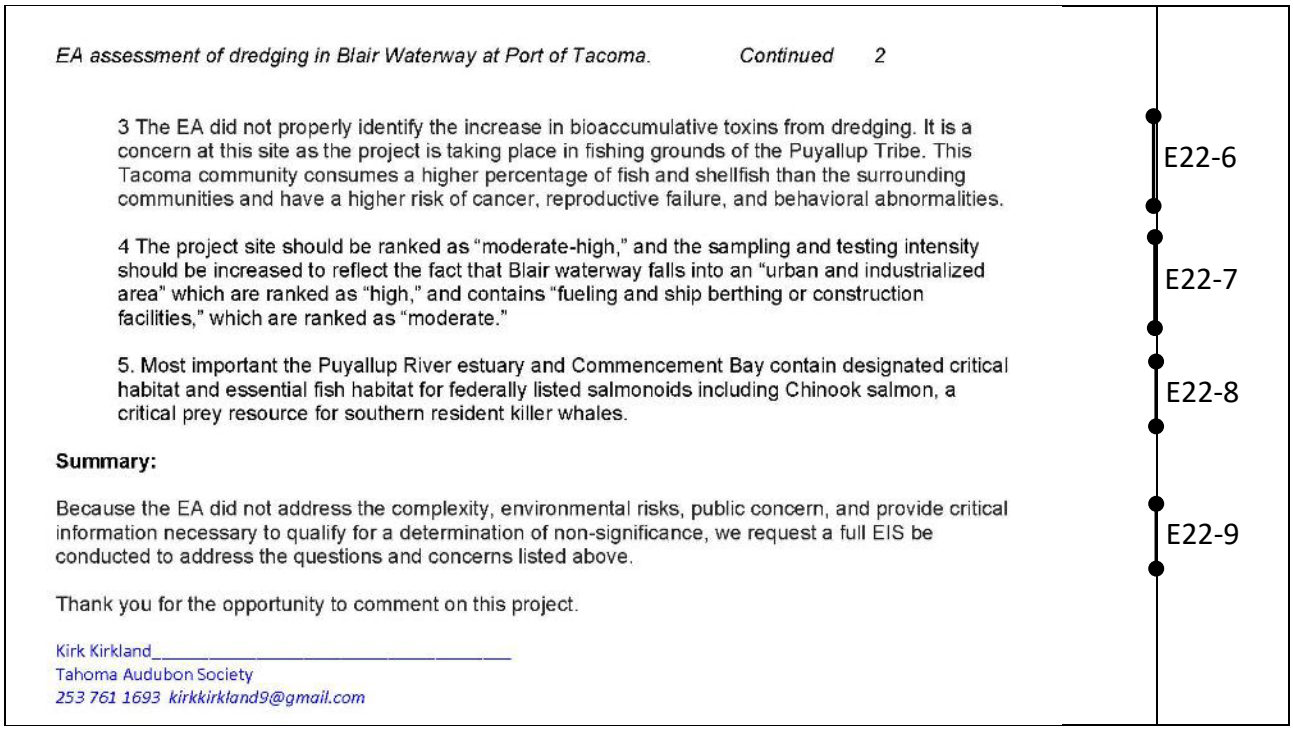
1. Evaluates the dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay, E22-2
2. Studies if dredging will impact neighbors who rely on seafood as a staple of their diets, and;
3. Studies potential harm to salmon and orca populations that find their food in Commencement Bay; and, E22-3
4. Considers the impact dredging will have on usual and accustomed fishing area of the Puyallup Tribe of Indians

Discussion:

The EA did not fully assess the Port of Tacoma's proposal to deepen the Blair Waterway in order to allow the world's largest ships to more easily unload goods and pick up cargo.

1 EA identified minimal risk of overlap with surrounding identified Toxic Cleanups Sites and the Occidental Chemical Superfund site. It also did not identify how the fifteen sites which have known contaminated groundwater and are located immediately next to the Blair Waterway would not be effected during dredging. As a result the Corps should sample the groundwater and sediments for all contaminants associated with the surrounding Toxic Cleanup Sites, and with the Occidental Chemical Superfund site. E22-4

2 We find that digging clamshell bucket in sediments is not suitable for open-water disposal. This would result in 13,000 CY of sediment resuspending into the water column. If this project moves forward, we recommend employing a dredging strategy that risks little or no resuspension of sediments. E22-5



EA assessment of dredging in Blair Waterway at Port of Tacoma. *Continued* 2

3 The EA did not properly identify the increase in bioaccumulative toxins from dredging. It is a concern at this site as the project is taking place in fishing grounds of the Puyallup Tribe. This Tacoma community consumes a higher percentage of fish and shellfish than the surrounding communities and have a higher risk of cancer, reproductive failure, and behavioral abnormalities.

E22-6

4 The project site should be ranked as "moderate-high," and the sampling and testing intensity should be increased to reflect the fact that Blair waterway falls into an "urban and industrialized area" which are ranked as "high," and contains "fueling and ship berthing or construction facilities," which are ranked as "moderate."

E22-7

5. Most important the Puyallup River estuary and Commencement Bay contain designated critical habitat and essential fish habitat for federally listed salmonoids including Chinook salmon, a critical prey resource for southern resident killer whales.

E22-8

Summary:

Because the EA did not address the complexity, environmental risks, public concern, and provide critical information necessary to qualify for a determination of non-significance, we request a full EIS be conducted to address the questions and concerns listed above.

E22-9

Thank you for the opportunity to comment on this project.

Kirk Kirkland
Tahoma Audubon Society
253 761 1693 kirkkirkland9@gmail.com

6.22.1 Response to Comment Letter E22

E22-1: An environmental impact statement (EIS) is not the appropriate NEPA document because the Corps rigorously evaluated the effects of dredging the Blair Waterway in the Environmental Assessment and determined that the effects of the action area will not be significant. Under NEPA, the Corps considers all practicable means and measures to avoid adverse effects to the environment.

E22-2: Please see Master Response 2. For sediments that are unsuitable for in-water disposal or have higher levels of bioaccumulative contaminants associated with them, the Corps will implement Best Management Practices during dredging operations to reduce the potential for sediment resuspension. This includes the use of different dredge buckets and slower cycle times targeted at decreasing sediment resuspension.

E22-3: The Corps has considered the effects of the preferred alternative to Tribal usual and accustomed fishing areas compared to the no action alternative. Coordination by the Corps and Port of Tacoma with the Puyallup Tribe of Indians, including Government-to-Government meetings, has been ongoing and will continue through the PED phase and construction.

E22-4: During the design phase, additional analysis will be done to evaluate potential impacts to groundwater at Occidental Chemical Corporation because of the deepening project. As part of the deepening project, the Corps cannot allow for any adverse impacts to existing HTRW sites, including the spread or uncontrolled release of contaminants. The Corps will conduct a Phase 2 Environmental Site Assessment for those places where additional sediment characterization is

needed prior to construction. Currently, THE CORPS has identified the Former Lincoln Avenue Ditch as one location that will likely require additional characterization.

E22-5: Please see the response to E22-2.

E22-6: Please see Master Response 2.

E22-7: The DMMP advisory determination included recommendations for the appropriate rank of different areas of the Blair waterway to be used for the full DMMP characterization. These recommendations are based on the data collected during the advisory-level characterization. Areas with existing information showing elevated sediment concentrations and past or present sources of contamination will be ranked higher.

E22-8: The Corps has consulted with the National Marine Fisheries Service and U.S. Fish and Wildlife Service under the Endangered Species Act (ESA) for effects to ESA-listed species, their critical habitat, and Essential Fish Habitat (EFH). Please see Sections 6.2 and 6.9 of the IFR/EA for a summary of ESA and EFH consultations. Appendix D contains ESA and EFH consultation documents.

E22-9: Please see response to E22-1.

6.23 Comment Letter E23—The Port of Tacoma/The Northwest Seaport Alliance

THE NORTHWEST SEAPORT ALLIANCE
Gateway to Solutions
nwseaportalliance.com

Port of Tacoma
People. Partnership. Performance.

P.O. Box 1837
Tacoma, WA 98401-1837
www.portoftacoma.com

February 14, 2020

Kristine Ceragioli
Project Manager. US Army Corps of Engineers
Seattle District, CENNS-PMP
PO Box 3755
Seattle, WA 98124-3755

Dear Ms Ceragioli,

The Port of Tacoma/The Northwest Seaport Alliance (Port) sincerely thanks the US Army Corps of Engineers Seattle District (USACE) for developing a thorough, robust, and forward-thinking Feasibility Study/Environmental Assessment (Study) for the Tacoma Harbor Deepening Project. It has been a pleasure working with such a dedicated and professional project team.

For the Tacoma Harbor to remain competitive in the international container shipping business, it is critical that the Blair Waterway is deepened. We have seen a slow erosion of market share in the Puget Sound port container gateway (Seattle and Tacoma harbors) with most of that being lost to Canadian competition. We expect that erosion to continue and likely accelerate if our Port is unable to accommodate ultra-large containerships (ULCS). We will not be able to serve these vessels if we do not deepen the Blair Waterway. And, to be clear, this effort is solely directed at container ships, as they are the only vessels plying the waters of Commencement Bay that need channels of the depths analyzed in this Study.

E23-1

The Port is in full agreement with USACE's major findings:

- The entire Blair Waterway, including the turning basin, is the appropriate scope of the Study;
- While deepening to -57' is shy of the theoretically required depth of -57.5' for the very largest ships, given the over-dredge allowance, -57' is operationally sufficient;
- Widening the federal channel in certain areas of the Blair Waterway improves operational safety, ship movement efficiency, and avoids undue operational constraints;
- The incremental cost increase of beneficially using dredge material at the Saltchuk habitat restoration site is far exceeded by the ecologic benefit of the site, particularly as it benefits migrating juvenile salmon and the food chain that supports the local Orca population. The Port thanks the USACE staff for their willingness to evaluate and ultimately use the National Marine Fisheries Service Habitat Equivalency Analysis model to analyze the benefits of using this material for salmon habitat.

P.O. Box 2985 | Tacoma, WA 98401-2985 | 800-657-9808
The Northwest Seaport Alliance is a marine-cargo operating partnership of the Port of Seattle and Port of Tacoma.

An additional environmental benefit of the deepening is the emerging fleet of ultra large container ships are more efficient. They require fewer sailings, reduce ship counts and burn less fuel to move the same amount of cargo. Given the new dynamic in the industry, the Port concurs with Environmental Assessment findings that the project will generally have positive environmental benefits including:

- A decrease in criteria air pollutants per container moved,
- A decrease in greenhouse gas emissions per container moved,
- Removal of sediments which do not meet sediment quality standards from the aquatic environment, and
- The creation of approximately 64 acres of prime habitat in Commencement Bay that significantly improves the migration route for juvenile salmonids emerging from the Puyallup River system.

E23-1 cont'd

We understand USACE staff found a math error in Appendix F, page 6, Cost Estimating Civil Works Breakdown Structure WBS # 30 "Planning, Engineering and Design" and that the estimated total cost of design will be reduced by approximately $45 million. The Port originally had concerns with the estimated design costs in PED, but with this correction that estimate falls in line with what is typical in the industry.

Again, thank you to the Seattle District, and the project team in particular, for producing an excellent Feasibility Study and Environmental Assessment. We look forward to working with USACE to ultimately produce a Chief's Report and continue with the deepening process.

If you have any questions regarding these comments, please direct them to Tony Warfield of the Port of Tacoma at 253-428-8632 or twarfield@portoftacoma.com.

Sincerely,

John Wolfe
Chief Executive Officer
The Northwest Seaport Alliance

Eric D. Johnson
Executive Director
Port of Tacoma

C: The Northwest Seaport Alliance Managing Members
(Port of Seattle and Port of Tacoma Commissioners)

6.23.1 Response to Comment Letter E23

E23-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

6.24 Comment Letter E24—Puyallup Tribe of Indian

Puyallup Tribe of Indians

February 14, 2020

VIA U.S. MAIL AND ELECTRONIC MAIL

U.S. Army Corps of Engineers
Seattle District
CENWS-PMP
PO Box 3755
Seattle, WA 98124-3755

Re: Tacoma Harbor Draft Feasibility Report and Environmental Assessment

The Puyallup Tribe of Indians hereby submits the attached comments to the Draft Feasibility Report for the Tacoma Harbor Navigation Study ("the Draft Study") that was released for public comment on December 18, 2019. We look forward to continued Government to Government Consultation on this project.

The Puyallup Tribe is a federally recognized Indian Tribe with its reservation located in Tacoma and surrounding communities in the State of Washington. The Tacoma Harbor Navigation Improvement project and its associated changes to operations within the Port of Tacoma are proposed to be conducted within and adjacent to the 1873 Survey Boundary for the Puyallup Tribe's Reservation. In addition to other lands, the Tribe owns land that will be directly impacted by this project. The lands owned by the Tribe are located within the Port of Tacoma and used for Port operations, as restoration sites providing critical and essential fish habitat, as cultural sites, and as marinas for both recreational and commercial boat traffic. Certain Tribal Lands will be directly impacted by the Port's need to cut back Tribal Properties to complete the dredging associated with the project. Tribal members reside within miles of the facility and conduct usual and accustomed cultural activities, including fishing and shellfish harvesting, within the project or near the facility in Commencement Bay.

E24-1

The Tribe, through the Medicine Creek Treaty of 1854, has a treaty right to fish in the waters of Commencement Bay and surrounding Tacoma Harbor and waters that will be impacted by the development and use at the proposed project site. The impacts to the waters, shorelines, habitat, and surrounding shoreline properties and uses go to the heart of the Tribe's culture and livelihood with potential impacts to fish, other wildlife, and natural resources, as well as impacts to the health and welfare of Tribal members. As is secured in Article VI, cl. 2 of the U.S. Constitution, the Treaty "shall be the supreme Law of the Land." As affirmed by *U.S. v. Washington,* the rights arising from the Medicine Creek Treaty cannot be diminished or interfered with absent authority from Congress.

E24-2

3009 E. Portland Ave. • Tacoma, Washington 98404 • 253/573-7800

While the Tribe appreciates the work performed by the Army Corps of Engineers, the Draft Feasibility Study and Environmental Assessment lack necessary details and analysis to fully assess the impacts of the project. This facility is proposed on the 1873 Survey Area, and on what were once the ancestral lands of the Tribe. Since the Tribe's lands were taken, the lands have been significantly degraded by decades of heavy industrial use, leading to significant declines in fisheries and other natural resources that have directly impacted the life and culture of every Tribal Member. This project will disturb decades old contamination and environmental harms that have been deposited in the Blair Waterway. The impacts, if not fully assessed for avoidance, reduction, and mitigation may have dire consequences on the already heavily impacted natural and cultural resources of the Tribe. We implore the Army Corps of Engineers to complete an Environmental Impact Statement to identify and assess the full suite of impacts from the proposed project.

The Feasibility Study, by design, is focused on whether the project, if undertaken, provides a sufficient federal economic benefit to justify the expenditure of federal funds, and the Environmental Assessment is not designed to undertake the data analysis necessary to assess all the impacts associated with this project. The Blair Waterway, Commencement Bay, and the natural and cultural resources surrounding the project area are a complex, diverse ecosystem which are already heavily burdened. The waters contain three fish species listed under the Endangered Species Act which, in spite of over twenty years of regulated recovery efforts, are continuing to decline. These declines are heavily impacting Tribal members and endangered marine mammals. The project, and its associated dredging and future operations, have the potential to impact human health as well. The analysis to date does nothing to assess the both short term and long term potential human health impacts for this proposal. E24-3

The Corps and the Port have continued to propose a mitigation site, called the Saltchuck Site, to mitigate impacts and utilize any dredge material suited for disposal in the nearshore habitat. However, not enough it known about the sediments or the impacts of such a use to determine if such an exercise would result in mitigation benefits. It is also unknown how long it would take to see any measurable benefit from such a project. The project must entail more than just deposit of the dredge material. For example, eelgrass will need to be planted for such a mitigation benefit to be realized. Yet the draft study does not address any of these concerns. It is impossible, without more, to know if the Saltchuck site is feasible, much less how long it may take to realize any mitigation benefit from such an undertaking. And EIS is necessary to evaluate the many details of such a mitigation proposal. E24-4

In addition to the above concerns and those in the attached technical comment document, the Tribe is concerned that the Draft Study fails to account for compliance with Tribal laws, the Land Claims Settlement or protecting Tribal Treaty Rights. The Corps, as part of its trust responsibility to the Tribe, must account for these matters in its analysis. Furthermore, while we appreciate the discussions we have had with the Corps, we are concerned that the Draft Study overstates the extent of consultation with the Tribe. Surprisingly, in evaluating structures and items impacted by the project, the Draft Study also fails to even mention the impacts and costs associated with relocating E24-5

the Tribe's boat on the impacted property, the loss of upland for the Tribe, and demolition of the structures on the impacted properties along the Blair Waterway.

The Tribe requests further government to government consultation to continue to receive and analyze the information necessary to evaluate this project. The Tribe again requests an EIS be prepared to complete the necessary review and evaluate all the cost and benefits of this project. Only after such review and evaluation can the Tribe ascertain the impact to the Tribe's Treaty Rights, natural resources, and cultural resources.

Please contact our legal counsel, Lisa A.H. Anderson at (253) 573-7852, to schedule further government to government consultation. Please also continue to work with all of our technical staff to exchange information and analysis in a timely manner. The Tribe reserves its rights to present additional comments throughout the review process.

Sincerely,

David Z. Bean, Chairman
Puyallup Tribal Council

Attachment

E24-5 cont'd

E24-6

Puyallup Tribe of Indians

Tacoma Harbor Deepening Draft FR/EA Technical Comments

February 14, 2020

The Puyallup Tribe provides the following preliminary technical comments on the Tacoma Harbor Deepening Draft FR/EA. The Draft represents a basic starting point for deeper analysis into the significant environmental impacts that can be expected from this proposal. However, due to the very basic and preliminary nature of the data collected and known to date, the Puyallup Tribe recommends further evaluation of the impacts through the process of development of an Environmental Impact Statement for the proposal. E24-7

The Tribe has the following specific comments regarding the document:

Executive Summary, Page III- The premise that no significant adverse effects to protected species and commercially important species is entirely unfounded. Long term disruption to the prey base will occur as a result of sediment dredging and unavoidable turbidity plumes that result from dredge tool operations, lifting of the clamshell bucket and dumping of slurry onto barges. Such a conclusion is entirely unsupported, rashly speculative and is entirely blind to the reality of a project of this scope, size and duration. E24-8

There is no commitment to construct the Saltchuk intertidal and subtidal restoration site. It currently is not included as part of the Tentatively Selected Plan (TSP). If the economics are not favorable to beneficially use a portion of the dredged sediments, it may not be included as part of the TSP at all, nor as a consequence receive federal funding. Even if the Port decided to build Saltchuk independently of the Blair Deepening project, non-federal funding for the project has not been secured. Substantial delay and temporal loss realizing environmental benefits associated with the project could realistically result if the restoration project is not included as part of the TSP. E24-9

Evaluation of beneficial use of the dredged material for construction of the Saltchuk restoration site is included in the TSP, possibly as part of any proposed mitigation for impacts for the project but such a conclusion is not clear. Ongoing evaluation of the Saltchuk site is pending the Corp's ecosystem restoration unit's decision to use a nearshore habitat valuation model. Tribal technical staff are not familiar with this model and have requested coordination with the Corps on this matter, yet no discussions have occurred to date. How will this model be used in making decisions about Saltchuk? What empirical data is included in the model? Furthermore, the speculative nature of E24-10

the Saltchuck project results in a complete lack of substantively viable compensatory mitigation for the proposal.

E24-10

With the speculative nature of the Saltchuck project, no compensatory mitigation is proposed as part of the TSP. The failure to identify mitigation is based on a finding of "no significant adverse effects to protected species and no significant adverse impacts to commercially important species or protected marine mammals." It is premature to make such a determination, particularly when data and analysis is lacking regarding the potential of the Blair deepening project to affect contaminated groundwater from several hazardous waste sites on the Blair Waterway. These sites are discussed further below.

E24-11

Furthermore, there are tribal commercial harvesting areas for crab that will likely be impacted by extended construction activities (19 months over 3 years), ongoing shipping operations, and periodic maintenance dredging of the Blair Waterway. This will result in lost opportunities for the Tribe to harvest crabs and a diminishment of treaty rights as well as likely impacts to distribution and abundance of crabs in tribal harvesting areas.

The area near the mouth of the Blair Waterway supports a productive Dungeness crab (DC) treaty harvest. The migratory nature of the crab implies that individuals harvested in the area may spend time in the Blair. The dredging activity would cause mortalities as well as degrade the habitat for several years and ultimately affect abundance in the vicinity.

E24-12

Puyallup Tribal shellfish biologists have found that DC abundance in the area follows a "boom and bust" cycle. Test fishing in the area shows that abundance is in the beginning of a "boom" phase. In case earlier test sampling was conducted during a "bust" phase, test fishing should be conducted in the near future.

The Saltchuk project would eliminate crab harvest area. It is unclear if DC would be displaced elsewhere or if the loss of habitat would result in a decrease in abundance. The shallow subtidal area proposed to be created may provide juvenile rearing habitat that may partially offset any decrease in adult habitat.

The EA Executive Summary states that "the Corps has coordinated with natural resource agencies and tribes on their concerns, conclusions, and recommendations regarding project impacts." (p.iii) This is tribal technical staff's first opportunity to review the Corp's environmental analysis and resulting conclusions and recommendations. Overall, we find the environmental analysis to be incomplete and insufficient, preventing accurate conclusions regarding impacts to the tribal treaty fishery, natural resources, or to the tribal membership. Coordination has not occurred with us regarding our concerns, conclusions, and recommendations regarding project impacts.

E24-13

Several avoidance and minimization measures to "ensure impacts are less than significant" (p.iii) are reportedly included in the EA. Avoidance and minimization measures are often discussed so generally throughout the document that it is

E24-14

impossible for the reader to understand how impacts of the project will be adequately addressed. Specific avoidance and minimization measures need to be developed and included as a stand-alone section in the EA to afford an adequate opportunity to review relative to project impacts.

E24-14 cont'd

2.5 Planning constraints

The study has identified, as a constraint, that the project area is within Treaty-reserved usual and accustomed (U&A) fishing areas for the Tribe. As a result, the study concludes that plans will avoid or minimize impacts to tribal fishing consistent with treaty obligations.

The direct impacts of this are inconclusive in how fishing impacts will avoid an active Tribal Fishery to be consistent with treaty obligations. The duration of the work is unclear in how it could impact temporal treaty fishing times in the future. Also, there is no detail in how impacts will be minimized within the study. The long term permanent impacts to the Tribal fishery are also not identified.

E24-15

3 Plan Formulation

3.2.1 No mention is given to forecasted changes in drive types used in new and larger ships as well as tug assist vessels. How will the use of azimuth drives affect sediment resuspension and the need for dredging as well as the need for maintenance of side slopes?

E24-16

3.2.7 What is actually involved in slope strengthening? The term is not defined or explained.

E24-17

4 Environmental Consequences

4.3 Figure 4.3 (p.63) does not include all mitigation and restoration projects that may be affected by the proposed deepening of the Blair Waterway. EPA Region 10 GIS (attached herein) developed a figure that includes the Earley and Slip 5 sites near the mouth of the Blair Waterway, the Fairliner site, as well as the Rhone-Poulenc wetland habitat sites. How will these restoration and mitigation sites be affected by construction as well as ongoing shipping operations? How will prop wash associated with ongoing shipping operations affect the substrates, as well as the biota of these sites?

E24-18

4.3.2.1. Include EQC Riverboat and shoreside building as part of the list of facilities and infrastructure along the Blair Waterway. Costs to relocate and dock facilities should be included as part of the costs of the project.

E24-19

4.4.2 It is not clear why section 4.4.2 is included here at all as it has no bearing on the surrounding environment.

E24-20

4.7 Water Quality. Outer Commencement Bay, where Saltchuk is located, is 303d listed for bacteria, dissolved oxygen, PCBs, and Bis (2-ethylhexylphthalate). Where and when were the water quality and sediment samples leading to the listing taken? Were

E24-21

the samples collected in the vicinity of where Saltchuk may be constructed? What were the sample concentrations? Confirmation sampling for these parameters should be repeated prior to construction of Saltchuk. If low dissolved oxygen or elevated PCBs in sediments persists in the vicinity of where Saltchuk may be constructed, project design should take this issue into account. We would like further coordination with the Port on these issues.

E24-21 cont'd

How is grading of the side slopes of the channel to prevent sloughing going to be done? Perturbations of side slope sediments may create preferential pathways for contaminated groundwater from adjacent hazardous waste sites, as well as re-suspend potentially contaminated sediments into the water column. How will this be prevented? How are 2:1 ratios going to be maintained? How are impacts to salmon and benthic organisms going to be avoided and minimized in these areas?

E24-22

4.8 The project airshed is designated a maintenance area for $PM_{2.5}$ and PM_{10}. The airshed is recently no longer a maintenance area for carbon monoxide or ozone. The preferred alternative, deepening the waterway to -57MLLW, will result in significant increases in these and other pollutant as well as greenhouse gasses (see Tables 4-13 and Table 4-16) yearly as a result of construction alone. A potential long-term overall reduction in these pollutants wouldn't be realized until 14 years down the road, if at all depending on the number of vessel calls dropping as expected from 590 to 428. In the long term, this estimate will be driven by market demand, so there is a high degree of uncertainty to the estimate. In the intervening time, for the first 14 years, there will be an additional 23,000 tons of greenhouse gasses emitted, 111 tons of nitrogen oxides as well as other pollutants that will be emitted. How are these impacts to people who live and work within the airshed, including the tribal membership, going to be avoided or mitigated? What additional control technologies may be implemented to mitigate these impacts? What are the cumulative effects of adding all these additional pollutants into an airshed that has only recently been designated a maintenance area?

E24-23

4.10 Sea Level Rise considerations should encompass more than the deck height limits of different terminals along the Blair Waterway when comparing to 2050 and 2100 planning horizons. While berthing areas are mentioned in the impact analysis, planning horizons are connected to the terminal deck heights in the table. Inundation at supporting terminal modal yards will subject the viability of the investment earlier than impacts to the decks without proper shoreline armoring and seawall investments. The table should be connected to the lowest points of the waterway subject to inundation.

E24-24

Additionally, modelling should include king tide event analysis connected to sea level rise. Where the report concludes small risks in the 2050 planning horizon and moderate risks in the 2100 horizon, not including king tide risks in conjunction with sea level rise will no take into account the costs necessary to protect properties, roads, and terminals active during those extreme events.

4.10.2 How will projected sea level rise actually be calculated into the dredging need and target depth? What factor(s) are being used and over what time period?

E24-24 cont'd

4.11 Based on the Phase I Site Assessment prepared by the Corps (Appendix H), there are 43 MTCA sites surrounding the Blair Waterway, along with 6 RCRA sites, 4 CERCLA sites, and 4 NPL sites. Fifteen of these sites have known contaminated groundwater and are located immediately next to Blair Waterway. The recommendation of the assessment is as follows: *potential side slope impacts should be evaluated relative to groundwater. The depth and flow regime of any adjacent groundwater plumes should be evaluated to determine if adverse impacts, specifically redirecting contaminated groundwater flow towards the channel, result from actions in the waterway.* When is this evaluation going to be done, what is the potential harm to the fishery and biota, and what actions are going to be undertaken to prevent contaminated groundwater from being directed towards the Blair channel as a direct result of the proposed project? The results of this and the other site investigations below should be included in the environmental impact analysis, subject to tribal and public review.

Two NPL sites, Commencement Bay Nearshore Tideflats and Glenn Springs Holdings (Occidental), are among the contaminated groundwater sites immediately next to the Blair Waterway. Will the proposed action adversely impact the partial de-listing of the operable unit associated with Blair waterway sediments? The Phase I Site Assessment also recommends confirmation that no impacts to the Occidental groundwater plume, located beneath the Blair-Hylebos peninsula, result from the dredge of the Blair waterway sediments. There is a potential preferential pathway of contaminants given the dense sands at -51 to -57 feet that have the potential to transmit contaminated groundwater. This investigation work needs to be included in the environmental impact analysis, subject to tribal and public review.

E24-25

TruGrit Abrasives Incorporated is another site managed by the Washington State Department of Ecology under the MTCA program. The Phase I study also recommends confirming the side slopes of the proposed dredge prism do not overlap with the metal contamination in the sediments at the TrueGrit site. Results of the recommended investigation should be included in the environmental impact analysis as well. Without this information, the environmental analysis is incomplete and insufficient and prevents adequate tribal and public review of project impacts.

At the former Lincoln Avenue ditch site adjacent to the Blair Waterway, contamination remains in place along the shoreline below elevation 12 ft MLLW and extends 30 feet water ward from the top of bank. There are institutional controls in place that place limits on future construction to prevent release of contamination. Soil and sediments contaminated with arsenic, dioxin, and PCBs above relevant MTCA thresholds are present at the site. Contaminated groundwater is also present. Borehole data at the Lincoln Avenue ditch site indicates materials -51 to -57 feet primarily consists of dense sand and if disturbed, have the potential to transmit contaminated groundwater. The borehole location under the ditch overlaps with side slopes associated with the

5

proposed navigation channel. Given this overlap and presence of institutional controls, we understand coordination with the EPA is required. The results of further investigation work regarding the potential release of PCBs, dioxin and arsenic in the waterway as a result of the deepening should be included in the environmental analysis subject to tribal and public review. We are requesting coordination with the Corps and Port on the investigation and results of these hazardous waste sites. E24-25 cont'd

4.12. One of the primary concerns of the tribes Fisheries program pertains to impacts to juvenile salmonids resulting from the dredging action and ancillary effects to the side slopes of the waterway. While we understand the side slopes are not targeted for deepening, it's likely some portions will succumb to gravity either immediately or subsequently to the dredging action. It is also likely that side slopes will subside and slump over time as a result of dredging. These areas need to be characterized uniformly to identify the contaminant risks associated with and in proximity to existing or prior industrial uses of the site. E24-26

Sites of concern include the TruGrit and former Martinolich Shipbuilding Company (Defunct since 1974) site that has been implicated for high concentrations of copper and zinc. Curiously, the Landau Associates Inc. RIFS Report (2014) for site #1294 is not even cited in the appendices yet provides perhaps the most recent and detailed analysis of sediment findings available. Additionally, this work indicates exceedances for these two elements at a depth approaching the -40' contour line and in immediate proximity to the targeted dredge boundary. E24-27

Little mention of benthic community types, species diversity, population estimates or recent characterization work of any kind is provided. Are we to assume that the Army Corps believes dredging impacts to these resources are inconsequential or that the benthic communities that will be eliminated are insignificant? The removal of up to 6' of sediment will effectively erase all established life from the sea floor hence setting the recovery clock back to zero. E24-28

The tribe is very concerned over the impacts to salmonid prey species that originate from these areas as well as the long term effects on prey base availability that may result from a multiyear, continuously operated dredging effort and subsequent loss of prey base in the water column. The proposed dredge area encompasses 214.5 acres and will take years to recolonize. E24-29

4.13.5 The review of previous studies concerning the impacts of contaminants on a variety of fish species are in agreement that short term sub-lethal effects are possible. However, no study has evaluated the synergistic effects of exposure to the many contaminants encountered during the outmigration period. Collective stressors including: altered habitat condition, diminished prey base, elevated TSS, and exposure to persistent organic compounds are just a few of the cumulative effects that contribute to diminished survival rates exhibited by salmonid fishes in Puget Sound over the last two decades. E24-30

Project mitigation strategies must reflect an awareness of cumulative effects and provide measureable improvements to this lowered baseline condition. Declining habitat productivity must be countered with offsets that not only mitigate for habitat injury but actually reverse the current trend of declining survival rates. Whether or not the Saltchuk concept will provide mitigation for this is unknown and will remain so for decades pending the findings from long term performance monitoring, trend analysis and comparisons of biological metrics of before and after conditions.

E24-31

No mitigation provisions whatsoever are mentioned that might address the temporal loss of habitat suitability and displacement (work zone avoidance), prey base elimination, contaminant exposure and the additive nature of these impacts toward diminished survival rates in salmonid fishes.

4.13 Fish Concentrations of PCBs and other bioavailable contaminants are expected to increase during dredging due to re-suspension of contaminated sediments and expected to remain elevated in the food chain for about 2-3 years after completion of the project. What is the expected increase in the biota from these contaminants? What is the additional risk to the tribal membership and other populations that eat proportionately higher levels of salmon and seafood than other populations?

E24-32

4.17 Cultural Resources. The proposed project area, including potential disposal areas are all within an area of high potential for impacting cultural resources. While the current Cultural Resource Analysis is satisfactory, the proposed project will require an inadvertent discovery plan, on-site monitoring and direct communication with the Tribal Historic Preservation Officer.

E24-33

5.0 Tentatively Selected Plan

5.4 Real Estate Considerations

The Draft States:

The Blair Waterway is an existing Federal project. The Port of Tacoma granted in 1964 two perpetual easements (Tracts 100E & 100E-2) to the Corps for this project. The non-Federal sponsor (NFS) is required to furnish all lands, easements, rights-of-way, relocations, and disposal (LERRD) for the proposed widening and deepening. To address real estate interests, the NFS will obtain a channel improvement easement over the whole Federal channel south of the 11th street right of way. The sponsor will receive LERRD credits for the new lands needed on the expanded channel summarized in Table 5-2 below.

Table 5-2 Lands Needed for NED Channel Tract	Interest	Owner	Acres
100E-3	Channel Improvement Easement	PORT OF TACOMA	146.5 (38.88 New Acres)
101E	Channel Improvement Easement	PUYALLUP TRIBE OF INDIANS FEE LANDS	2.22
A	Channel Improvement Easement	USA IN TRUST (PUYALLUP TRIBE OF INDIANS)	1.84

Costs of land acquisition may not include a Yellow-book Appraisal of Federal Trust Lands. Additionally, it is unclear how channel easements and cutbacks will impact existing Tribal assets along the channel (shoreside building, loss of square footage of land, etc). After channelization easements are established, will navigational buffers still be appropriate for existing EQC riverboat to be located back in its current location? Will the docking infrastructure need to be removed as part of the project effort? Will existing shoreside building have to be demolished? E24-34

Will the Tribe receive Appendix G – Real Estate Plan as one of the parties that are subject to the easement acquisition plan?

6.0 Compliance*

List of Laws for compliance does not include the Puyallup Land Claims Settlement or Treaty of Medicine Creek. E24-35

Appendix A, Economics, Sections 7.1.5

The Environmental Justice component of the study fails to mention the Puyallup Tribe whose lands the project interfaces with. The Medicine Creek Treaty of 1854 ceded the Tribe's traditional usual and accustomed lands and established the Puyallup Reservation as the permanent homelands for the Puyallup people. The development of the tideflats over the next century would directly impact the Tribe's tribal fisheries, dispossess it of its federally reserved homelands, and impact the Tribe's ability to deliver essential services to its people. The Harbor Deepening Project encompasses the geography of the Blair Waterway, the Saltchuk Site, and disposal sites within Commencement Bay. The need for easements over tribal trust land and dredging and disposal of soils next to areas where tribal treaty rights are actively practiced need to be analyzed from an environmental justice perspective. The Puyallup Tribe will face disproportional impact compared to any other income group, ethnicity, or community of people. As our trustee, the federal government and thus the Army Corps has a legal E24-36

8

obligation and fiduciary duty, which should be recognized and elevate the review taken to a higher standard in this analysis. This fiduciary duty includes protecting treaty rights, lands, assets, and resources.

Appendix C.

3.0 The ratio of impacted area (Blair Navigation Channel) to proposed restored area (Saltchuk), is roughly 214.5: 64 acres or 3.35 to 1.

Impacts discussed above (Executive Summary comments) to the tribal commercial Dungeness crab harvest areas should be discussed here as well.

9

E24-36 cont'd

E24-37

6.24.1 Response to Comment Letter E24

E24-1: Under the U.S. Constitution, treaties are part of the supreme law of the land, with the same legal force and effect as federal statutes. Pursuant to this principle, and its trust relationship with federally recognized tribes, the United States has an obligation to honor the rights reserved through treaties, including rights to both on and, where applicable, off-reservation resources, and to ensure that its actions are consistent with those rights and their attendant protections. The U.S. Army Corps of Engineers (Corps) has a trust obligation to

consult with, and consider views of, federally recognized American Indian Tribes when proposing an action that may have the potential to significantly affect tribal rights, resources and lands; including, but not limited to the impact of the proposed activity on tribal reserved treaty rights. See Department of Defense Instruction (DODI) 4710.02, Section 3, Subject: DOD Interactions with Federally Recognized Tribes (24 September 2018). The Corps appreciates the Puyallup Tribe's participation in the study process and will continue to coordinate and consult with the Puyallup Tribe on effects to Tribal resources from the Tacoma Harbor Navigation Improvement Project during further design and construction.

E24-2: The Corps recognizes rights were reserved by the Puyallup Tribe in the Medicine Creek Treaty of 1854 with the United States. Under Article VI, Clause 2 of the U.S. Constitution, treaties with the Tribes are part of the supreme law of the land, with the same legal force and effect as federal statutes.

E24-3: Please see Master Response 4.

E24-4: Please see Master Response 5. Planting eelgrass is not within the scope of the beneficial use of dredged material. However, the project will raise substrate to elevations suitable for potential eelgrass colonization (+5 to -10 feet mean lower low water). In addition, this may encourage others to further pursue habitat restoration actions in and near Saltchuk. The Port of Tacoma (Port), for instance, has expressed plans to perform habitat restoration adjacent to Saltchuk. Port actions are still being developed, but initial designs include tidal marsh benches, removal of shoreline structures, and riparian habitat improvements..

E24-5: IFR/EA main report Section 4.3.2.1 was updated to include EQC Riverboat as part of the list of facilities and infrastructure along the Blair Waterway. Additional analysis will be completed to determine whether vessel and dock relocation would be required as part of the recommended plan. If relocation is necessary, these costs will be included as an associated economic cost. A new section for the Puyallup Land Claims Settlement was added to Section 6 (Compliance), the Corps' federal trust responsibility that accrues in regards to the Treaty of Medicine Creek is addressed in Section 6.7 . The IFR/EA has been updated to include information about the Puyallup Land Claims Settlement and Treaty of Medicine Creek and the relevance to Tribes in the project area. The Corps looks forward to continuing consultation with the Puyallup Tribe of Indians through Government-to-Government meetings.

E24-6: Please see Master Response 4. The Corps will continue Government-to-Government consultation with the Puyallup Tribe of Indians and coordinate with technical staff so the Tribe can determine effects to the Tribe's Treaty Rights and membership.

E24-7: Please see Master Response 4.

E24-8: Please see the response to E2-4 and Master Response 4. The Corps reviewed recent benthic sampling by Ecology in the Blair Waterway, which found a benthic community with low

diversity and low arthropod abundance (a primary salmonid prey resource; Section 4.12 of the draft IFR/EA). This type of community is expected to become re-established in 1-3 years from the un-dredged portion of the Blair Waterways. Given the context in which dredging takes place and the proportion of the benthic community that would be removed during each dredging year, deepening the Blair Waterway does not constitute a significant effect to the benthic community of Commencement Bay. In addition, juvenile salmonids are surface-oriented, feed in shallow habitat near the shoreline, and would not prey on benthic organisms at the -51 MLLW depth of the navigation channel. The proposed alternative would not affect forage fish, and the temporary reduction in benthic abundance and diversity would result in a measurable reduction in total prey items.

E24-9: The Saltchuk beneficial use site shows sufficient benefit for inclusion as part of the recommended plan and is included in the recommended plan in the final IFR/EA. This is a feasibility study to determine the justified recommended plan and make a recommendation for Corps project approval and congressional authorization to construct. Budgeting and final construction timeline will be determined if Congress authorizes the approved project.

E24-10: The Corps needed a habitat model to assess the quality of intertidal and subtidal marine habitat in Commencement Bay to evaluate the beneficial use of dredged material. The Corps chose to use the NHV model because it evaluates habitat value to a relevant local species (Chinook salmon), the Port of Tacoma has used the model in Commencement Bay in the past and is applicable to other locations around Puget Sound. In addition, because the National Marine Fisheries Service (NMFS) designed the model for public use, the model is fairly easy to use, transparent and uses specific criteria (i.e., Chinook salmon Primary Constituent Elements) to determine habitat quality under different scenarios. The Corps used the NHV model to demonstrate the ecological lift between pre- and post-beneficial use of dredged material, not to calculate mitigation.

For Corps studies, environmental restoration projects evaluate changes in habitat and HUs over the 50-year planning period of analysis to compute average annual habitat units (AAHUs). The Corps computed AAHUs for each restoration scenario, including the No Action or future without project condition. The benefits of a proposed restoration project are the net change in AAHUs from the No Action scenario. Beneficial use of dredged material needed to be economically justified in order to be included for consideration in the TSP. The Corps has provided the model documentation to the technical staff of the Puyallup Tribe of Indians.

E24-11: Compensatory mitigation is not warranted at this time, based off of the current level of design and existing information, because BMPs and conservation measures the Corps intends to implement during dredging will avoid and minimize adverse effects to natural resources so that there are no significant adverse effects. During the PED phase of the project, the Corps will continue to refine the project's design and engage the Puyallup Tribe for further review and comment on the design of Saltchuk, to continue to validate the assumptions and conclusions relied upon in this feasibility level analysis, and will consider whether additional BMPs or design

features are appropriate. USACE will engage the Tribe regarding criteria for placement of sediments at the Saltchuk beneficial reuse site. As the project progresses into later stages of design and side slopes are confirmed, the potential for impacts to groundwater will be further assessed to validate current assessments, specifically if deepening has the potential to influence the directionality and/or magnitude of flow for contaminated groundwater.

E24-12: Interactions between dredging and crab populations are well-studied in Grays Harbor, Washington, due to the abundance of crabs and frequent dredging in Grays Harbor. The results of those studies are applicable here. The entrainment rate will depend on the crab density, and the mortality rate for clamshell dredging is approximately 10% of the crabs entrained. Juvenile stages of crab would be unable to escape, but the nonnative loam to silt-loam material of the Blair Waterway is not their preferred substrate, and lack of submerged vegetation make it unlikely for the navigation channel to be a nursery area. The active dredging area is very small compared to the entire Blair Waterway, and mobile organisms like a crab would be able to escape active dredging.

When comparing shipping operations in the No Action Alternative to the preferred alternative, crab are less likely to be disturbed by vessel traffic in a deeper waterway because there will be fewer vessels and greater distance between the bottom of the navigation channel and the bottom of the vessel. The Corps estimated maintenance dredging would be necessary every 25 years, so repeated disturbance would be limited. The Corps will continue to consult with the Puyallup Tribe of Indians on avoiding and minimizing any effects of dredging to tribal commercial harvest. During the PED phase of the project, the Corps will engage the Puyallup Tribe for review and comment on the design and construction schedule of Saltchuk so additional BMPs and design features can be incorporated as appropriate to avoid and minimize effects to the tribe's crab harvest. USACE will engage the Tribe regarding criteria for placement of sediments at the Saltchuk beneficial reuse site.

E24-13: The Corps is engaging in Government-to-Government consultation with the Puyallup Tribe of Indians and looks forward to coordination with tribal technical staff. A summary of Tribal government consultation and coordination is in Section 7.2 of the IFR/EA main report.

E24-14: Avoidance and minimization measures are described in each resource section of Chapter 4 of the IFR/EA main report as they apply to the protection of the resources, and collected in Section 5.9.5 (Environmental Commitments and BMPs). In addition, conservation measures for the protection of ESA-listed species are included in the Biological Assessment that are reviewed by NMFS and USFWS. The Corps will develop additional avoidance and minimization measures in PED as appropriate, and as the project design progresses.

E24-15: The Corps will develop measures to avoid and minimize impacts to Tribal fisheries through ongoing consultation with the Puyallup Tribe of Indians during PED. More information, design, and coordination are needed to define the measures that will be most effective.

E24-16: Propeller wash is most pronounced in the Federal navigation channel and near the berthing areas. The Corps anticipates O&M dredging near the Port Terminal berthing areas will be necessary occasionally.

E24-17: Slope strengthening refers to engineered stabilization, such as riprap or secant pile walls, at locations of the recommended navigation channel where the sideslope would be unstable at a 1.5:1 H:V or 2:1 H:V slope. Additional refinement on the potential slope strengthening measures and effects have been added to Chapters 3 and 4 of the IFR/EA.

E24-18: Please see Master Responses 3 and 5. The Corps updated the IFR/EA to include a more comprehensive map of restoration and mitigation sites in the project area. The recommended Federal navigation channel is designed to avoid existing restoration and mitigation sites. In this regard, nothing will change, and the Corps anticipates minimal impacts in relation to dredging operations. The Corps will observe BMPs during placement of dredged material at Saltchuk. BMPs will minimize, but not completely avoid, effects associated with the work such as substrate disturbance and water column turbidity. The Corps will evaluate specific measures and methods further during PED.

E24-19: The Corps updated the IFR/EA main report Section 4.3.2.1 to include EQC Riverboat as part of the list of facilities and infrastructure along the Blair Waterway. The Corps will conduct additional analysis in PED to determine whether vessel and dock relocation would be required as part of the recommended plan. If relocation is necessary, The Corps would include these costs as an associated economic cost.

E24-20: The IFR/EA main report Section 4.4.2 Vessel Characteristics: Existing Condition describes existing vessel traffic at Tacoma Harbor. Understanding of the existing condition is a critical component to deep draft navigation studies per Engineer Regulation 1105-2-100 and should be described in the Main Report. The existing fleet sets the baseline for all fleet forecasting for the Future Without-Project and Future With-Project conditions. As such, Section 4.4.2 is relevant to the Affected Environment and Environmental Consequences of the Action given that the project changes vessel operations at Tacoma Harbor, which is relevant to the Affected Environment and Environmental Consequences. This section is commonly included in deep draft navigation sections under Section 4.

E24-21: The Corps obtained water quality and sediment information used to create the 303(d) list from the Washington Department of Ecology Water Quality Atlas (https://fortress.wa.gov/ecy/waterqualityatlas/StartPage.aspx). A map of this information appears in Appendix C. The Corps is working with Ecology to ensure the contractor meets water quality standards during construction and encourages coordination between the Puyallup Tribe of Indians and the Port of Tacoma.

E24-22: Corps analysis of existing bathymetry following the last deepening event indicates that 2H:1V is the natural angle of repose of the material within the waterway. During dredging, the material is excavated from the channel bottom, and side slopes are created due to sloughing.

Sideslope material that is unsuitable for open-water disposal will be removed with an environmental bucket. Channel sections presented in the IFR/EA show idealized and uniform slopes, which is not necessarily the case when constructed. The finished slopes will look a lot more like the existing slopes from the bathymetry than the actual slopes from the conceptualized design drawing.

Contaminated sites will continue to be monitored by the responsible agency, and additional evaluations will be performed during PED to determine if further measures are necessary to avoid disturbance or uncontrolled release of HTRW. See Master Response 2 for impacts to salmon and benthic organisms. Effects to salmon and benthic organisms are described in the IFR/EA (Sections 4.11 Benthic Organisms, 4.12 Fish, and 4.14 Threatened and Endangered Species).

E24-23: Estimating total vessel calls at Tacoma Harbor over the study period involves uncertainty. Variation in the market can lead to year-to-year changes in cargo volumes and vessel calls. As a result, the study focuses on long-term trends and includes sensitivity analyses to account for the full range of potential operations at Blair Waterway over the study period.

In all scenarios, the Corps anticipates a reduction in total vessel calls. Channel deepening from -51 MLLW to -57 MLLW does not change the market forces that drive commodity demand. Additionally, vessel deployment is a firm-level decision based on fleet availability, newbuilds, vessel scrap rates, and utilization rates by trade lane. As a result, the proposed project does not change the long-term trend toward large vessel use at Tacoma Harbor, and the study team does not anticipate that the channel deepening will induce vessel movement to Blair Waterway. Instead, the project allows carriers to load vessels more efficiently, leading to the potential for fewer overall vessel calls. This results in transportation cost savings and reduced channel congestion at Tacoma Harbor.

The greenhouse gas (GHG) and criteria pollutant emissions that result from construction would be offset by the emissions reduction due to the anticipated fewer total vessel calls. The amount of GHG emissions are a small proportion (0.69%) of the annual GHG emissions in Washington State and would not have a measurable effect on climate change or sea level rise. Wood smoke contributes over half the particulate matter in the Tacoma airshed, and fewer wood-burning devices and better emission control technology makes it unlikely for emissions levels to exceed EPA standards during construction. The short-term increase in GHG and criteria pollutant emissions will ultimately benefit the Tacoma area by reducing GHG and other emissions from container ships.

E24-24: The Corps performed Sea Level Rise analysis per the latest Corps guidance ER 1100-2-8162. The method determines the 99% annual exceedance probability of the measured total water level at the Seattle tide gage and then adds the three Sea level Change (SLC) scenarios to identify impacts to navigation. It is anticipated additional local service facilities beyond the terminals, including supporting modal yards, will also require some form of adaptation by the

Port of Tacoma. These actions are the responsibility of the Port and will be addressed in the Ports climate adaptation plan.

E24-25: The Corps is coordinating with the relevant regulatory agencies, including the US EPA and Washington Department of Ecology, regarding the presence of Federal and State cleanups in and around Blair Waterway. For the Superfund Site partially delisted sediments Operable Unit in Blair Waterway, the Corps will be conducting a suitability determination in accordance with DMMP guidelines and will ensure that newly exposed sediments in the navigation channel meet DMMP requirements and State standards for anti-degredation requirements. Further, additional analyses will be conducted during design to ensure no adverse impacts to upland groundwater sites, particularly the Occidental Chemical Corporation.

The Corps continues to evaluate the TruGrit site and will coordinate with the Department of Ecology and site Personally Responsible Party (PRP) as the design progresses on both the deepening and cleanup studies to ensure compatibility.

The Former Lincoln Avenue Ditch Site will be evaluated during design, and supplemental sampling will occur to fully characterize the nature and extent of contamination along the shoreline. This evaluation will be done in close coordination with the US EPA.

The Corps will continue to coordinate with the Puyallup Tribe of Indians throughout the design as the results of these evaluations become available.

E24-26: The Corps will follow the requirements of the DMMP to ensure sediments are adequately characterized before dredging. Where side slopes are of concern due to historic industrial activities, targeted sampling may be performed to ensure adequate characterization.

E24-27: The 2014 Remedial Investigation Report for TruGrit was reviewed by Corps staff during the feasibility study. Additionally, the Corps evaluated 2018 toxicity testing results associated with the TruGrit Remedial Investigation. More recently, the Corps has been coordinating with the PRP regarding the draft Feasibility Study for the site. References for these various documents were omitted from the Phase I assessment because they did not directly supply information stated in the report. Rather, the Corps provided reference to the 2019 Ecology Toxics Cleanup Program, given that the status and location of the site ultimately informed the Corps' evaluation and determination for further coordination with Ecology and PRP.

E24-28: Please see the response to E2-4. The Corps reviewed recent benthic sampling by Ecology in the Blair Waterway, which found a benthic community with low diversity and low arthropod abundance (a primary salmonid prey resource; Section 4.12 of the draft IFR/EA). This type of community is expected to become re-established in 1-3 years from the un-dredged portion of the Blair Waterways. Given the context in which dredging takes place and the proportion of the benthic community that would be removed during each dredging year, deepening the Blair Waterway does not constitute a significant effect to the benthic community of Commencement Bay.

E24-29: Please see the response to E2-4. In addition, juvenile salmonids are surface-oriented, feed in shallow habitat near the shoreline, and would not prey on benthic organisms at the -51 MLLW depth of the navigation channel. The proposed alternative would not affect forage fish, and the temporary reduction in benthic abundance and diversity would result in a measurable reduction in total prey items.

E24-30: Research of marine survival of salmonid fishes in Puget Sound is ongoing, and there are numerous factors in the riverine, estuarine, and marine environments that play a complex role in survival. Negative effects to salmon of the preferred alternative are primarily related to short-term effects of construction (disturbance and suspended sediments). There is a low but not discountable probability that migrating salmonids may be present in the Blair Waterway during dredging and could experience these effects. Therefore, the Corps has incorporated several BMPs into the project design at this stage to avoid effects to fish species during dredging. These include in-water work windows, minimizing suspended sediment, and sediment testing prior to dredging. The 27% reduction from 590 to 428 Panamax and Post-Panamax ships per year by 2035 is considered a countervailing effect for air quality, GHG emissions, underwater noise, and disturbance to fish and ESA-listed species because the reduced vessel traffic would be a long-term benefit.

E24-31: Mitigation is not proposed for this project because there is no loss of wetlands, no significant adverse effects to protected species, and no significant impacts to commercially important species or protected marine mammals based on the analysis in the IFR/EA. A monitoring and adaptive management plan will be developed according to Corps guidelines for inclusion in the final report.

E24-32: The reference to increased fish tissue contaminant concentrations for 2 to 3 years following dredging is specific to dredging of CERCLAregulated sediment during a remedial response action at a NPL site. While some degree of sediment resuspension is inevitable for navigation dredging, increased risk associated with contaminant body burden in fish is not anticipated. For this project, USACE will follow all necessary steps to ensure environmental impacts are minimized, including water quality monitoring requirements under Clean Water Act Section 401, dredging during designated in-water work windows, and thorough characterization of dredge material through the Dredged Material Management Program (DMMP).

During the Preconstruction Engineering and Design phase of the project, USACE will engage the Puyallup Tribe and offer the opportunity to review and comment on the sampling design for the DMMP suitability characterization. USACE also intends to engage the Tribe regarding criteria for placement of sediments at the Saltchuk beneficial reuse site.

Outside of the USACE proposed project and Blair Waterway, the US EPA continues to monitor contaminant levels in fish tissue and the potential changes resulting from previously completed remedial actions as part of the Commencement Bay Nearshore Tideflats Superfund project.

Please also see Master Response 2.

E24-33: The Corps has a standard inadvertent discovery plan that is tailored to each specific project. The Corps is developing the inadvertent discovery plan to address the inadvertent discovery of archaeological resources, cultural resources, and historic period resources during project implementation. As a component of the inadvertent discovery plan, a separate section will also address the inadvertent discovery of human remains. Each of the plans will include protocols for ceasing work near the discovery, protection of the resource or remains, and phone contact information to include law enforcement, the State Historic Preservation Officer, the Corps archaeologist, and cultural contacts for each affected Tribe. The inadvertent discovery plan will be in place prior to project implementation. Archaeological monitoring has been conducted during the geotechnical testing that has been conducted and will continue for ground disturbing activity (including underwater sediment disturbance) associated with this project.

E24-34: The Puyallup Tribe will not receive a copy of Appendix G (Real Estate Plan) from the Corps unless approval is granted by Northwestern Division or approved by the Non-Federal Sponsor. Appendix G is shared with the non-Federal project sponsors who are responsible for acquiring all LERRD interest as per the Project Partnership Agreement. Information given to those entities who may be subject to the Non-Federal Sponsor's LERRD acquisition plan will be at the discretion of the Non-Federal Sponsor during their acquisition of any interests required by the project. All land acquisitions will be appraised in accordance with ER 405-1-04, Real Estate Appraisal. Land acquisition by the Non-Federal Sponsor will conform to the guidelines in the Project Partnership Agreement. Please see the response to E24-19 for information related to the Emerald Queen and associated infrastructure during and after construction.

The valuation preformed in the Real Estate Plan was a land cost estimate, and not a full gross appraisal, and was for planning purposes only. The Cost Estimate includes anticipated administrative costs incurred by the non-Federal sponsor as relate directly to the acquisition of real property interests necessary for project execution. These administrative costs may include the cost of the Sponsor having a Yellow Book Compliant appraisal conducted of any necessary Federal Trust lands as part of the sponsor's own valuation and acquisition plan. In order to qualify for LERRD crediting the sponsor must have a Yellow Book Compliant appraisal done on any acquired lands to confirm appropriate valuation for crediting.

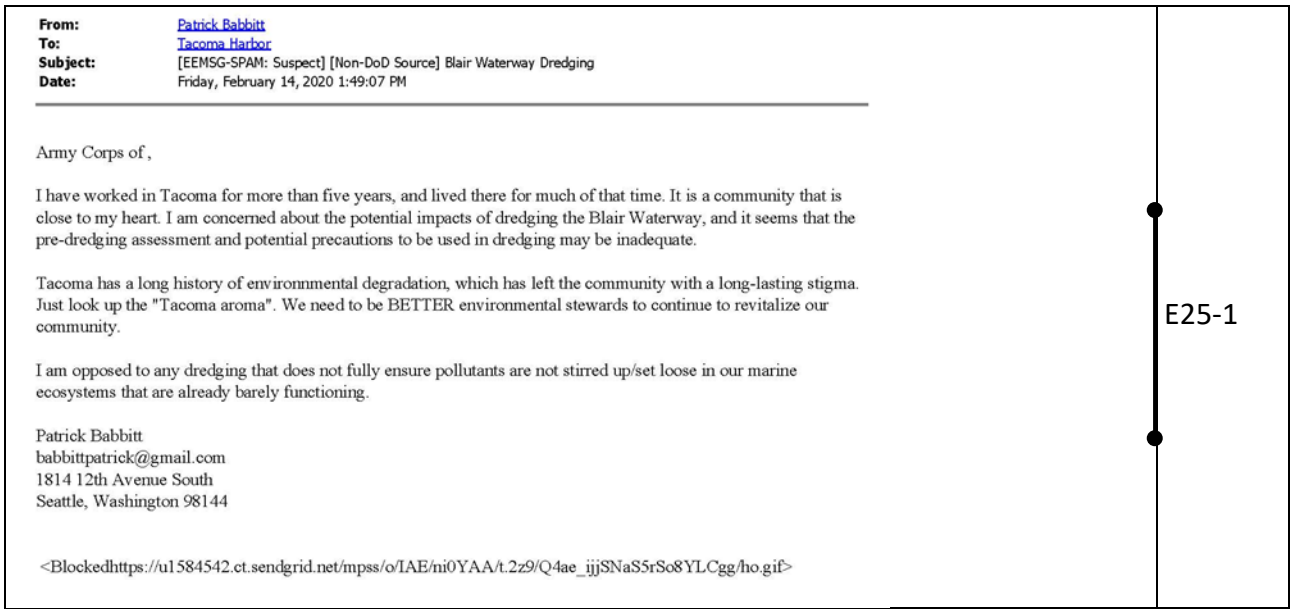
E24-35: A new section for the Puyallup Land Claims Settlement was added to Section 6 (Compliance), the Corps' federal trust responsibility that accrues in regards to the Treaty of Medicine Creek is addressed in Section 6.7 . Section 7.2 (Tribal Government Consultation and Coordination Process) of the IFR/EA also address how the Corps meets its responsibility to consult with Native American Tribes for this project. The Corps encourages coordination between the Puyallup Tribe of Indians and the Port of Tacoma and looks forward to continuing consultation with the Puyallup Tribe of Indians through Government-to-Government meetings.

E24-36: Section 6.14 (Executive Order 12898 Environmental Justice and Executive Order 14008 Climate Crisis) and Appendix C of the IFR/EA has been updated with additional analysis of the

potential for a disproportional impact to Tribal members compared to other groups. . The proposed project is within a highly industrialized environment that has been substantially modified and impacted over the last 100 years. Analysis for environmental justice evaluates potential project effects within this previously altered setting. Effects would be considered significant if the project caused substantial changes in the ways members of the surrounding community live, work, relate to one another, or otherwise function as members of society, or caused substantial negative environmental, human health, or economic effects on minority and low-income populations. The Corps analyzed the potential effects of the alternatives on communities within a 5-mile radius of the proposed action and found there would be no disproportionately high and adverse human health impacts to any environmental justice communities. Implementation of commitments listed in Sections 5.9.3 (PED Activities) and 5.9.5 (Environmental Commitments and BMPs) will further avoid and minimize effects to environmental justice communities. The proposed action would not disproportionately affect minority or low-income populations. No interaction with other projects would result in any such disproportionate impacts.

E24-37: The Corps updated Appendix C to include a discussion of the dredging footprint and tribal commercial Dungeness crab harvest.

6.25 Comment Letter E25—Patrick Babbitt



From: Patrick Babbitt
To: Tacoma Harbor
Subject: [EEMSG-SPAM: Suspect] [Non-DoD Source] Blair Waterway Dredging
Date: Friday, February 14, 2020 1:49:07 PM

Army Corps of ,

I have worked in Tacoma for more than five years, and lived there for much of that time. It is a community that is close to my heart. I am concerned about the potential impacts of dredging the Blair Waterway, and it seems that the pre-dredging assessment and potential precautions to be used in dredging may be inadequate.

Tacoma has a long history of environmental degradation, which has left the community with a long-lasting stigma. Just look up the "Tacoma aroma". We need to be BETTER environmental stewards to continue to revitalize our community.

I am opposed to any dredging that does not fully ensure pollutants are not stirred up/set loose in our marine ecosystems that are already barely functioning.

Patrick Babbitt
babbittpatrick@gmail.com
1814 12th Avenue South
Seattle, Washington 98144

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/IAE/ni0YAA/t.2z9/Q4ae_ijjSNaS5rSo8YLCgg/ho.gif>

E25-1

6.25.1 Response to Comment Letter E25

E25-1: Please see Master Response 3.

6.26 Comment Letter E26—Center for Biological Diversity

Submitted via email

February 14, 2020

Col. Mark A. Geraldi, Commander
ATTN: CENWS-PMP
P.O. Box 3755
Seattle, WA, 98124-3755
TacomaHarbor@usace.army.mil

Re: Tacoma Harbor Draft Feasibility Report and Environmental Assessment; https://go.usa.gov/xEjss

Dear Colonel Geraldi,

We submit these comments on behalf of the Center for Biological Diversity (Center) regarding the Tacoma Harbor Draft Feasibility Report and Environmental Assessment (Draft EA), and to supplement our comments dated February 21, 2019, on the United States Army Corps of Engineers' (Corps) Notice of Preparation of Environmental Assessment for the Tacoma Harbor Navigation Improvement Project.

We reiterate our request for a full programmatic Environmental Impact Statement ("EIS") to address the indirect and cumulative impacts of anthropogenic activities on the Southern Resident killer whales in the Puget Sound. Specifically, the EIS must include (1) a meaningful analysis of impacts on endangered species and (2) available mitigation measures in its discussion of alternatives. In addition, the December 2015 Biological Opinion on which the Draft EA relies[1] is both outdated and inadequate because it fails to consult on the range of activities included in the Tacoma Harbor Navigation Improvement Project (Project). The Corps needs to fully analyze the adverse effects on endangered species of vessel trips, noise pollution, and contaminant pollution as a result of this project. Therefore, it must initiate consultation on the Project to comply with the Endangered Species Act.

E26-1

I. Endangered Southern Resident Killer Whales' Population Has Declined Further In the Past Year.

E26-2

Since our detailed comments from a year ago, the population of Southern Resident killer whales has continued to decline. The most recent official population estimate is 73 Southern

[1] Draft EA at p. 111 ("The complete analysis [of impacts] appears in the Corps (2015) Biological Assessment and the NMFS (2015) Biological Opinion, which are incorporated by reference.").

Resident killer whales as of July 1, 2019,[2] and on January 30, 2020, a breeding male was confirmed missing and feared to be dead.[3] The declining population underscores the importance of the Corps' consulting with the National Marine Fisheries Service to analyze the impacts of the agency action on killer whales. Under the consultation mandate, the Endangered Species Act requires that "[e]ach Federal agency shall, in consultation with . . . [NMFS], [e]nsure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical habitat]."[4] Especially because the action area of this project occurs in killer whale critical habitat,[5] and will adversely affect critical habitat due to the vessel noise and traffic occurring there, the Corps must initiate consultation to analyze impacts on and implement conservation measures for killer whales.

E26-2 cont'd

Also of note is that both NMFS and Canadian authorities have now established that the death of J34 resulted from blunt force trauma consistent with vessel strike and "likely from ship impact."[6] This is important as it relates to the Tacoma Draft EA because of the increased risk of a ship strike from bigger, deeper ships that are expected to come to the port after completion of navigation improvements.

II. Threats To Endangered Southern Resident Killer Whales Remain Unmitigated Even As New Technology Promises Solutions.

Our earlier comment letter highlighted threats from the Tacoma Navigation Project such as noise pollution and ship strikes. As part of the Corps' environmental assessment, it must consider these impacts on endangered species and consider alternatives that would mitigate the impacts. Since our letter, technology companies working with government have debuted a network of listening stations that relay real-time information about killer whales' presence to alert ships to steer clear.[7] Incorporating a network into Tacoma's harbor could mitigate the impacts of commercial ship traffic to whales and should be part of an alternative to the action.

E26-3

---

[2] Center for Whale Research, 2019. https://www.whaleresearch.com/orca-population.
[3] Center for Whale Research, 2020. *L41, a prominent Southern Resident killer whale, missing!* https://www.whaleresearch.com/l41.
[4] 16 U.S.C. § 1536(a)(2).
[5] Draft EA at 111 ("Critical habitat includes marine waters of Puget Sound; the mouth of the Blair Waterway overlaps the demarcation line of critical habitat and the Commencement Bay disposal site is included.").
[6] *See* "Southern Resident KW Necropsies (1996-2016)," Health and Body Condition, Photogrammetry to monitor growth and body condition of SRKWs. Presentation to Pacific Fisheries Management Council, May 2019. Available: https://www.fisheries.noaa.gov/event/ad-hoc-southern-resident-killer-whale-workgroup; Larsen, Karin. "Report confirms ship strike caused death of killer whale J34." CBC News. July 23, 2019. Available: https://www.cbc.ca/news/canada/british-columbia/report-confirms-ship-strike-caused-death-of-killer-whale-j34-1.5220616
[7] Feb. 1, 2020, *Hey Google, help save the whales: Engineers developing AI to recognize calls of endangered orcas*, https://www.cbc.ca/news/canada/british-columbia/google-orcas-technology-1.5445495; Li, Wanyee. Feb. 2, 2020. *How Google's AI is tracking 'chatty' killer whales — and why that could be a game-changer for orcas facing extinction.* https://www.thestar.com/news/canada/2020/01/30/how-googles-ai-is-tracking-chatty-killer-whales-and-why-that-could-be-a-game-changer-for-orcas-facing-extinction.html.

III. The Failure To Consider Impacts From the Seattle Navigation Improvement Project In Conjunction With Tacoma Is Unlawful Segmenting.

The Draft EA fails to consider the cumulative impacts on endangered Southern Resident killer whales from the navigation improvement projects at both Seattle and Tacoma. As stated in the Draft EA, in "2015, the Port of Tacoma joined with the Port of Seattle in the operating partnership [Northwest Seaport Alliance]. As a cargo operating partnership, the two ports are the fourth-largest container gateway by tonnage in North America." These two deepening projects are designed to attract additional ships, specifically those with too deep a draft to easily access the port. The no action alternative, to forego the deepening and navigation improvements, would mean that those ships would visit other ports instead of Seattle and Tacoma, located in Southern Resident killer whale critical habitat in the vulnerable Puget Sound.

E26-4

The cumulative impacts to Puget Sound from commercial ship traffic resulting from improvements to Tacoma and Seattle pose a threat to Southern Resident killer whales. Federal regulations require that related or connected actions be analyzed in a single document.[8] Unlawful segmenting is the splitting of an action into several smaller parts and, in this case, analyzing them in a series of EAs that should be analyzed in a larger EIS. Segmentation is prohibited because, as here, the significance of the action as a whole might not be apparent or be underestimated if parts are analyzed separately.

The Draft EA offers two applicable, yet entirely inadequate analyses of cumulative effects. First, the Draft EA falsely concludes that the action will result in a "long-term reduction in vessel traffic," which would thus "reduce underwater noise that could disturb birds, fish, or marine mammals in the project area."[9] The Corps cannot show that either of these conclusions are true – (1) that the action will reduce vessel traffic, as compared to the no action alternative or (2) that fewer, larger ships will reduce underwater noise. As discussed above, the no action alternative could cause larger ships to divert to other ports, which could protect Puget Sound and Southern Resident killer whales. In addition, larger vessels could "introduce more noise to the marine environment through larger positioning thrusters and propulsion units. Tending vessels might also need to be larger or more numerous to safely accommodate/maneuver the vessels."[10] Thus, the newer, bigger ships are not necessarily quieter. The more likely scenario is that navigation improvements at Tacoma and Seattle will increase commercial ship traffic, noise pollution, and impacts to Southern Resident killer whales as compared to the no-action alternative.

E26-5

[8] 40 CFR 1502.4(a) ("Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.")
[9] Draft EA section 4.16.5 at 117.
[10] Final Independent External Peer Review Report Seattle Harbor, Washington, Navigation Improvement Project Feasibility Report and Environmental Assessment, King County, Washington, at 13.

Second, the Draft EA argues that the waterbody and waterfront are so degraded that impacts to threatened and endangered species would be "insignificant."[11] The list of factors affecting the waterway include "shoreline fill, armoring and subsequent loss of wetlands, persistent contaminants from past industrial practices, periodic dredging, vessel traffic, and other ongoing and future construction related activities that may result in elevated turbidity and noise that affect the wildlife itself and/or their prey resources."[12] Contrary to the Corps' conclusion that when combined with these factors, the deepening project impacts are insignificant, scientists have shown that to prevent extinction of and recover Southern Resident killer whales will require no new threats and mitigation of primary threats affecting them.[13]

E26-6

IV. Conclusion

The Draft EA fails to answer important questions about the impacts to critically endangered Southern Resident killer whales, the cumulative impacts of the Tacoma project in combination with the Seattle harbor navigation improvement, and any mitigation measures to lessen the impacts. The impacts to Southern Resident killer whales from the Tacoma Project includes the likelihood of more noise pollution and a higher risk of ship strikes due to the larger positioning thrusters and additional tug boats needed to maneuver. The Corps must analyze the background noise level and establish a system to monitor any increase due to commercial ship traffic to the ports of Tacoma or Seattle. Monitoring from the Washington ferry system has shown that historically, the background noise level of the working Seattle waterfront has increased to an average of 127-128 dB (24 hour average) above the assumed historical average of 120 dB.[14] Scientists have estimated that increasing ship traffic has resulted in a doubling of noise intensity every 10 years.[15] The Army Corps cannot finalize the EA without addressing these issues in an EIS.

E26-7

Thank you for consideration. Please feel free to contact me with any questions.

Sincerely,

Catherine W. Kilduff, Senior Attorney
Center for Biological Diversity

[11] Draft EA at section 4.15.5 at 113.
[12] *Id.*
[13] Lacy, R.C., Williams, R., Ashe, E., Balcomb III, K.C., Brent, L.J., Clark, C.W., Croft, D.P., Giles, D.A., MacDuffee, M. and Paquet, P.C., 2017. Evaluating anthropogenic threats to endangered killer whales to inform effective recovery plans. *Scientific reports*, 7(1), pp.1-12.
[14] Final Independent External Peer Review Report Seattle Harbor, Washington, Navigation Improvement Project Feasibility Report and Environmental Assessment, King County, Washington, at 13 (**citing** Laughlin, J. (2011). Seattle Ferry Terminal Background Sound Measurement Results – FINAL Technical Memorandum. Washington State Department of Transportation, Seattle, WA. May 18).
[15] Jones, N. 2019. The Quest for Quieter Seas. Nature, 568:158-161.

4

6.26.1 Other public comment materials received from the Center for Biological Diversity with their comment letter and held by the Corps office, but not included here:

- Laughlin, J. 2015. WSF Underwater Background Monitoring Project: Compendium of Background Sound Levels for Ferry Terminals in Puget Sound.

- Battelle Memorial Institute. 2016. Final Independent External Peer Review Report Seattle Harbor, Washington, Navigation Improvement Project Feasibility Report and

Environmental Assessment, King County, Washington. Columbus, Ohio. Prepared for Department of the Army, U.S. Army Corps of Engineers, Deep Draft Navigation Planning Center of Expertise, Mobile District. Contract No. W912HQ-15-D-0001. Task Order: 0012. September 23, 2016. Available online: https://usace.contentdm.oclc.org/digital/collection/p16021coll7/id/4442/

- Jones, Nicola. 2019. The Quest for Quieter Seas. Nature 568:158-161. Available online: https://phe.rockefeller.edu/wp-content/uploads/2019/04/Nature-IQOEa.pdf

- Lacy, R.C., R. Williams, E. Ashe, K.C. Balcomb III, L.J. Brent, C.W. Clark, D.P. Croft, D.A. Giles, M. MacDuffee. and P.C. Paquet. 2017. Evaluating anthropogenic threats to endangered killer whales to inform effective recovery plans. Scientific Reports 7(1):1-12. Available online: https://www.nature.com/articles/s41598-017-14471-0

- Center for Biological Diversity. September 22, 2017. Comment on the Seattle Harbor Navigation Improvement Project Notice of Preparation of Environmental Assessment.

- Center for Biological Diversity. May 1, 2018. Supplemental Comment on the Seattle Harbor Navigation Improvement Project Notice of Preparation of Environmental Assessment.

6.26.2 Response to Comment Letter E26

E26-1: Please see Master Response 4.

E26-2: The referenced 2015 Biological Assessment and 2015 Biological Opinion are for disposal of material at the DMMP Puget Sound open-water disposal sites only and do not include consultation on the dredging aspect of projects. The 2015 consultation for the DMMP Puget Sound open-water disposal sites included SRKW. The Corps initiated consultation with NMFS and USFWS under the ESA for the preferred alternative andconcluded consultation February 2022 (Appendix D and Sections 6.2 and 6.9 of the IFR/EA)...

E26-3: The Corps does not anticipate induced vessel movements as a result of dredging the Blair Waterway from -51 MLLW to -57 MLLW. With or without a project, these vessels will continue to call. The project allows these vessels to call more efficiently with greater tonnage onboard per call. Given the assumption of no change in call frequency of the largest vessel classes (12,000 TEU capacity and larger) combined with fewer smaller-class vessels (less than 10,000 TEU capacity), overall long-term vessel noise and ship strike frequency should be reduced as a result of the project.

E26-4: Cumulative effects to SRKW were considered in the IFR/EA. The Seattle Harbor and Tacoma Harbor deepening projects have independent utility from one another; therefore, the Corps did not improperly segment them under NEPA.

E26-5: The Corps does not anticipate induced vessel movements as a result of dredging the Blair Waterway from -51 MLLW to -57 MLLW. The project does not change the market forces driving trade at Tacoma Harbor. The channel deepening serves to reduce the transportation cost associated with forecasted commodity movements through Blair Waterway over the study period (2030-2079).

At current channel depths, carriers will continue to light-load containerships by filling vessels with less tonnage on each trip to and from Blair Waterway. Channel deepening allows vessels to add tonnage to each trip to Husky Terminal, WUT, and PCT. As vessels load more tonnage each trip, less overall vessel calls would be required.

Concerning underwater noise, the Corps does not anticipate channel deepening in the Blair Waterway from -51 MLLW to -57 MLLW to change the frequency of large, Post-Panamax vessel calls (+12,000 TEU capacity). These vessels are capable of transiting the waterway without channel deepening. The Blair Waterway already receives vessel calls with TEU capacity exceeding 13,000 TEUs. With or without a project, these vessels will continue to call. The project allows these vessels to call more efficiently with greater tonnage onboard per call. Given the assumption of no change in call frequency of the largest vessel classes (12,000 TEU capacity and larger) combined with fewer smaller-class vessels (less than 10,000 TEU capacity), overall long-term vessel noise should be unchanged or potentially reduced as a result of the project.

Incremental noise between and within vessel classes is not well documented. The Corps does not have the authority to control carrier vessel deployment. The study estimates the most likely project impact for purposes of analysis and comparison between the alternatives. The IFR/EA will be updated to recognize the uncertainty associated with this assumption.

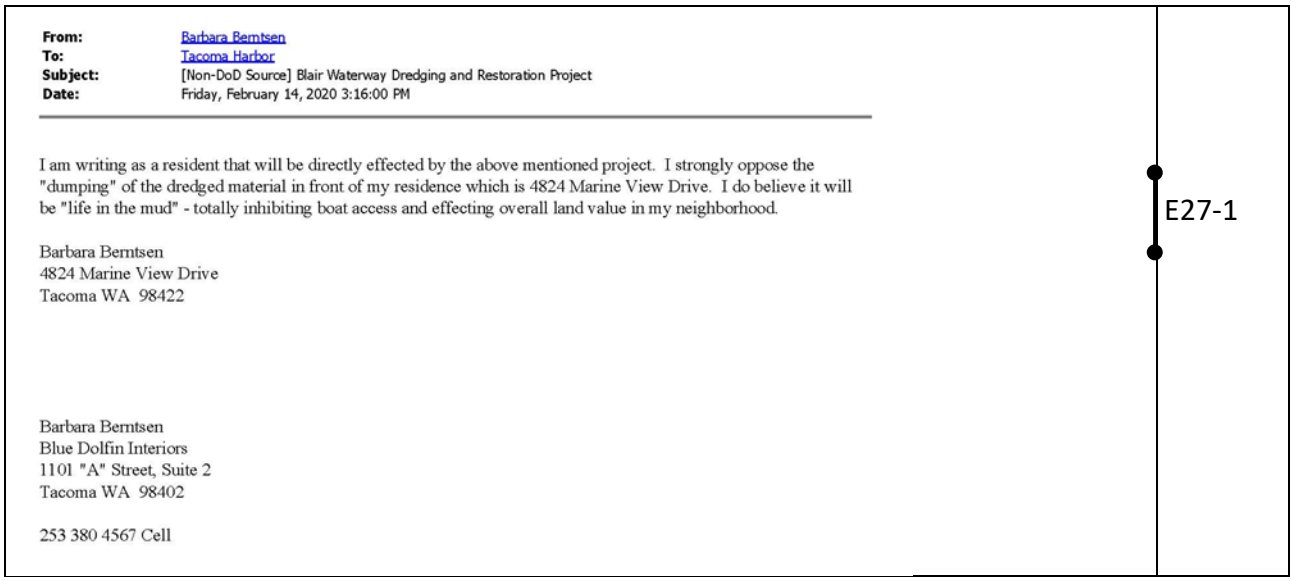
During ESA consultation, NMFS evaluated the potential for a change in noise, ship strikes, and wake effects on Puget Sound shorelines resulting from the proposed action. NMFS found no information that supported an increase in negative impacts to listed fish or marine mammals. NMFS concurred with the Corps' determination of "not likely to adversely affect" SRKW."

E26-6: In all scenarios, the study team anticipates a reduction in total vessel calls. Channel deepening from -51 MLLW to -57 MLLW does not change the market forces that drive commodity demand. Additionally, vessel deployment is a firm-level decision based on fleet availability, newbuilds, vessel scrap rates, and utilization rates by trade lane. As a result, the proposed project does not change the long-term trend toward large vessel use at Tacoma Harbor, and the study team does not anticipate that the channel deepening will induce increased vessel movement to Blair Waterway. Instead, the project allows carriers to load vessels more efficiently, leading to the potential for fewer overall vessel calls. This results in transportation cost savings and reduced channel congestion at Tacoma Harbor.

Please see the response to E26-5 about vessel traffic and noise. In addition, Section 4.4.3.2 (Vessel Fleet Characteristics: Future Without-Project Condition) describes the vessel calls under the no action alternative and compares it to vessel calls under the preferred alternative.

E26-7: Please see Master Response 4 and the response to E26-5 and E26-6.

6.27 Comment Letter E27—Barbara Berntsen



From: Barbara Berntsen
To: Tacoma Harbor
Subject: [Non-DoD Source] Blair Waterway Dredging and Restoration Project
Date: Friday, February 14, 2020 3:16:00 PM

I am writing as a resident that will be directly effected by the above mentioned project. I strongly oppose the "dumping" of the dredged material in front of my residence which is 4824 Marine View Drive. I do believe it will be "life in the mud" - totally inhibiting boat access and effecting overall land value in my neighborhood.

E27-1

Barbara Berntsen
4824 Marine View Drive
Tacoma WA 98422

Barbara Berntsen
Blue Dolfin Interiors
1101 "A" Street, Suite 2
Tacoma WA 98402

253 380 4567 Cell

6.27.1 Response to Comment Letter E27

E27-1: The Saltchuk beneficial use site is one alternative that is being considered for placement of dredged material, and modeling efforts will continue throughout the design process to ensure adequate understanding of the fate of placed materials to avoid impacts on existing infrastructure.

6.28 Comment Letter E28—City of Tacoma

City of Tacoma

Mayor Victoria Woodards

February 14, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP
PO Box 3755
Seattle WA 98124-3755

To whom it may concern:

I am writing to support the Army Corps of Engineers' continued investigation of the benefits of deepening the Blair Waterway in Tacoma Harbor. We know that deepening the Port of Tacoma's key navigation channel will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships.

Recognizing the critical economic impact of this effort, I fully support maximizing NED Plan benefits while remaining consistent with Federal, State, and local goals and policies of protecting our valuable environmental resources. Specifically, I support the Army Corps' continued efforts:

- To evaluate the Tentatively Selected Plan (TSP), which includes the National Economic Development (NED) Plan and dredging 2.8 million cubic yards of sediment from the waterway and disposing of said material both at the Commencement Bay Dredged Material Management Program open-water, non-dispersive site and potentially at the upland Saltchuk site as a form of ecosystem restoration;
- To prepare a Biological Assessment based on the feasibility-level design of the TSP, use of an existing nearshore habitat valuation model to evaluate beneficial use of dredged material for ecosystem restoration and, prior to decision to proceed with disposal of dredged material in this way, evaluation of whether the proposed activity would be in the public interest.

E28-1

Collaboration is a key value to me so I must take this opportunity to recognize the need for deliberative, thoughtful collaboration between the Army Corps, the City of Tacoma, the Puyallup Tribe of Indians, and the Port of Tacoma on these issues. Decisions are better – more equitable, resilient, and accountable – when all parties are involved.

The City of Tacoma is currently engaged in a subarea planning effort for the port and tideflats area with our partners at the Port of Tacoma, Puyallup Tribe, Pierce County, and the neighboring City of Fife. The aim of our Tideflats Subarea Plan is to establish a shared, long-term vision as well as a more coordinated approach to development, environmental review and protection, and strategic capital investments in the area. The timing is opportune for conversation about how the proposal to deepen the Blair Waterway integrates into the long-term vision we five partners are establishing for this area.

I believe it is necessary for the City and our partners to consider these studies, and the resulting benefits and impacts, together, within the framework we have established for the Subarea Plan. I request that you begin with an initial coordination and consultation meeting with City staff. Following that, I will gladly take the lead in coordinating with our partners to facilitate a more substantive and collaborative inter-governmental review.

To set up an initial consultation meeting with City staff, please contact Alisa O'Hanlon, Government Relations, at 253-591-5310 or aohanlon@cityoftacoma.org.

If you have additional questions regarding the Tideflats Subarea Planning Process, please contact Principal Planner Stephen Atkinson at 253-591-5531 or satkinson@cityoftacoma.org.

Sincerely,

Victoria R. Woodards
Mayor

E28-1

6.28.1 Response to Comment Letter E28

E28-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project. The Corps will set up an initial consultation meeting with Alisa O'Hanlon.

6.29 Comment Letter E29—Andy Bartels

From: Andy Bartels
To: Tacoma Harbor
Subject: [Non-DoD Source] citizen response Tacoma Harbor Navigation Improvement Project
Date: Friday, February 14, 2020 10:17:35 PM

Hello --

I live on the shore of Commencement Bay just north of the mouth of the Hylebos Waterway and directly on the Saltchuck Disposal Site for dredged material from the navigation improvement project for Tacoma Harbor. My closest neighbor to the north is the Dick Gilmur Kayak Put-in which belongs to the Port of Olympia. My house rests on land leased from the Port of Tacoma. Our physical address is 4826 Marine View Dr.

We are 100% in favor of placement of dredged material which suitable for ecosystem restoration being placed in the Saltchuck disposal area to create such ecosystem restoration along Commencement Bay. The shoreline in that area is already enjoyed by the citizens of Tacoma and neighboring communities. Recreating an estuary environment there would make the wildlife and plant life in the area far more diverse, and mitigate the nearby polluted Port of Tacoma operating areas. The improvement in the health of Puget Sound and other other long term public benefits that this project would foster makes it worth every cent of additional cost the dredged material placement would pose in the near term. It would control erosion caused by wave action on the shore which undermines State Route 509. It would reduce flood damage from Hylebos Creek and the Puyallup River. The woody debris from the log boom that was over the Saltchuck area for 80+ years has created an oxygen desert in the area. The fill would cap that woody debris, creating habitat that fosters salmon migration up the Hylebos.

My neighbors and I disagree about the desirability of this project. Like them, our family has invested substantial financial resources as well as time and care into the house my in-laws purchased and remodeled more than 20 years ago. I understand my neighbors' concerns. The public benefit to the children we see playing on the shore outside our house and to their children's children make this a project a "must move forward" proposition for us. It may cost our immediate family, but we believe it will pay huge dividends to our community.

Overall, the increase in accessibility of the Tacoma Harbor to the container ships of tomorrow as allowed by this project will do great things for the region's economic health, diversity and long-term prosperity.

Thank you for your kind attention.

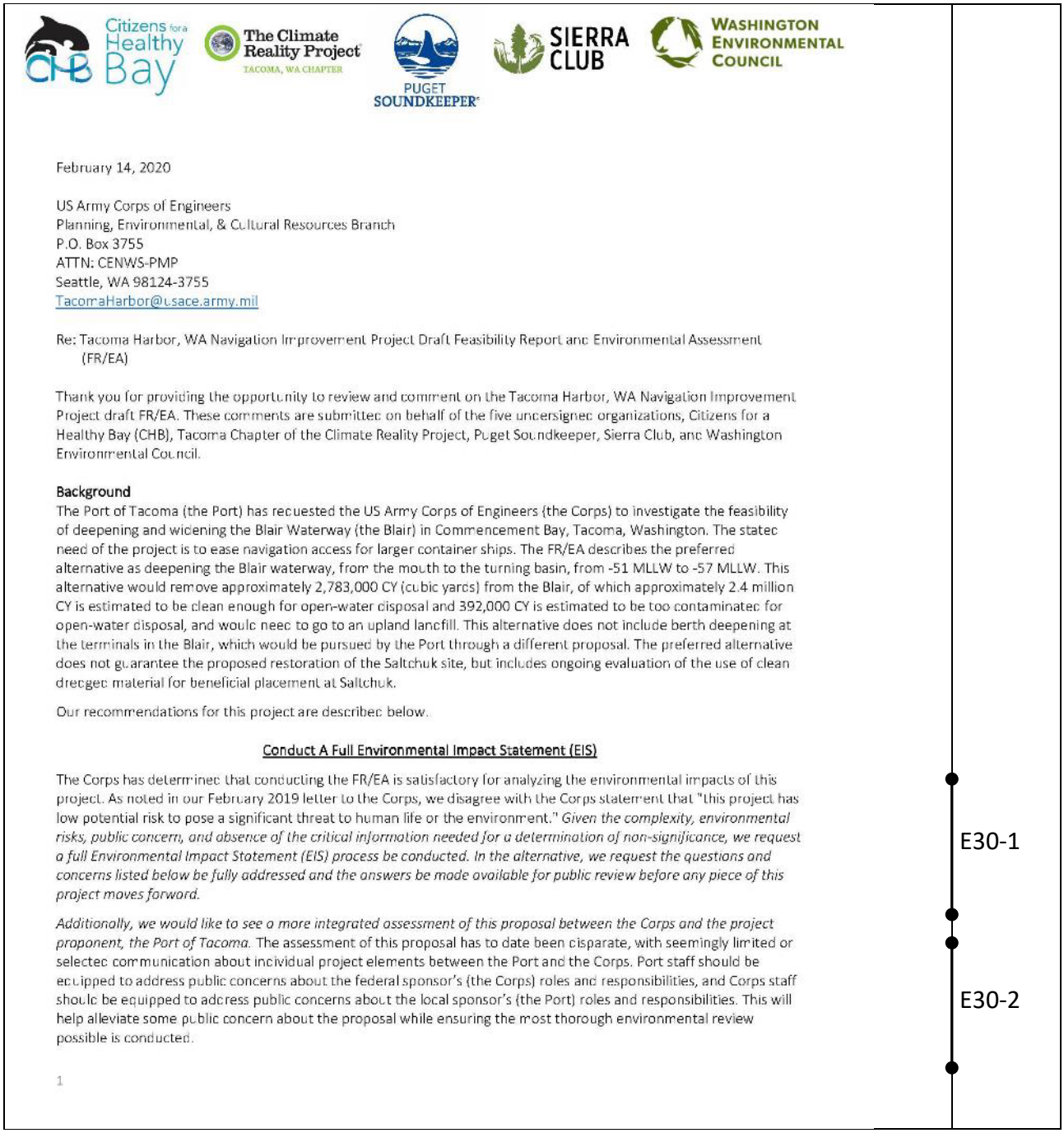
Sincerely,

Frederick A. Bartels
6716 East Side Dr NE Suite 1 Box 316
Tacoma WA 98422
andybartels1983@gmail.com <mailto:andybartels1983@gmail.com>
<Blockedhttps://ssl.gstatic.com/ui/v1/icons/mail/no_photo.png> ReplyForward
<Blockedhttps://drive.google.com/u/0/settings/storage?
hl=en&utm_medium=web&utm_source=gmail&utm_campaign=manage_storage>
<Blockedhttps://www.google.com/intl/en/policies/terms/>
<Blockedhttps://www.google.com/intl/en/policies/privacy/>
<Blockedhttps://www.google.com/gmail/about/policy/>

6.29.1 Response to Comment Letter E29

E29-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

6.30 Comment Letter E30— Citizens for a Healthy Bay, Tacoma Chapter of the Climate Reality Project, Puget Soundkeeper, Sierra Club, and Washington Environmental Council



Citizens for a Healthy Bay | The Climate Reality Project Tacoma, WA Chapter | Puget Soundkeeper | Sierra Club | Washington Environmental Council

February 14, 2020

US Army Corps of Engineers
Planning, Environmental, & Cultural Resources Branch
P.O. Box 3755
ATTN: CENWS-PMP
Seattle, WA 98124-3755
TacomaHarbor@usace.army.mil

Re: Tacoma Harbor, WA Navigation Improvement Project Draft Feasibility Report and Environmental Assessment (FR/EA)

Thank you for providing the opportunity to review and comment on the Tacoma Harbor, WA Navigation Improvement Project draft FR/EA. These comments are submitted on behalf of the five undersigned organizations, Citizens for a Healthy Bay (CHB), Tacoma Chapter of the Climate Reality Project, Puget Soundkeeper, Sierra Club, and Washington Environmental Council.

Background

The Port of Tacoma (the Port) has requested the US Army Corps of Engineers (the Corps) to investigate the feasibility of deepening and widening the Blair Waterway (the Blair) in Commencement Bay, Tacoma, Washington. The stated need of the project is to ease navigation access for larger container ships. The FR/EA describes the preferred alternative as deepening the Blair waterway, from the mouth to the turning basin, from -51 MLLW to -57 MLLW. This alternative would remove approximately 2,783,000 CY (cubic yards) from the Blair, of which approximately 2.4 million CY is estimated to be clean enough for open-water disposal and 392,000 CY is estimated to be too contaminated for open-water disposal, and would need to go to an upland landfill. This alternative does not include berth deepening at the terminals in the Blair, which would be pursued by the Port through a different proposal. The preferred alternative does not guarantee the proposed restoration of the Saltchuk site, but includes ongoing evaluation of the use of clean dredged material for beneficial placement at Saltchuk.

Our recommendations for this project are described below.

Conduct A Full Environmental Impact Statement (EIS)

The Corps has determined that conducting the FR/EA is satisfactory for analyzing the environmental impacts of this project. As noted in our February 2019 letter to the Corps, we disagree with the Corps statement that "this project has low potential risk to pose a significant threat to human life or the environment." *Given the complexity, environmental risks, public concern, and absence of the critical information needed for a determination of non-significance, we request a full Environmental Impact Statement (EIS) process be conducted. In the alternative, we request the questions and concerns listed below be fully addressed and the answers be made available for public review before any piece of this project moves forward.*

E30-1

Additionally, we would like to see a more integrated assessment of this proposal between the Corps and the project proponent, the Port of Tacoma. The assessment of this proposal has to date been disparate, with seemingly limited or selected communication about individual project elements between the Port and the Corps. Port staff should be equipped to address public concerns about the federal sponsor's (the Corps) roles and responsibilities, and Corps staff should be equipped to address public concerns about the local sponsor's (the Port) roles and responsibilities. This will help alleviate some public concern about the proposal while ensuring the most thorough environmental review possible is conducted.

E30-2

1

Provide Evidence That Contaminated Groundwater and Sediments Will Not Enter the Blair Through Dredging

The FR/EA identified minimal risk of overlap with surrounding Toxic Cleanups Sites and the Occidental Chemical Superfund site, but goes on to say that "fifteen of these sites have known contaminated groundwater and are located immediately next to the Blair Waterway." *Prior to dredging, the Corps should sample the groundwater and sediments for all contaminants associated with the surrounding Toxic Cleanup Sites, and with the Occidental Chemical Superfund site.* Due to the lack of field-verified data showing the extent of the groundwater contamination from Occidental, and due to the proximity of contaminated groundwater, analysis of the associated contaminants is needed as a precautionary approach to allow for a thorough environmental review. *Additionally, a plan for addressing newly found contaminated groundwater or sediment in the project area should be drafted and made available for public review prior to dredging.*

E30-3

Employ A Dredging Strategy That Does Not Resuspend Sediments and Contaminate Aquatic Life

The FR/EA describes using a digging clamshell bucket to dredge sediments suitable for open-water disposal and an environmental bucket for sediments unsuitable for open-water disposal, which would result in 13,000 CY of sediment resuspending into the water column. We find this rate of resuspension unacceptable, especially given the lack of accuracy these forms of mechanical dredging provide. *If this project moves forward, we recommend employing a dredging strategy that risks little or no resuspension of sediments, including active monitoring, similar to what was used for the cleanup of the Thea Foss Waterway.* We don't believe that use of a sediment curtain is adequate to contain resuspended sediments that may contain elevated levels of toxic substances.

Further, we are concerned about the erroneous conclusion that there will be a "minor increase" in the concentration of PCBs and other bioaccumulative toxins during dredging, and that these toxins would persist in the food chain for only two to three years post dredging. PCBs are known to persist indefinitely in marine environments, particularly in marine sediments. *To fully understand this threat to human health and the environment, the Corps needs to numerically quantify the estimated increase in bioaccumulative toxins and analyze if this increase in the marine environment is temporary, or if it will add to the long-term burden of these toxins in the food web of Commencement Bay and its surrounding waters.*

E30-4

This unidentified increase in bioaccumulative toxins is particularly concerning when we consider that the project is taking place in the Usual and Accustomed fishing area of the Puyallup Tribe of Indians, among other Coast Salish nations. These communities, along with other marginalized groups in Tacoma, consume a higher percentage of fish and shellfish than the surrounding communities within the project area, and therefore, have a higher risk of cancer, reproductive failure, and behavioral abnormalities. Fishing advisories in the area do not preclude our neighbors from consuming contaminated fish and shellfish, nor do they alleviate the responsibility of the Corps or the Port to consider these impacts. *To fully understand these risks, the Corps needs to evaluate the potential for disproportionate negative impacts to these marginalized groups from consuming seafood in the project area.*

Fully Mitigate for Loss of Habitat and Prey Availability

In the preferred alternative, dredging would occur 24 hours/day, from July 16th through February 15th, for three years. It is assumed in each year, approximately one third of the total benthic habitat area would be dredged (i.e., removed), thereby eradicating benthic macroinvertebrates and fish that utilize the area, as well as any existing eelgrass or algae beds. We are disturbed that the preferred alternative would essentially set the prey availability for already-stressed fish populations back to zero, without any mention of mitigating for this loss. Recovery of the benthic community in the Blair will take at least five years, during which time, other species that depend on this community will suffer. *We request the Corps and Port develop a mitigation plan to address these losses now, before dredging begins. Additionally, we request the Corps and Port further evaluate the baseline habitat conditions and population demographics in the Blair prior to dredging.* The Corps' assumption that this project would cause little impact to threatened and endangered species because of the "degraded state of the waterfront" does not negate the responsibility of the project sponsors to fully evaluate the biological conditions of the area, nor does it give the project sponsors license to further degrade an already-stressed environment.

E30-5

Develop an Effective, Long-lasting Restoration Project

We tentatively support the use of clean dredged materials for restoration of the Saltchuk site, however, we believe much more mitigation is needed to compensate for the loss of benthic habitat and benthic communities as a result of this project. The preferred alternative will remove 214 acres of benthic habitat over the period of 3 years, while the restoration being tentatively proposed is for only 64 acres. *We strongly recommend the project sponsors fully mitigate for the entirety of the benthic habitat to be lost, including for the impacts to Tribal Treaty fishing rights.* Completion of an EIS including a biological assessment of the Blair and analysis of the Tribe's commercial and treaty fisheries will provide a more clear picture of the mitigation that will be required.

E30-6

If this restoration project is to proceed, sea level rise needs to be considered to avoid losing any beneficial placement of materials. Saltchuk is in a high energy area, and we fear fine sands and silts placed in the area will be carried away during heavy tidal exchanges and storm events. Restoration should be proactive and should not rely on nearby eelgrass patches to reestablish in the restoration area. The Port should plant eelgrass starts in the area during times of the year with the least tidal energy and threat of storm events. Further, the 63 creosote-treated timber piles located in the shallow subtidal zone of the area should be removed, and not simply covered over. *We request the Port and the Corps develop a restoration plan soon in this process, and make it available for public review and comment.*

E30-7

Follow the Dredged Material Evaluation and Disposal Procedures

In our February 2019 letter, CHB provided substantive comments on the Sediment Sampling and Analysis Plan (SAP). We are providing those comments again here, as we are unsure how or if they've been considered.

The 2018 Dredged Material Evaluation and Disposal Procedures User Manual (DMEDP) clearly states, "Before embarking on the dredged material evaluation process, the proposed final resting place of the dredged material must be determined." Sediment quality standards differ widely for dredged materials to be disposed of in-water, for beneficial use, or at upland disposal sites. *We request that the ultimate destination of the dredged sediments be confirmed, and the SAP adapted accordingly with a thorough SAP that includes contaminants from all Tideflats industries.*

We recommend the project site be ranked as "moderate-high," and the sampling and testing intensity be increased to reflect this rank. The Blair falls into an "urban and industrialized area" which are ranked as "high," and contains "fueling and ship berthing or construction facilities," which are ranked as "moderate." Legacy contamination is present in much of the surrounding project areas, along the slopes and upland areas of the Blair. Groundwater of the Blair-Hylebos peninsula generally flows southwesterly towards the Blair. Precaution is needed to prevent legacy contamination from re-entering the waterway, and can be achieved through a more robust sampling design. Additionally, the Puyallup River estuary and Commencement Bay contain designated critical habitat and essential fish habitat for federally listed salmonids including Chinook salmon, a critical prey resource for southern resident killer whales.

E30-8

The current SAP lacks site information required by the DMEDP. *The following information needs to be included in an updated draft of the SAP so that a thorough environmental review can be conducted:* "one or more cross-sections of the dredging prism, dredging depth (MLLW) including overdepth, side-slope ratios, and proposed disposal site....", and; "site history including past characterization data." Further, the SAP should include a review of the 2016 Alexander Avenue site evaluation report conducted by Robinson Noble. This report details the historical use of portions of the Blair Waterway, including significant information on the presence of legacy contamination, including volatile organic compounds (VOCs) "and semi-VOCs, specifically tetrachloroethylene (PCE) and associated breakdown products, and pentachlorophenol (PCP) and associated breakdown products...." as well as arsenic, benzene and vinyl chloride.

The Sampling Design Plan as currently published is lacking details required by the DMEDP that are needed to conduct a thorough environmental review of the project. *The following needs to be included in the Sampling Design Plan:* "Table with DMMU identification, DMMU volume, designation as surface or subsurface DMMU, and number of samples for each DMMU.... Table of sampling locations including coordinates, mudline elevation (MLLW), design depth, overdepth, Z-depth, and preliminary determination of required core lengths to be assigned to DMMUs and Z-samples."

The Conceptual Dredging Plan as currently published is also lacking details recommended in the DMEDP that will aid in the thorough environmental review of the project.[3] *The following needs to be included in the Conceptual Dredging*

3

6.30.1 Response to Comment Letter E30

E30-1: Please see Master Response 4.

E30-2: Please see Master Response 4 (NEPA Process and Environmental Compliance) for more details about the compliance process used during this study. As the cost-sharing non-Federal sponsor of the feasibility study, the Port of Tacoma has been a team member involved throughout the study.

E30-3: During the design phase, additional analysis will be done to evaluate potential impacts to groundwater at Occidental Chemical Corporation as a result of the deepening project. As part of the deepening project, the Corps cannot allow for any adverse impacts to existing HTRW sites, including the spread or uncontrolled release of contaminants. The Corps will conduct a Phase 2 Environmental Site Assessment for those places where additional sediment characterization is needed prior to construction. Currently, the Corps has identified the Former Lincoln Avenue Ditch as one location that will likely require additional characterization.

The Corps will rely on existing data related to potential sediment and groundwater contamination at other sites, given the extensive sampling already performed under various regulatory programs for those sites. If any data gaps are found, additional sampling may be warranted. Additional analysis may also be warranted if those groundwater sites are found to be potentially impacted from navigation deepening.

E30-4: Please see Master Response 2.

E30-5: Please see responses to E2-4 and E24-28.

E30-6: Please see responses to E2-4 and E24-28 and Master Response 5. Saltchuk is not being proposed as mitigation; rather, Saltchuk is a beneficial use of dredged material. Ongoing coordination with the Puyallup Tribe of Indians regarding avoiding and minimizing effects to tribal fishing will continue through PED and construction.

E30-7: Sea level rise analysis has been incorporated into this project per the latest Corps guidance ER 1100-2-8162. In addition, a preliminary sediment transport analysis was performed for Saltchuk and will be updated in PED to more accurately predict the fate of placed material. Eelgrass is not within the scope of beneficial use of dredged material, and creosote pile removal will be the responsibility of the Port.

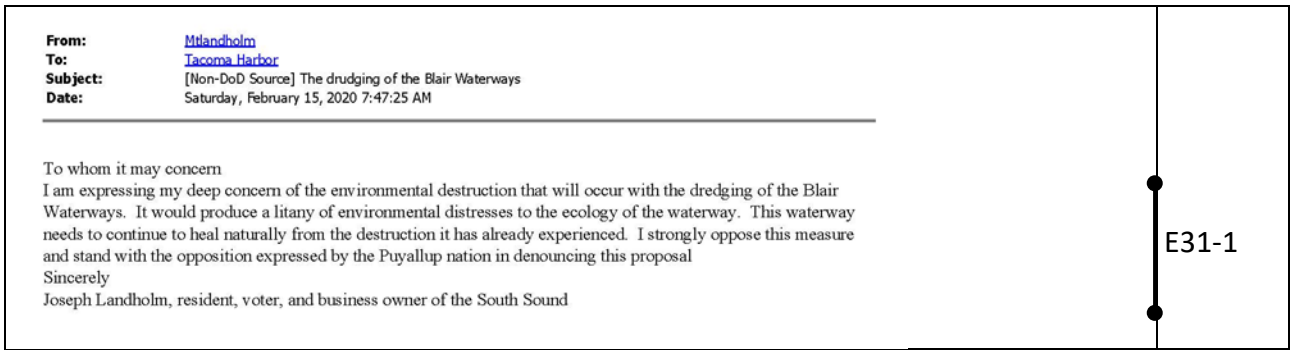
E30-8: See Master Response #3.

E30-9: Please see response to 24-18. The Corps evaluated Wapato Creek in the draft IFR/EA. There is no documentation of the use of Wapato Creek by Chinook salmon or steelhead for at least twenty years, and NMFS does not believe Wapato Creek provides suitable habitat in present conditions. The report has been updated to include a BMP to ensure equipment is free of invasive species.

E30-10: The Corps has a standard inadvertent discovery plan that is tailored to each specific project. The Corps is developing the inadvertent discovery plan to address the inadvertent discovery of archaeological resources, cultural resources, and historic period resources during project implementation. As a component of the inadvertent discovery plan, a separate section will also address the inadvertent discovery of human remains. Each of the plans will include protocols for ceasing work near the discovery, protection of the resource or remains, and phone contact information to include law enforcement, the State Historic Preservation Officer, the Corps archaeologist, and cultural contacts for each affected Tribe. The inadvertent discovery plan will be in place prior to project implementation. Archaeological monitoring has been conducted during the geotechnical testing that has been conducted and will continue for ground disturbing activity (including underwater sediment disturbance) associated with this project.

E30-11: While reserving material for other reuse opportunities would be beneficial, stockpiling dredged material is not within the scope of this feasibility study. In addition, the use of the Saltchuk site or any other beneficial use site requires extensive environmental coordination and consultation and is limited to the beneficial use of dredged material. The Corps formulates and evaluates alternatives and makes plan recommendations for Corps approval and subsequent congressional authorization through the feasibility process. This is documented in the IFR/EA. Comments and feedback the Corps received through study scoping, agency meetings, and the public review and comment process did not identify other potential beneficial use sites for evaluation during feasibility. As a result, the Corps does not intend to evaluate additional potential beneficial use sites.

6.31 Comment Letter E31—Joseph Landholm



From: Mtlandholm
To: Tacoma Harbor
Subject: [Non-DoD Source] The drudging of the Blair Waterways
Date: Saturday, February 15, 2020 7:47:25 AM

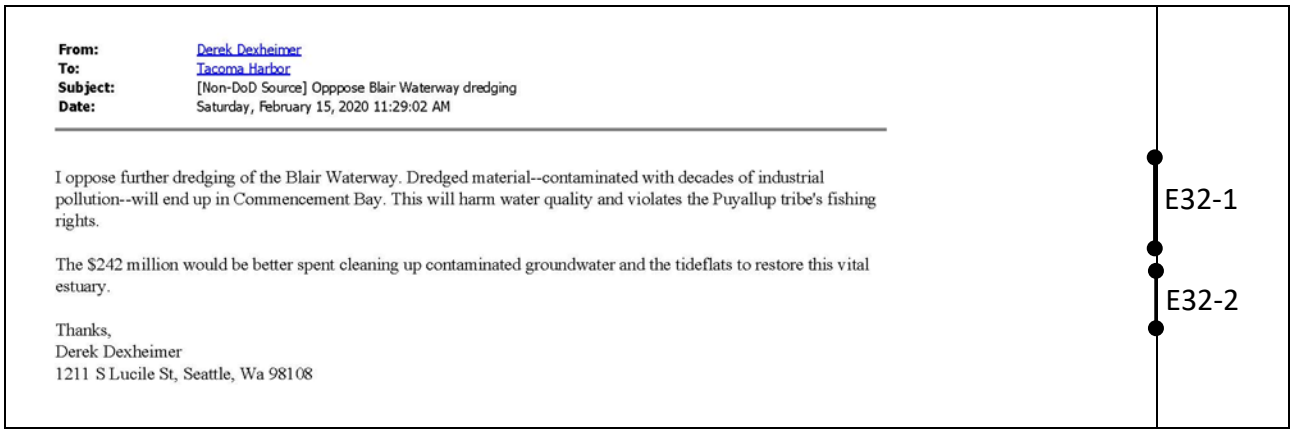
To whom it may concern
I am expressing my deep concern of the environmental destruction that will occur with the dredging of the Blair Waterways. It would produce a litany of environmental distresses to the ecology of the waterway. This waterway needs to continue to heal naturally from the destruction it has already experienced. I strongly oppose this measure and stand with the opposition expressed by the Puyallup nation in denouncing this proposal
Sincerely
Joseph Landholm, resident, voter, and business owner of the South Sound

E31-1

6.31.1 Response to Comment Letter E31

E31-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. Coordination with the Puyallup Tribe of Indians, including Government-to-Government meetings, has been ongoing and will continue through the PED phase and construction.

6.32 Comment Letter E32—Derek Dexheimer



From: Derek Dexheimer
To: Tacoma Harbor
Subject: [Non-DoD Source] Opppose Blair Waterway dredging
Date: Saturday, February 15, 2020 11:29:02 AM

I oppose further dredging of the Blair Waterway. Dredged material--contaminated with decades of industrial pollution--will end up in Commencement Bay. This will harm water quality and violates the Puyallup tribe's fishing rights.

The $242 million would be better spent cleaning up contaminated groundwater and the tideflats to restore this vital estuary.

Thanks,
Derek Dexheimer
1211 S Lucile St, Seattle, Wa 98108

E32-1

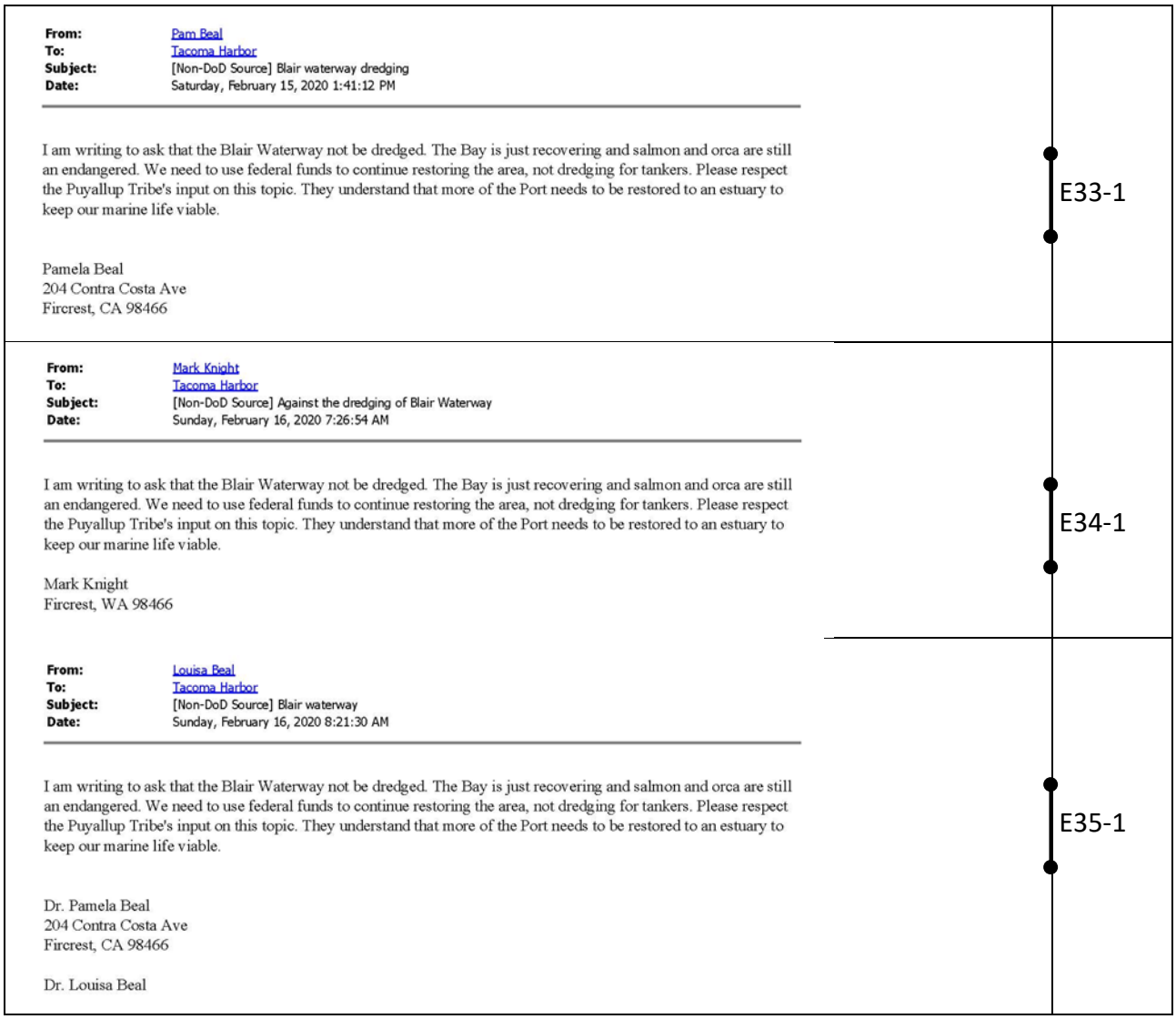
E32-2

6.32.1 Response to Comment Letter E32

E32-1: Please see Master Response 3. Coordination with the Puyallup Tribe of Indians, including Government-to-Government meetings, has been ongoing and will continue through the PED phase and construction to avoid and minimize effects to tribal fishing rights.

E32-2: Thank you for your comment. This comment is outside the scope of this feasibility study. This deep draft navigation feasibility study is undertaken to identify and evaluate alternatives to improve the efficiency of the navigation system in Tacoma Harbor. The purpose of the proposed Federal action is to achieve transportation cost savings (increased economic efficiencies) at Tacoma Harbor.

6.33 Comment Letters E33—Pamela Beal, E34—Mark Knight, E35—Dr. Louisa Beal



From: Pam Beal
To: Tacoma Harbor
Subject: [Non-DoD Source] Blair waterway dredging
Date: Saturday, February 15, 2020 1:41:12 PM

I am writing to ask that the Blair Waterway not be dredged. The Bay is just recovering and salmon and orca are still an endangered. We need to use federal funds to continue restoring the area, not dredging for tankers. Please respect the Puyallup Tribe's input on this topic. They understand that more of the Port needs to be restored to an estuary to keep our marine life viable.

Pamela Beal
204 Contra Costa Ave
Fircrest, CA 98466

E33-1

From: Mark Knight
To: Tacoma Harbor
Subject: [Non-DoD Source] Against the dredging of Blair Waterway
Date: Sunday, February 16, 2020 7:26:54 AM

I am writing to ask that the Blair Waterway not be dredged. The Bay is just recovering and salmon and orca are still an endangered. We need to use federal funds to continue restoring the area, not dredging for tankers. Please respect the Puyallup Tribe's input on this topic. They understand that more of the Port needs to be restored to an estuary to keep our marine life viable.

Mark Knight
Fircrest, WA 98466

E34-1

From: Louisa Beal
To: Tacoma Harbor
Subject: [Non-DoD Source] Blair waterway
Date: Sunday, February 16, 2020 8:21:30 AM

I am writing to ask that the Blair Waterway not be dredged. The Bay is just recovering and salmon and orca are still an endangered. We need to use federal funds to continue restoring the area, not dredging for tankers. Please respect the Puyallup Tribe's input on this topic. They understand that more of the Port needs to be restored to an estuary to keep our marine life viable.

Dr. Pamela Beal
204 Contra Costa Ave
Fircrest, CA 98466

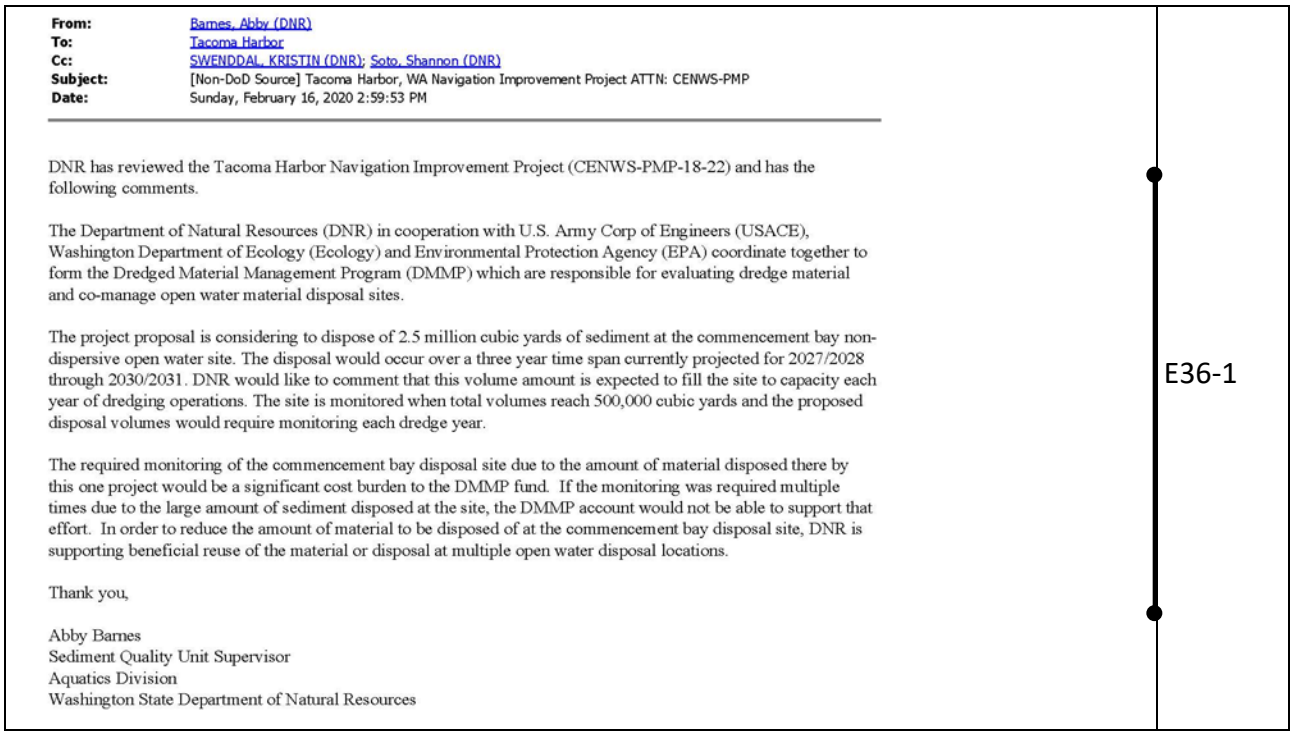
Dr. Louisa Beal

E35-1

6.33.1 Response to Comment Letter E33, E34, and E35

E33-1, E34-1, and E35-1: Under the National Environmental Policy Act, the Corps considers all practicable means and measures to avoid adverse effects to the environment. This includes effects to salmon and orca. In addition, the Corps has consulted with NMFS and USFWS under the ESA for impacts to ESA-listed species (Appendix D and Sections 6.2 and 6.9 of the IFR/EA). Coordination with the Puyallup Tribe of Indians, including Government-to-Government meetings, has been ongoing and will continue through the PED phase and construction.

6.34 Comment Letter E36—Washington Department of Natural Resources



From: Barnes, Abby (DNR)
To: Tacoma Harbor
Cc: SWENDDAL, KRISTIN (DNR); Soto, Shannon (DNR)
Subject: [Non-DoD Source] Tacoma Harbor, WA Navigation Improvement Project ATTN: CENWS-PMP
Date: Sunday, February 16, 2020 2:59:53 PM

DNR has reviewed the Tacoma Harbor Navigation Improvement Project (CENWS-PMP-18-22) and has the following comments.

The Department of Natural Resources (DNR) in cooperation with U.S. Army Corp of Engineers (USACE), Washington Department of Ecology (Ecology) and Environmental Protection Agency (EPA) coordinate together to form the Dredged Material Management Program (DMMP) which are responsible for evaluating dredge material and co-manage open water material disposal sites.

The project proposal is considering to dispose of 2.5 million cubic yards of sediment at the commencement bay non-dispersive open water site. The disposal would occur over a three year time span currently projected for 2027/2028 through 2030/2031. DNR would like to comment that this volume amount is expected to fill the site to capacity each year of dredging operations. The site is monitored when total volumes reach 500,000 cubic yards and the proposed disposal volumes would require monitoring each dredge year.

The required monitoring of the commencement bay disposal site due to the amount of material disposed there by this one project would be a significant cost burden to the DMMP fund. If the monitoring was required multiple times due to the large amount of sediment disposed at the site, the DMMP account would not be able to support that effort. In order to reduce the amount of material to be disposed of at the commencement bay disposal site, DNR is supporting beneficial reuse of the material or disposal at multiple open water disposal locations.

Thank you,

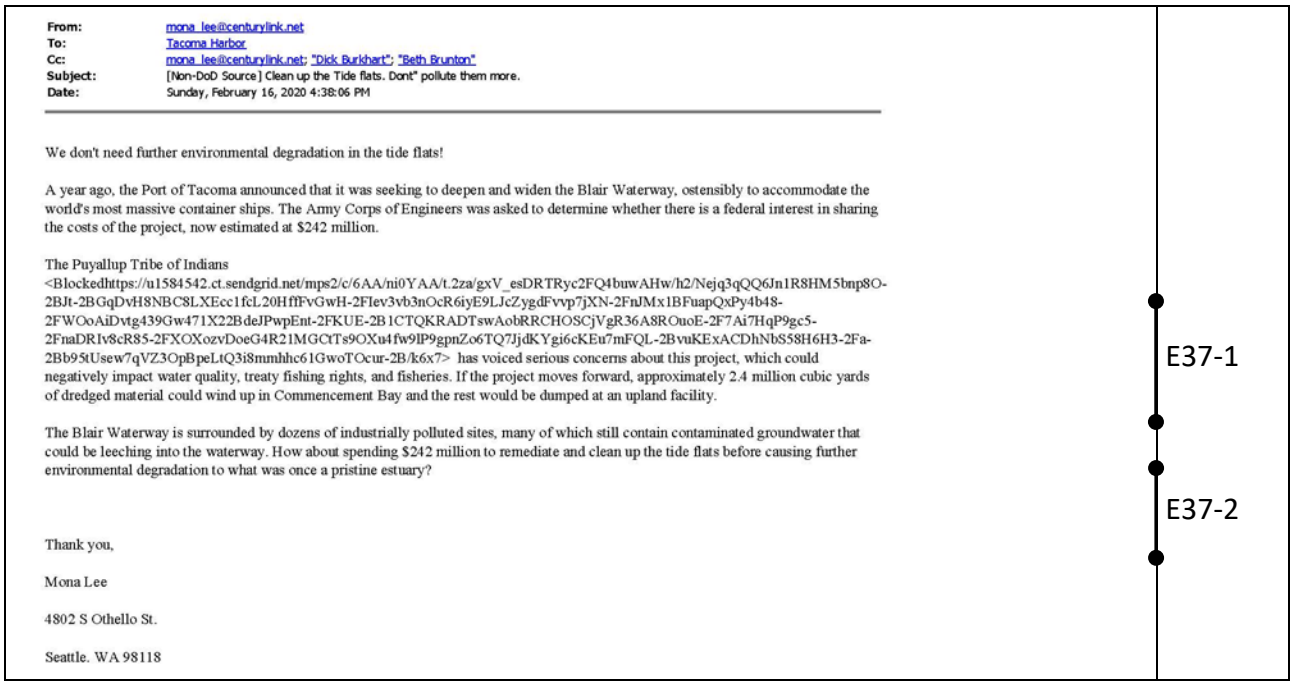
Abby Barnes
Sediment Quality Unit Supervisor
Aquatics Division
Washington State Department of Natural Resources

E36-1

6.34.1 Response to Comment Letter E36

E36-1: As the local sponsor for the Tacoma Harbor Deepening project, the Port of Tacoma would pay the tipping fee for disposal of material at the Commencement Bay open-water disposal site. In addition, physical monitoring of the disposal site (multi-beam bathymetric survey and SPI monitoring) has been incorporated into project costs at a rate of once every 500,000 CY or at the end of each dredged season. Therefore, there should be no cost burden to DNR from monitoring the disposal site as a result of this project.

6.35 Comment Letter E37—Mona Lee



From: mona_lee@centurylink.net
To: Tacoma Harbor
Cc: mona_lee@centurylink.net; "Dick Burkhart"; "Beth Brunton"
Subject: [Non-DoD Source] Clean up the Tide flats. Dont" pollute them more.
Date: Sunday, February 16, 2020 4:38:06 PM

We don't need further environmental degradation in the tide flats!

A year ago, the Port of Tacoma announced that it was seeking to deepen and widen the Blair Waterway, ostensibly to accommodate the world's most massive container ships. The Army Corps of Engineers was asked to determine whether there is a federal interest in sharing the costs of the project, now estimated at $242 million.

The Puyallup Tribe of Indians <Blockedhttps://u1584542.ct.sendgrid.net/mps2/c/6AA/ni0YAA/t.2za/gxV_esDRTRyc2FQ4buwAHw/h2/Nejq3qQQ6Jn1R8HM5bnp8O-2BJt-2BGqDvH8NBC8LXEcc1fcL20HffFvGwH-2FIev3vb3nOcR6iyE9LJcZygdFvvp7jXN-2FnJMx1BFuapQxPy4b48-2FWOoAiDvtg439Gw471X22BdeJPwpEnt-2FKUE-2B1CTQKRADTswAobRRCHOSCjVgR36A8ROuoE-2F7Ai7HqP9gc5-2FnaDRIv8cR85-2FXOXozvDoeG4R21MGCtTs9OXu4fw9lP9gpnZo6TQ7JjdKYgi6cKEu7mFQL-2BvuKExACDhNbS58H6H3-2Fa-2Bb95tUsew7qVZ3OpBpeLtQ3i8mmhhc61GwoTOcur-2B/k6x7> has voiced serious concerns about this project, which could negatively impact water quality, treaty fishing rights, and fisheries. If the project moves forward, approximately 2.4 million cubic yards of dredged material could wind up in Commencement Bay and the rest would be dumped at an upland facility.

The Blair Waterway is surrounded by dozens of industrially polluted sites, many of which still contain contaminated groundwater that could be leeching into the waterway. How about spending $242 million to remediate and clean up the tide flats before causing further environmental degradation to what was once a pristine estuary?

Thank you,

Mona Lee

4802 S Othello St.

Seattle. WA 98118

E37-1

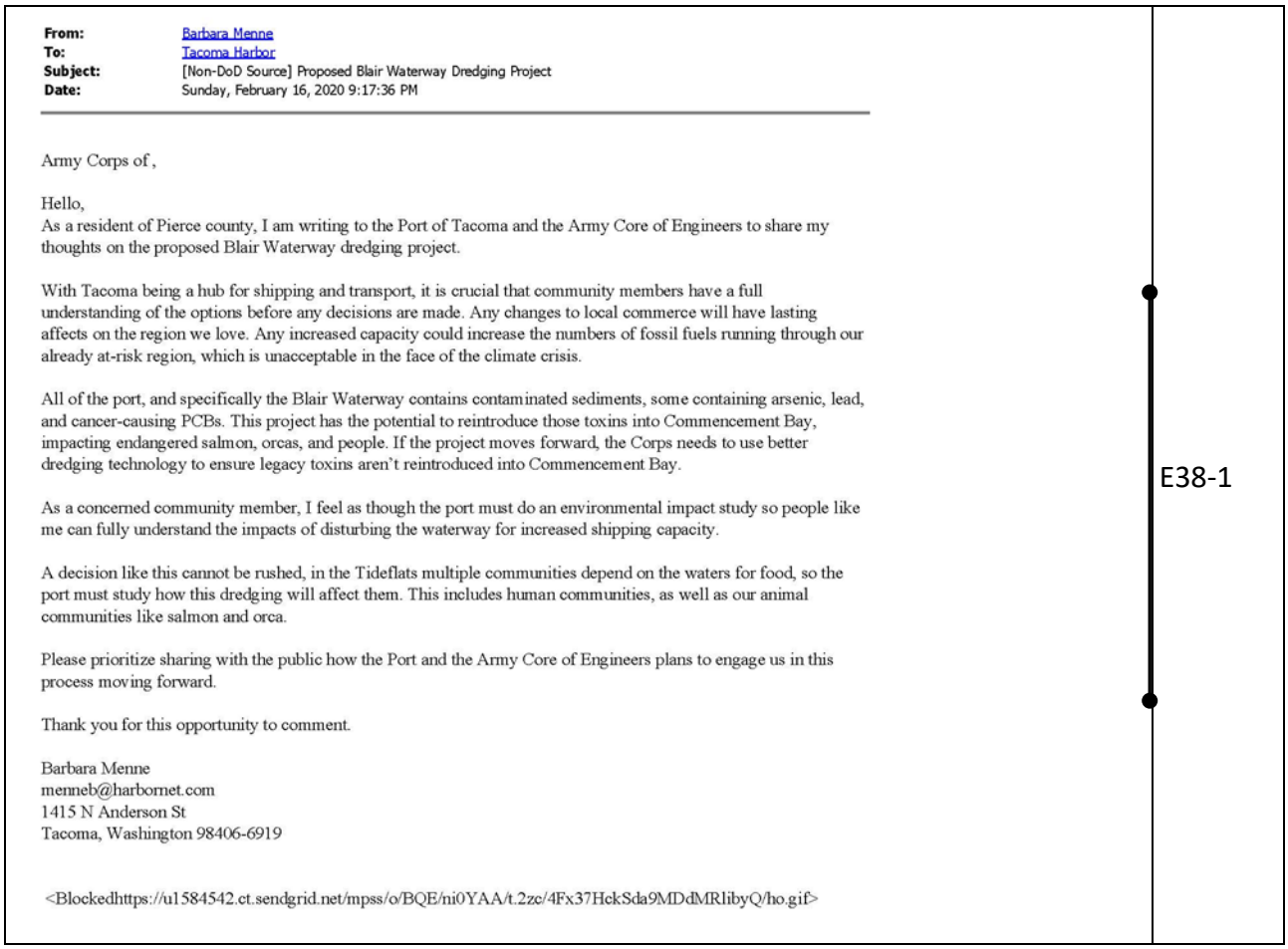
E37-2

6.35.1 Response to Comment Letter E37

E37-1: Coordination with the Puyallup Tribe of Indians, including Government-to-Government meetings, has been ongoing and will continue through the PED phase and construction.

E37-2: See Master Response 1.

6.36 Comment Letter E38—Barbara Menne



From: Barbara Menne
To: Tacoma Harbor
Subject: [Non-DoD Source] Proposed Blair Waterway Dredging Project
Date: Sunday, February 16, 2020 9:17:36 PM

Army Corps of ,

Hello,
As a resident of Pierce county, I am writing to the Port of Tacoma and the Army Core of Engineers to share my thoughts on the proposed Blair Waterway dredging project.

With Tacoma being a hub for shipping and transport, it is crucial that community members have a full understanding of the options before any decisions are made. Any changes to local commerce will have lasting affects on the region we love. Any increased capacity could increase the numbers of fossil fuels running through our already at-risk region, which is unacceptable in the face of the climate crisis.

All of the port, and specifically the Blair Waterway contains contaminated sediments, some containing arsenic, lead, and cancer-causing PCBs. This project has the potential to reintroduce those toxins into Commencement Bay, impacting endangered salmon, orcas, and people. If the project moves forward, the Corps needs to use better dredging technology to ensure legacy toxins aren't reintroduced into Commencement Bay.

As a concerned community member, I feel as though the port must do an environmental impact study so people like me can fully understand the impacts of disturbing the waterway for increased shipping capacity.

A decision like this cannot be rushed, in the Tideflats multiple communities depend on the waters for food, so the port must study how this dredging will affect them. This includes human communities, as well as our animal communities like salmon and orca.

Please prioritize sharing with the public how the Port and the Army Core of Engineers plans to engage us in this process moving forward.

Thank you for this opportunity to comment.

Barbara Menne
menneb@harbornet.com
1415 N Anderson St
Tacoma, Washington 98406-6919

<Blockedhttps://u1584542.ct.sendgrid.net/mpss/o/BQE/ni0YAA/t.2zc/4Fx37HckSda9MDdMRlibyQ/ho.gif>

E38-1

6.36.1 Response to Comment Letter E38

E38-1: See Master Response 1.

6.37 Comment Letter E39—Rayna Holtz

From: h
To: Tacoma Harbor
Subject: [Non-DoD Source] Dredging the Blair Waterway
Date: Sunday, February 16, 2020 10:09:15 PM

Not environmentally sound! It will disturb what ecological features have been able to survive there, and add to the traffic, the water sediment, stirring up of toxins, and more damage to the vital estuary of the Puyallup River, one of the South Sound's major salmon rivers during this time when the salmon runs are reaching all time lows and the orcas dependent on them are nearly at a point of no return due to the low numbers of their primary food source, salmon.

To disturb Commencement Bay in any way that will stir up toxins, impact what living marine communities have managed to survive, and add marine traffic will be a step backward in our struggle to restore the most important features of this place: ecological health and biodiversity.

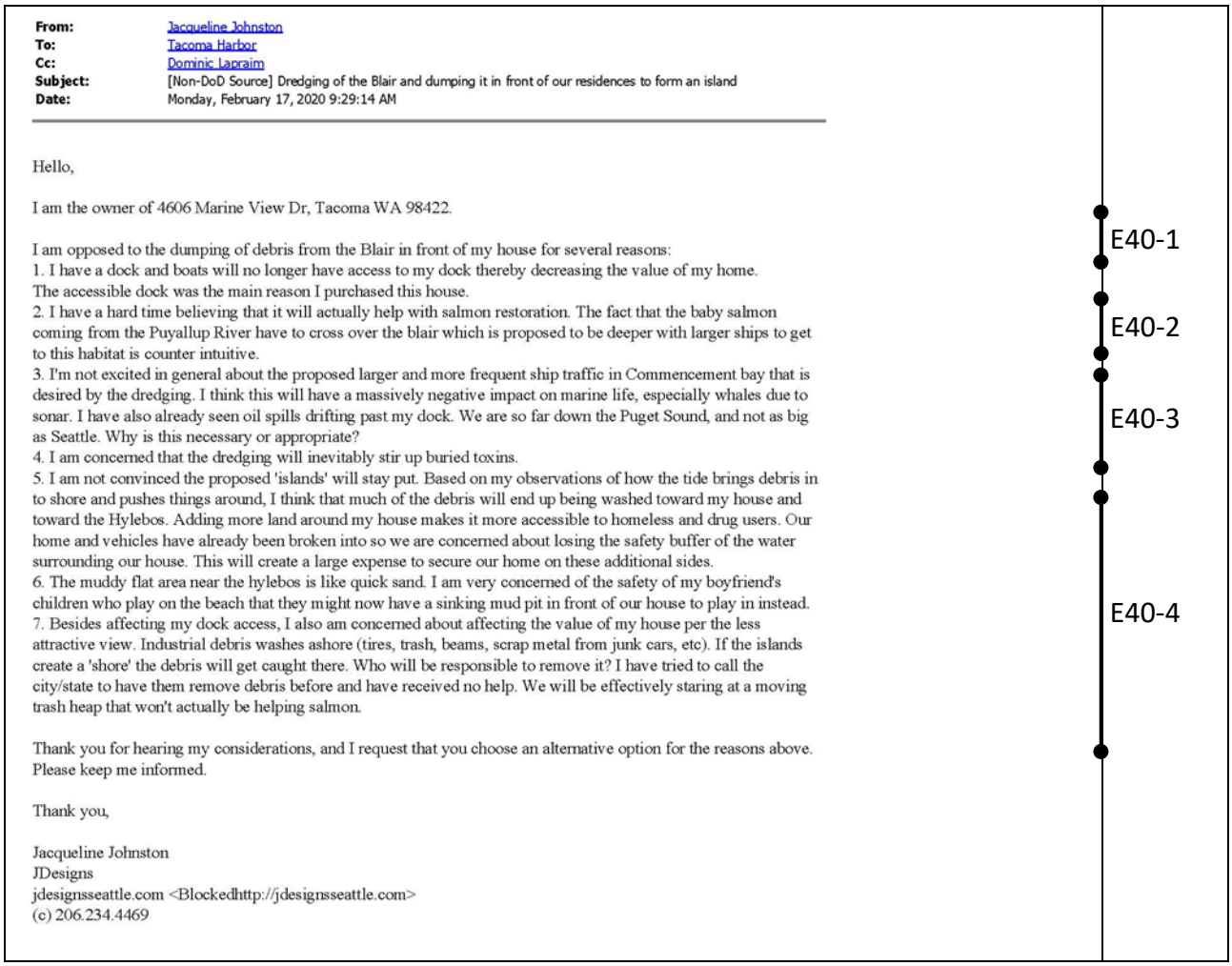
Rayna Holtz
Vashon Beach Naturalist
45-year resident of Vashon Island

E39-1

6.37.1 Response to Comment Letter E39

E39-1: See Master Response 1

6.38 Comment Letter E40—Jacqueline Johnston



From: Jacqueline Johnston
To: Tacoma Harbor
Cc: Dominic Lapraim
Subject: [Non-DoD Source] Dredging of the Blair and dumping it in front of our residences to form an island
Date: Monday, February 17, 2020 9:29:14 AM

Hello,

I am the owner of 4606 Marine View Dr, Tacoma WA 98422.

I am opposed to the dumping of debris from the Blair in front of my house for several reasons:
1. I have a dock and boats will no longer have access to my dock thereby decreasing the value of my home. The accessible dock was the main reason I purchased this house.
2. I have a hard time believing that it will actually help with salmon restoration. The fact that the baby salmon coming from the Puyallup River have to cross over the blair which is proposed to be deeper with larger ships to get to this habitat is counter intuitive.
3. I'm not excited in general about the proposed larger and more frequent ship traffic in Commencement bay that is desired by the dredging. I think this will have a massively negative impact on marine life, especially whales due to sonar. I have also already seen oil spills drifting past my dock. We are so far down the Puget Sound, and not as big as Seattle. Why is this necessary or appropriate?
4. I am concerned that the dredging will inevitably stir up buried toxins.
5. I am not convinced the proposed 'islands' will stay put. Based on my observations of how the tide brings debris in to shore and pushes things around, I think that much of the debris will end up being washed toward my house and toward the Hylebos. Adding more land around my house makes it more accessible to homeless and drug users. Our home and vehicles have already been broken into so we are concerned about losing the safety buffer of the water surrounding our house. This will create a large expense to secure our home on these additional sides.
6. The muddy flat area near the hylebos is like quick sand. I am very concerned of the safety of my boyfriend's children who play on the beach that they might now have a sinking mud pit in front of our house to play in instead.
7. Besides affecting my dock access, I also am concerned about affecting the value of my house per the less attractive view. Industrial debris washes ashore (tires, trash, beams, scrap metal from junk cars, etc). If the islands create a 'shore' the debris will get caught there. Who will be responsible to remove it? I have tried to call the city/state to have them remove debris before and have received no help. We will be effectively staring at a moving trash heap that won't actually be helping salmon.

Thank you for hearing my considerations, and I request that you choose an alternative option for the reasons above. Please keep me informed.

Thank you,

Jacqueline Johnston
JDesigns
jdesignsseattle.com <Blockedhttp://jdesignsseattle.com>
(c) 206.234.4469

E40-1

E40-2

E40-3

E40-4

6.38.1 Response to Comment Letter E40

E40-1: The Saltchuk beneficial use site is one alternative that is being considered for placement of dredged material, and modeling efforts will continue throughout the design process to ensure adequate understanding of the fate of placed materials to avoid impacts on existing infrastructure.E40-2: Please see Master Response 5.

E40-3: Please see Master Responses 2 and 3. The Corps evaluated changes to vessel traffic and determined fewer vessels will call at Tacoma Harbor by deepening to -57 MLLW. Please see the response to E26-5 and E26-6 for more detail.

E40-4: Further sediment characterization and sediment fate and transport modeling will be performed in the design stage to assess the nature of the sediment being dredged and placed in Saltchuk. This will include the placement of new topography features, including intertidal islands and submerged berms. See Master Response 1.

6.39 Comment Letter E41—U.S. Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

REGIONAL
ADMINISTRATOR'S
DIVISION

February 14, 2020

Kristine Ceragioli, Project Manager
Planning, Environmental, and Cultural Resources Branch
U.S. Army Corps of Engineers, Seattle District
P.O. Box 3755
Seattle, WA 98124-3755

Dear Ms. Ceragioli:

The U.S. Environmental Protection Agency has reviewed the U.S. Army Corps of Engineers Draft Feasibility Report and Environmental Assessment for the proposed Tacoma Harbor Navigation Improvement Project in Pierce County, Washington (EPA Region 10 Project Number 19-0001-COE). Our review was conducted in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act.

The Draft FR/EA analyzes the potential environmental impacts associated with activities to improve the efficiency of the navigation to the Blair Waterway of the Tacoma Harbor. The improvements would include channel deepening and widening, turning basin expansion, enhancement of the existing training structures, and disposal of dredged material. The project would allow the Harbor to accommodate newly built, larger vessels and containerships calling on the waterway and requiring more channel depth and width, larger berths, and bigger cranes to operate efficiently. For analysis of impacts from this action, the Corps considered three action alternatives and a no action. The Draft FR/EA identifies Alternative 2b as the Corps' preferred alternative and Tentatively Selected Plan.

Our review of the Draft FR/EA finds that most of the potential impacts from the program would be due to construction and operation activities, and mitigation measures would be applied to minimize the impacts, the EPA recommends that the Corps coordinate with other federal, state and tribal entities throughout the implementation of the project to ensure that activities are conducted in a manner protective of human health and the environment. We recommend that the Final FR/EA include additional clarifying information on the following topics.

Potential impacts on contaminated sites
We recommend that the Corps coordinate with the EPA Superfund and Resource Conservation and Recovery Act Programs as the project is implemented so that the Corps actions are consistent with agreed upon remedies for relevant contaminated site cleanup and monitoring. The Draft FR/EA indicates the existence of contaminated sites in the project area, including six RCRA, four Comprehensive Environmental Response, Compensation, and Liability Act, and four National Priorities List sites.[1] In addition, it is possible that more contaminated sites could be discovered during construction and operation of the project. The EPA Remedial Program Manager for CERCLA Sites is Kristine Koch and she may be reached at (206) 553- 6705 or Koch.Kristine@epa.gov. For RCRA sites, the EPA Manager is Laura Castrilli and she may be reached at 206-553-4323 or at castrilli.laura@epa.gov. More

E41-1

[1]Draft FR/EA, Appendix H

information on this topic is provided in our attached comments. The EPA would be interested in meeting with you to discuss further the issues associated with the sites and measures to take to address them. It would also be helpful to coordinate with Washington State Department of Ecology so that the Final FR/EA identifies all the contaminated sites in the planning area and discusses measures to take to minimize project impacts and meet state requirements. We note that currently there are up to 43 Model Toxics Control Act sites surrounding the Blair Waterway, with the possibility that even more MTCA sites could be identified as the project is implemented.

We also recommend the Final FR/EA include a monitoring program designed to assess the impacts from the project and effectiveness of mitigation measures. We encourage the Corps to indicate how the program would use an effective feedback mechanism, such as adaptive management, so that any needed adjustments can be made to the project to meet environmental objectives during operations and maintenance. For example, the Final FR/EA can discuss plans for monitoring emerging contaminants and taking corrective action if pollutant levels exceed standards or pose a risk to human health and the environment. This is especially important because the planning area has been heavily industrialized and work to identify all contaminated sites, contaminants of concern, and mitigation measures for related impacts continues.

E41-1

Potential impacts to water quality and beneficial uses

As the project construction and operation activities may impact water resources, we have the following recommendations for the Final FR/EA:

- Discuss the most current information regarding the status of the State of Washington Clean Water Act Section 401 certification process and conditions of the certification that assure the project would meet EPA-approved state water quality standards under the CWA. The Draft FR/EA indicates that there are many waterways in the planning area that are on the state's Section 303(d) list of impaired waterbodies due to exceedances of WQS for polychlorinated biphenyls or PCBs, dieldrin, chlorinated pesticides, dichlorodiphenyltrichloroethane or DDT, dissolved oxygen, and others.[2] Because of these exceedances, we encourage the Corps to consider including mitigation measures to minimize impacts related to these impairments;
- Discuss how the Corps will be working collaboratively with Washington State Department of Ecology to ensure compliance with any water quality restoration plans for the Commencement Bay area or vicinity, and Coastal Zone Management Act requirements;
- Provide information on the National Pollutant Discharge Elimination System permit application process and measures to protect water quality. The Draft FR/EA indicates that project construction would disturb an area of up to 64 acres (Saltchuk site), which meets the threshold (more than one acre) for authorization to discharge stormwater to waters of the United States from a state issued NPDES permit. A related Stormwater Pollution Prevention Plan may also be required, as well as construction best management practices. We recommend discussing the project with the NPDES program at the Department of Ecology as early as possible; and
- Indicate plans to coordinate with Ecology, and all affected tribes, to assure that state and tribal water resources are protected from impacts associated with the proposed project's construction and operation activities.

E41-2

[2]Draft FR/EA, p. 78

Potential impacts to air quality
We recommend that the Corps:

- Review information on air quality provided in the Draft FR/EA and update the Final FR/EA commensurate with our suggested revisions in our attached comments. If the updated data would trigger a general conformity analysis, then the Final FR/EA would need to include results of that analysis;
- Monitor air quality and implement appropriate mitigation measures in coordination with Ecology and other entities, such as the Puget Sound Clean Air Agency, in the analysis area to ensure compliance with the National Ambient Air Quality Standards and related regulatory requirements throughout this project implementation; and
- Tailor air monitoring strategies to local conditions because localized air quality impacts can be substantial (e.g., during wildfire burns) even though area-wide and/or long-term monitoring may show compliance with air quality regulatory requirements. This is particularly important for this project which is in a maintenance area for $PM_{2.5}$ and PM_{10}.

E41-3

Potential impacts to biological resources
We recommend that the Final FR/EA include information on working with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and as appropriate, with the Washington Department of Fish and Wildlife, including recommended measures to reduce risks and protect biota and habitat. The Draft FR/EA indicates the proposed project activities may impact federally and state protected species occurring in the project area and vicinity, such as the endangered Southern Resident killer whale and threatened Puget Sound bull trout, Chinook salmon, and steelhead. We also encourage the Corps to include in the Final FR/EA information on the outcomes of consultations with the Services and coordination with other agencies.

E41-4

Monitoring and Adaptive Management
We recommend that the Corps describe a monitoring program designed to assess the impacts from the project and effectiveness of mitigation measures. We encourage the Corps to indicate how the program would inform adaptive management, so that any needed adjustments can be made to the project to meet environmental objectives during operations and maintenance. As an example, the program could be helpful in managing the predicted impacts on water quality from changes in climate in the analysis area.[3]

E41-5

Thank you for the opportunity to review this Draft FR/EA. If you have questions about our comments, please contact Theo Mbabaliye of my Staff at 206-553-6322 or mbabaliye.theogene@epa.gov or me at 206-553-1841 or nogi.jill@epa.gov.

Sincerely,

Jill A. Nogi, Chief
Policy and Environmental Review Branch

[3] Draft FR/EA, p. 79

U.S. Environmental Protection Agency Detailed Comments on the Tacoma Harbor Navigation Improvement Project Pierce County, WA

In our review of the Draft FR/EA, we noted that there are unclear, incomplete or missing data on contaminated sites and sediment management, and air emissions. We recommend the Corps review the data and make changes in the Final FR/EA accordingly:

I. Contaminated sites and sediment management

- We recommend that the Corps consult the Commencement Bay 2020 Fifth Five-Year-Review documents, which reference the Commencement Bay Nearshore/Tideflats 2014 Fourth FYR Report as a source for much of the CERCLA-related information in the Draft FR/EA. The EPA Region 10 will release the final CBNT 2020 Fifth FYR in February 2020, which has updated and more accurate information regarding the CBNT CERCLA Site. The information presented in the Corps' Draft FR/EA needs to be updated based on the 2020 FYR data which can be obtained from the EPA's CBNT Remedial Project Manager, Kristine Koch at any time. This is especially important for corrections to the background information and the current status of Sitcum and Blair Waterways. The EPA Superfund program is available to provide clarifications and discuss the implications of the 2020 FYR at the Corps' request. E41-6

- We recommend that the Corps review and update information related to the Commencement Bay Interagency Dredged Material Management Program. The Commencement Bay DMMP-managed open-water site is proposed as one of the three dredged material disposal options. The Draft FR/EA indicates that under the TSP, nearly 3 million CY of material could be found suitable for placement at the site. In June 2019, the DMMP agencies provided an Advisory Determination to the Corps stating that disposal of a large volume of material over a relatively short period of time could result in off-site migration of the dredged material. This has been a concern historically at the Commencement Bay site. Additional measures, including physical monitoring (multibeam bathymetric monitoring and Sediment Profile Imaging) at the disposal site, will likely be required to inform management at the site if a large volume is proposed for open-water disposal. The DMMP agencies recommended baseline physical monitoring, with subsequent monitoring of the site after every 500,000 CY of disposal, or at the end of a given dredging year. These costs are not included in the Corps' analysis to date. If physical monitoring reveals significant off-site migration, the DMMP agencies could consider implementing institutional controls to manage the site. These controls could affect dredging schedule and equipment, and therefore costs. Possible controls could include shifts in the target zone or required barge routes over the site, or restriction of disposal to a specified portion of the tide cycle. It is important that the Final FR/EA acknowledges these potential implementation issues and costs, and discuss when they will be considered during project planning.[4] E41-7

- We recommend that the Corps clarify information regarding the Commencement Bay DMMP Disposal Site Monitoring Funding. Regular DMMP site management monitoring is E41-8

[4] Draft FR/EA, Appendices B and H

currently conducted and funded by the Corps and Washington Department of Natural Resources. This monitoring is generally triggered by cumulative placement volumes at a given site. In Puget Sound, WDNR funds its portion of the monitoring by collecting a per cubic yard tipping fee of $0.45. We recommend the Final FR/EA describe how necessary monitoring would be accomplished for the material from this project. We recommend the Final FR/EA describe when documentation relative to this issue will be provided.

E41-8

- Section 1.4.5, p. 16:
    - We recommend correcting and updating this section with information in the CBNT 2020 FYR. The waterward extent of the CBNT CERCLA site extends out to the -60' MLLW mark in the Bay. The entirety of the Blair Waterway and Sitcum Waterway navigation channels and side slopes are within the CBNT site, not just the mouths of these waterways.
    - We recommend reconsideration of the information that appears to indicate that contamination at levels below Remedial Action Levels may indicate a lack of contamination. For parts of the Blair Waterway it was assumed that natural recovery would occur. The 2020 FYR reports that the recovery may not have occurred completely as indicated by contaminant concentrations above Sediment Quality Objectives currently in the Blair Waterway (see 2020 FYR).
    - We recommend the Corps correct and update information related to the delisting of the Blair Waterway. Per the EPA Superfund National Priorities List Deletion Guidance and Policy, delisted sites may still require Five-Year-Reviews to assess protectiveness and, if future site conditions warrant, additional response actions can be taken. Although relisting on the NPL is not necessary, sites may still be restored to the NPL if extensive response work is required. Based on data collected by the Corps for this project, and for regulatory projects in Blair Waterway, the EPA is noting in the 2020 FYR that this area may require additional response actions and the potential for contaminated source material in the waterway side slopes in areas where no sampling has occurred.

E41-9

- Section 1.4.5, p. 17:
    - We recommend that the discussion in this section reference all sites with or needing CERCLA actions and Institutional Controls. Notable actions missing here are cleanups associated with the Puyallup Land Claim settlement and waste in place isolated in the Slip 1 Nearshore Confined Disposal facility. The shoreline of the Slip 1 NCD should be included for stability analysis. Slip 5 is an EPA CERCLA mitigation site constructed adjacent to the mouth of the Blair Waterway. Proximity to the widened channel requires its inclusion and discussion in this documentation. CERCLA mitigation sites are considered part of the site-wide remedy in the long-term and protected by ICs.
    - We recommend revision to the information that the Sitcum Waterway remedy is considered "complete and effective", with the main channel dredged to clean. While the remedy is currently complete and effective, the subsurface is considered waste in place, thus requires ICs. The monitoring mentioned in this section was conducted

under the Sitcum Waterway piers and indicated that while surface sediments met cleanup goals, the subsurface did not. We recommend the Final FR/EA refer to the 2020 FYR for language pertinent to Sitcum.

- Section 1.5, pp. 17-18:
  - We recommend including the DMMP's August 2009 Supplemental EIS for the Commencement Bay open-water disposal site in the references (DMMP 2009). The site capacity was expanded at that time.
  - We recommend that the statement on use of the Saltchuk beneficial uses site be revised to include the possibility that another beneficial uses option could be identified at a later time. We appreciate the evaluation of the Saltchuk site and support the pursuit of this alternative. However, given the earliest likely implementation of the deepening project is 2027, it is possible that another beneficial uses option could be identified in the intervening time. The EPA would support beneficial use at a different or additional site should another opportunity become available and the supporting documentation and permitting be completed.
- Section 3.5, Alternative 2, p. 33: We recommend indicating at what stage slope stabilization requirements will be assessed. Please list some of the range of possibilities intended when this term is used together with, for example, armoring, sheet piles, and secant walls actions. Please label "Area 2 on Figure 3-4. Other areas besides Lincoln Avenue Ditch have ICs and may require specific analysis in the Preconstruction Engineering and Design.
- Table 4-1, p. 57: We recommend that the Geotech detailed effects analysis include stability of Blair Waterway features such as side slopes, areas where waste is left in place and all mitigation sites that have been constructed via the 404 regulatory or CERCLA program.
- Figure 4-3, p. 63: We recommend inclusion of the CERCLA and regulatory mitigation sites in the Blair Waterway on a similar figure. These sites include Slip 5, Fairliner and Rhone Poulenc at a minimum.
- Section 4.3.2.2, pp. 64 – 65: We recommend use of the appropriate terminology in this section and others such as 4.11 and 4.11.2. There is one CERCLA site, CBNT, listed on the NPL which includes 6 Operable Units, and various problem areas. Removal actions have occurred, also under the umbrella of the single CBNT NPL site. Glenn Springs Holdings (former Occidental Chemical) is within the CBNT site, specifically OUs 1 and 5. MTCA sites are within OU 5. Please contact the CBNT RPM Kristine Koch directly for questions related to this topic. See also the previous comment on "delisting" and its implications relative to "Federal actions". Please refer to Glenn Springs Holdings consistently, to prevent confusion.
- We recommend that the Final FR/EA include the correct CBNT NPL listing year as 1983 and not 1981 and change the sentence to read, "The EPA issued a partial deletion in 1996 pertaining to the portions of these OUs addressing…".
- Section 4.3.3.3, p. 67: We recommend depicting this project on future Saltchuk figures and/or in the narrative description. The EPA is currently exploring a CERCLA-required

E41-9 cont'd

E41-10

E41-11

E41-12

E41-13

E41-14

E41-15

E41-16

mitigation project at the southern edge of the Saltchuk site. Project negotiations involve the WDNR, Port of Tacoma, Glenn Springs Holdings and American Construction. E41-16 cont'd

- Section 4.6.2, p. 77: We recommend that these geotechnical assessments include stability of the Slip 1 NCD slope, Blair Waterway mitigation sites (including Slip 5), and any other locations where waste is left in place in the shoreline and side slopes. E41-17
- Section 4.11, p. 90: We recommend that this section be updated with language from the 2020 FYR.
- Section 4.11.2, p. 92: We recommend that information on this page clarify that Lincoln Ditch is not the only location where ICs are in place to protect contamination left in place (e.g. Slip 1 NCD). Per updates in the 2020 FYR, EPA is pursuing additional IC's at several locations along the Blair and Sitcum Waterways. E41-18
- Section 4.13.3, p. 99: We recommend that information in this section clarify whether there are no eelgrass beds off the mouth of Blair in the vicinity of the Slip 5 habitat mitigation site, at similar depths. We are aware of the existence of a large healthy eelgrass bed offshore of the peninsula between Thea Foss and Middle Waterway starting at -4.8' MLLW, stretching completely across the peninsula. E41-19
- Section 4.15, p. 105: We recommend that the Final FR/EA clarifies why slope stabilization is not considered part of this Federal action, and slope stabilization would not be required for the widening and deepening. E41-20
- Section 4.15, p. 108: We recommend that the discussion on Eulachon studies also include a figure identifying the locations of habitat restoration sites on the Blair waterway and other discussions. All restoration sites in the Blair (Fairliner, Rhone Poulenc) and near the waterway mouth (Slip 5) must be mapped and clearly identified, and potential effects to them assessed in this document. The discussion should include existing ICs and whether the projects are NRDA, 404 permitting or CERCLA required actions. E41-21
- Section 4.16.2, p. 114: We recommend adding that the work may also require the use of a small skiff or boat for water quality monitoring. E41-22
- Section 4.16.2, pp. 114-115:
    - We recommend that the Final FR/EA include additional clarifying information the differences between areas of "slope stabilization" and areas of "slope strengthening". Those activities have different implications for ESA species and for the effects of the activities themselves, especially for areas with ICs. If "slope strengthening" is possibly required, we recommend it be considered for the ESA analysis. E41-23
    - We recommend that the potential "slope strengthening" options referred to on p. 115 be provided in Section 3.5, e.g., sheet piles and secant walls. Protection might be required for other areas of the waterway with ICs, not just the four sections provided to date.
    - Section 4.18, pp. 119-120: We recommend consulting the 2020 FYR for updated information relevant to this section. The EPA has collected tissue samples from these waterways and is analyzing for PCBs and dioxins. Results are expected in 2020. E41-24

- Section 5.1, p. 125: We recommend consideration that the Saltchuk alternative also reduces the costs of monitoring/management at the DMMP Commencement Bay open-water disposal site. E41-25
- Section 5.1.2, p. 127: We recommend providing information in the Final FR/EA that clearly differentiates stabilization and strengthening activities. Currently, it is confusing for the reader of the Draft FR/EA document to know the types of activities each could include. E41-26
- Section 5.4, p. 129: Regarding the navigational servitude mentioned here, we recommend that the Final FR/EA include a discussion on the implications for collection of a tipping fee at the Commencement Bay open-water disposal site and for the use of the Saltchuk site. E41-27
- Section 5.8.3: We recommend that this section include a discussion on the Corps plans for coordination with the EPA CERCLA program. Ecology and other agencies are specifically mentioned for coordination. Coordination should occur with the EPA CERCLA program as the entire project area is within the bounds of the CBNT Superfund Site, but not necessarily for the specific sites mentioned here – Lincoln Ditch, Glenn Springs Holdings, and TruGrit. To our knowledge, groundwater contamination at Glenn Springs Holdings moves north and east into the Hylebos WW and not the Blair; however, this must be confirmed with Ecology. E41-28
- Section 5.9.2.1, p. 139: We recommend that the Final FR/EA add language as to how and when coordination with the EPA will occur. Coordination must occur whether or not contaminated materials are encountered. For more information on this, please contact Kristine Koch.
- Other editorial comments to review and correct:
    - Add TSP to acronyms table.
    - Globally change "dredge material" to "dredged material", e.g. p. 4.
    - Globally edit and correct text figure reference numbers, e.g. p. 8.
    - Page 17: Edit "Error! Reference source not found.
    - Appendices B and H:
        - The information provided in the supporting appendices should be updated based on FS/EA comments provided above. E41-29
        - Appendix H, p. 9. Section 3.2. The language in this section should be revised to align with information in the 2020 FYR.
        - Appendix H, Figure 5, p. 13: This is an excellent figure but is hard to read and should emphasize Blair Waterway locations and updated status. We recommend locations, such as mitigation sites, with ICs be included on this figure as well.
        - Appendix H, Section 7.0, Summary: This summary does not include all the sites mentioned earlier in the document.

8

II. Comments on potential impacts to air quality and emissions

- Section 4.8, pp. 81-82:
  - We recommend that information on ozone be corrected because ozone is not "evaluated by measuring ozone precursors…." in the air. The official monitors measure zone concentrations in the atmosphere. If the text were discussing the control of ozone, then it would be accurate to discuss controlling VOCs/ROGs as well as NO_x, since ozone is a secondary pollutant that forms from photochemical processes. E41-30
  - Regarding designations, we recommend including revisions in the Final FR/EA to reflect the following:
    - Areas meeting the NAAQS are designated as "attainment/unclassifiable." Areas without sufficient data to designate are "unclassifiable." Areas not meeting the NAAQS are "nonattainment";
    - No areas are initially designated as "attainment." An area listed as "attainment" in 40 CFR Part 81 is an area that was designated nonattainment, then was re-designated back to attainment with an approved maintenance plan (State Implementation Plan). While these areas are referred to as "maintenance" areas, that is a shortcut as the Clean Air Act does not contain a "maintenance" designation; E41-31
    - Designations do not take in to account whether areas "… have always met…" the NAAQS. Designations are only based on the current applicable NAAQS;
    - When air quality improves, the measured levels are below the NAAQS, rather than "improving above NAAQS";
    - Please note that the reason the area is no longer considered "maintenance" for CO is that the 20-year maintenance period required by the CAA after being re-designated to attainment concluded;
    - Table 4-10 indicates that the area concluded the 1-hour ozone maintenance period in 2016. Technically that this is not accurate, as the 1-hour ozone NAAQS was revoked over a decade ago. The way the EPA implemented the new ozone NAAQS, areas that had been re-designated back to attainment for the 1-hour standard prior to revocation were simply known by their designation for the newer 8-hour standard. For the project area that designation was "attainment/unclassifiable";
    - We recommend including in the Final FR/EA an explanation as to why the EPA models such as MOVES were not used for certain offroad equipment. The Draft FR/EA indicates that two California models were used to assess diesel emissions from all involved equipment. It is not clear whether these models were used because that was what was used in the Puget Sound Maritime emissions inventory in 2018; and E41-32
    - Please also note that both VOCs/ROGs and NO_x are ozone precursors. E41-33

- Section 4.8.1, No-Action:
  - We recommend that the Final FR/EA include additional clarifying information on whether the newer, deeper draft vessels use cleaner engines or whether the argument is that a decreased number of vessels would be needed to carry the same volume of cargo, and that this would lead to a reduction in emissions. We recommend this section include support for these claims of potential future disbenefits – address whether the disbenefit is due entirely to idling. E41-34
- Section 4.8.2, Blair Waterway to -58 MLLW:
  - The first sentence on p. 83 is correct, but it is not clear what that has to do with the rest of the paragraph.
  - Regarding the discussion on general conformity, we recommend the following corrections:
    - The citation should be 40 CFR 93.153; E41-35
    - The general conformity cutoffs are in tons i.e., short tons of 2000 lbs/ton. The Draft FR/EA uses metric tons, which would mean there are 2204 lbs/ton. According to that, this project triggers a general conformity analysis due to being above the NO_x tones per year threshold. Please verify the information and if true, discuss plans to address the conformity analysis for this project; and
    - Because the project area remains in the 20-year maintenance period for $PM_{2.5}$, we recommend that the Final FR/EA explain why the general conformity is being discussed.
  - Page 84: We recommend that the statement that "Operation of the dredge and associated support vessels would emit GHGs, primarily carbon monoxide and nitrous oxides from burning fossil fuels" be corrected to reflect the following: E41-36
    - GHGs are emitted as a result of combustion of diesel; and
    - The criteria pollutants CO and NO_x are also emitted.
  - The conclusion that the de minimis threshold is not exceeded is incorrect. Please refer to Table 2 in 40 CFR 93.153 under "$PM_{2.5}$ Maintenance areas". E41-37
  - We recommend additional clarifying information in the final paragraph of section 4.8.2 because what is argued is unclear for the following reasons:
    - The number of vessels would decrease. There is no discussion about the emissions from newer vessels, and how they compare with older vessels. E41-38
    - Finally, please focus this discussion on criteria pollutants. Section 4.9 is for GHGs but the two topics appear to be conflated here.
- Section 4.8.3, Alternative 2a:
  - We note that information in this section appears to have nothing to do with air quality and conflates GHG emissions with criteria pollutant emissions. We recommend that the section of the Final FR/EA be revised. E41-39

- Section 4.8.4, alternative 2b:
  - See comments to section 4.8.2 above as the same errors were made here.
  - As mentioned above, the discussion on general conformity also triggers general conformity assessment.
- Section 4.8.5, Cumulative effects:
  - We recommend that additional data be included to support the conclusions made. For example, we note that:
    - It is unclear that fewer vessels correlate with fewer emissions;
    - Results for criteria pollutants need to be discussed here;
    - It is unclear why 14 years is used for the long-term end date; and
    - There is no discussion made about the projected freight increases, and how those projected increases will impact the number of vessels calling on the terminal.

E41-40

E41-41

6.40 Response to Comment Letter E41

E41-1: The Corps plans to coordinate with the US EPA and Washington Department of Ecology as the study progresses in order to ensure compatibility with the various Federal and State cleanup activities occurring in and around Blair Waterway. Based on coordination with EPA during the feasibility study process, EPA expects low levels of contamination within Blair Waterway to be manageable through the use of standard best management practices associated with navigation dredging of unsuitable material. Outreach and coordination comittments are included in Sections 5.9.3 (PED Activities) and 5.9.5 (Environmental Commitments and BMPs) of the IFR/EA.

E41-2: The Corps has updated the CWA compliance status in Section 6.3 of the IFR/EA. The Corps will seek a Section 401 Water Quality Certification (WQC) from the Department of Ecology (Ecology), and any other appropriate Certifying Authority under CWA 401 (such as the Puyallup Tribe), and will comply with conditions in a 401 WQC that are consistent with the CWA and its implementing regulations. The Corps will continue to coordinate with Ecology as the study progresses in order to ensure compliance with the CWA and Coastal Zone Management Act, and discuss appropriate BMPs to minimize impacts to water quality. The Corps is addressing the placement of dredge and fill material in Saltchuk as jurisdictional activity under Section 404 of the Clean Water Act, not Section 402. The Corps will confirm the approach for CWA compliance during further design and analysis in PED based on final design information. The Corps will continue to work with Ecology, affected tribes, and natural resource agencies to avoid and minimize impacts to water resources. Outreach and coordination comittments are included in Sections 5.9.3 (PED Activities) and 5.9.5 (Environmental Commitments and BMPs) of the IFR/EA.

E41-3: The Corps reviewed the proposed action and air quality information. Due to project schedule changes, a general conformity analysis would not be triggered because regulatory thresholds of criteria air pollutants would not be reached. Therefore, air quality monitoring is not included as a proposed construction activity.

E41-4: The Corps updated the IFR/EA with the status of ESA consultations, which have been concluded. Coordination with NMFS, USFWS, and WDFW will continue through PED. Outreach and coordination comittments are included in Sections 5.9.3 (PED Activities) and 5.9.5 (Environmental Commitments and BMPs) of the IFR/EA.

E41-5: A monitoring and adaptive management plan has been prepared according to Implementation Guidance for Section 1161 of the WRDA 2016, which amends Section 2039 of WRDA 2007 and is included in Appendix C (Supplemental Information).

E41-6: The Corps received a copy of the fifth Five Year Review in April 2020. As noted in the Five Year Review, EPA indicated: "the USACE also sampled the Blair Waterway in 2019 in anticipation of deepening the waterway. Dioxin/furans and hexachlorobutadiene were detected at concentrations greater than the [Dredge Material Management Program (DMMP)] requirements for open-water disposal within the nearshore areas of middle sections of the

waterway. If this material is not removed under this program, additional data would be needed to determine whether the contamination is site-related, and action is warranted due to newly identified contamination." In a subsequent conversation on April 29, 2020, with EPA's Justine Barton and Kristine Koch, clarification was provided from EPA to indicate the intent of this statement was to acknowledge the presence of material unsuitable for open-water disposal per DMMP guidelines. If the Corps did not proceed with the deepening of Blair Waterway, EPA would possibly independently pursue additional studies to characterize the material and determine a path forward for potential site action under CERCLA. Through the characterization conducted by the Corps in 2019, EPA acknowledges that there are no site specific Remedial Action Levels (RALs) for Blair Waterway; however, none of the sediment concentrations exceed the lowest RALs for other waterways in the Commencement Bay Superfund Site. In an evaluation of those same sediment results collected by the Corps in 2019, only a single sample had an exceedance of the hexachlorobutadiene Sediment Cleanup Level established for the sediment operable unit in the Commencement Bay Superfund Site.

E41-7: Physical monitoring of the disposal site (multi-beam bathymetric survey and SPI monitoring) has been incorporated into project costs at a rate of once every 500,000 CY or at the end of each dredged season, in addition to baseline monitoring.

Added information to the IFR/EA regarding potential for adding institutional controls if material migrates off-site.

E41-8: As the local sponsor for the Tacoma Harbor project, the Port of Tacoma would pay the tipping fee for disposal of material at the Commencement Bay open-water disposal site.

E41-9: Text was revised to accurately define the footprint of the CERCLA site as well as the description of this portion of the Sediment OU being delisted.

There are no site specific Remedial Action Levels (RALs) for Blair Waterway; however, none of the sediment concentrations from the Corps 2019 sampling effort exceed the lowest RALs for other waterways in the Commencement Bay Superfund Site. In an evaluation of those same sediment results collected by the Corps in 2019, only a single sample had an exceedance of the hexachlorobutadiene Sediment Cleanup Level established for the sediment operable unit in the Commencement Bay Superfund Site.

Additional text was added to discuss all sites with or needing CERCLA actions and Institutional Controls.

The text was revised to state subsurface waste in the Sitcum waterway requires ICs.

E41-10: The DMMP (2009) reauthorization of Commencement Bay Supplemental Environmental Impact Statement is included in references (IFR/EA) and referenced in sections 4.1.2 and 4.7.2.

E41-11: Thank you for your support of the use of Saltchuk for the beneficial use of dredged material. As you note, the use of the Saltchuk site or any other beneficial use site requires extensive environmental coordination and consultation and is limited to the beneficial use of dredged material. The Corps formulates and evaluates alternatives and makes plan recommendations for Corps approval and subsequent congressional authorization through the feasibility process. This is documented in the IFR/EA. Comments and feedback the Corps received through study scoping, agency meetings, and the public review and comment process did not identify other potential beneficial use sites for evaluation during feasibility. As a result, the Corps does not intend to evaluate additional potential beneficial use sites.

E41-12: The Corps updated the IFR/EA with additional clarification about current assumptions and approaches regarding slope stabilization measures that may be pursued based upon subsequent analysis and design in PEDs. Figure 3-4 now contains the suggested language.

E41-13: Additional slope stability analysis will take place in PED.

E41-14: An additional figure has been added as requested.

E41-15: Terminology has been revised, as suggested.

E41-16: An updated figure has been added as requested.

E41-17: Additional slope stability analysis will take place in PED.

E41-18: Text was updated in the report to describe the individual, institutional controls, or anticipated institutional controls consisting of environmental covenants and conservation easements, as identified in EPA's Five Year Review. The Corps anticipates that the deepening will not interfere with these institutional controls.

E41-19: The Corps is aware of the eelgrass bed in the Olympic View Resource Area between the Thea Foss and Middle waterways. No eelgrass beds have been documented at the mouth of the Blair Waterway.

E41-20: The Corps updated the IFR/EA with additional information on why the slope stabilization of the berths, which is the responsibility of the Port of Tacoma, is not part of the Federal action.

E41-21: The Corps added a more comprehensive figure of restoration and mitigation sites in the project area to Appendix C for reference in the eulachon discussion. Potential effects to these sites are described in Section 4.12, 4.13, and 4.14of the IFR/EA.

E41-22: The project description has been updated to include the use of a small skiff or boat for water quality monitoring.

E41-23: The IFR/EA was revised to clarify the difference between slope stabilization and berth strengthening. The potential for slope strengthening is addressed in the ESA Consultation documentation.

E41-24: The Corps reviewed EPA's Five Year Review to ensure the information provided is consistent with EPA's documentation. The Corps is aware of the recent fish collection conducted by WDFW. If chemical results from this collection effort become available prior to finalization of the Feasibility Report and PED, those results and any subsequent changes to the fish advisories will be included. Per EPA's fifth Five Year Review, English Sole were collected in June of 2019 to evaluate potential reductions to contaminant body burden as a result of completed Superfund remedial actions (EPA 2020). This additional tissue data is anticipated to be taken into consideration as part of the existing CERCLA response action, outside of this proposed project. Currently, the fish advisory for this portion of Commencement Bay suggests no consumption of rockfish and only two meals per month for English Sole (DOH 2022).

E41-25: The IFR/EA states that beneficial use of dredged material reduces the amount of material going to the DMMP Commencement Bay open-water disposal site. The Corps will add the consideration that the cost of monitoring and management of the open-water disposal site will also be reduced.

E41-26: The Corps updated the IFR/EA with assumptions for slope stabilization along the navigation channel.

E41-27: As the local sponsor for the Tacoma Harbor Deepening project, the Port of Tacoma would pay the DNR tipping fee for disposal of material at the Commencement Bay open-water disposal site.

E41-28: The Corps will coordinate with US EPA staff directly, both the CERCLA and RCRA programs. Coordination will help ensure compatibility of the deepening project with any Federal and State cleanup action in and around Blair Waterway. PED activities are described in IFR/EA main report Section 5.9.3.

E41-29: Editorial revisions made as suggested.

E41-30: Updates made to the text regarding ozone made as suggested.

E41-31: Updates made to the text regarding NAAQS made as suggested.

E41-32: The MOVES model was not used because the SCAQMD and SMAQMD models do not require specialized software and use the EPA data on emissions rates to generate emissions estimates.

E41-33: Updates to made to the text regarding ozone precursors made as suggested.

E41-34: The Corps has updated Section 4.8.1 to clarify the link between emissions reductions and greater vessel efficiency.

E41-35: Updates to the text regarding the citation, use of short tons, and context for general conformity discussion have been made as suggested. The Corps reviewed the proposed action and air quality information. Due to project schedule changes, a general conformity analysis would not be triggered because regulatory thresholds (in short tons) of criteria air pollutants would not be reached.

E41-36: Updates made to the text regarding GHG sources made as suggested.

E41-37: The Corps reviewed the proposed action and air quality information. Due to project schedule changes, the *de minimis* threshold would not be exceeded according to Table 2 in 40 CFR 93.153.

E41-38: Information on emissions from newer vessels have been added, and discussion on GHGs has been removed.

E41-39: Updates to Section 4.8.3 to focus on air quality rather than a discussion of GHGs have been made.

E41-40: The suggested edits, clarifications, and updates for Section 4.8.2 have been made to Section 4.8.4 in the IFR/EA.

E41-41: The Corps has clarified the link between fewer vessels, efficient vessel use, projected freight use, and fewer emissions and criteria pollutants in the IFR/EA. The 14 year timeline (i.e., in 2035) is when the project benefit of reducing the total number of vessels using Blair Waterway is fully realized.

PUGET SOUND PILOTS
Protecting Puget Sound Since 1935

Jessica G. Winkler
Chief of Civil Works Branch, Seattle District
Via email to jessica.g.winkler@usace.army.mil

Kymberly C. Anderson
Chief of Operations Program Management Branch, Seattle District
Via email to kymberly.c.anderson@usace.army.mil

U.S. Army Corps of Engineers
4735 E. Marginal Way S., Building 1202
Seattle, WA 98134-2385

RE: **Blair Waterway Deepening Project (Tacoma, WA)**
Comments Regarding Disposal Site Options

September 18, 2019

Dear Chief Winkler and Chief Anderson,

Puget Sound Pilots (PSP) has been involved in email correspondence with Daniel E. Bernal, P.E., Coastal Engineer regarding the study area for the Blair Waterway Deepening Project in the Port of Tacoma. We appreciate his informal outreach to us and would like to formalize our comments in writing to you.

As you are aware, PSP is responsible for safe navigation of vessels within the states regulated inland waterways. Our mission is to assure against the of loss of lives, loss of or damage to vessels and landside infrastructure, and to protect the marine environment. To achieve this, we are compelled to exhaust all efforts to ensure impediments to safe navigation in and out of our ports and waterways are reduced or eliminated. After careful review of the two options shown in the Study Area (attached), **the Commencement Bay Open Water Disposal Site is the preferred and only option Puget Sound Pilots support**.

We are unable to support the Saltchuk Disposal Site option as it increases the impediments to safe navigation including, but not limited to, the following:

1) The proposed fill site creates shoaling adjacent to the entrance of the Hylebos waterway constricting the entrance and increasing the risk of grounding for the ship. It additionally increases the possibility of grounding for the tugs that are assisting the ship, in this area where the tugs are being made up. Extending the shoal out constricts the area for vessels to maneuver in preparation of lining up for navigating the waterway.

E42-1

PUGET SOUND PILOTS
Protecting Puget Sound Since 1935

2) The Federally recognized anchorage directly offshore from the proposed fill site is effectively reduced in size by creating shallow water and therefore pushing the ships out farther into the bay and into deeper water, effectively increasing the possibility of dragging anchor due to less scope of deployed anchor chain in deeper water, with less room to drag prior to grounding on site fill.

3) The possibility of the fill site material shifting in the current and blocking or reducing the entrance to the Hylebos waterway is also a concern.

We hope you will take this information into serious consideration and facilitate continued improvements to safe navigation in our harbors and waterways. Please do not hesitate to contact me should you require further information or elaboration. Thank you.

Respectfully,

Capt. Eric vonBrandenfels
President

Puget Sound Pilots
101 Stewart St, Suite 900
Seattle, WA 98101
Office: 206-518-5444
Cell: 206-595-8209

CC: Daniel E. Bernal, Coastal Engineer, US Army Corps of Engineers, Seattle District
John Moriarty, Chief, Waterways Management Branch, USCG District 13
Capt. Linda A. Sturgis, Sector Commander (Capt of the Port), USCG Sector Puget Sound

E42-2

E42-3

6.40.1 Other public comment materials received and held by the Corps office, but not included here:

Study area map included in the draft IFR/EA.

6.40.2 Response to Comment Letter E42

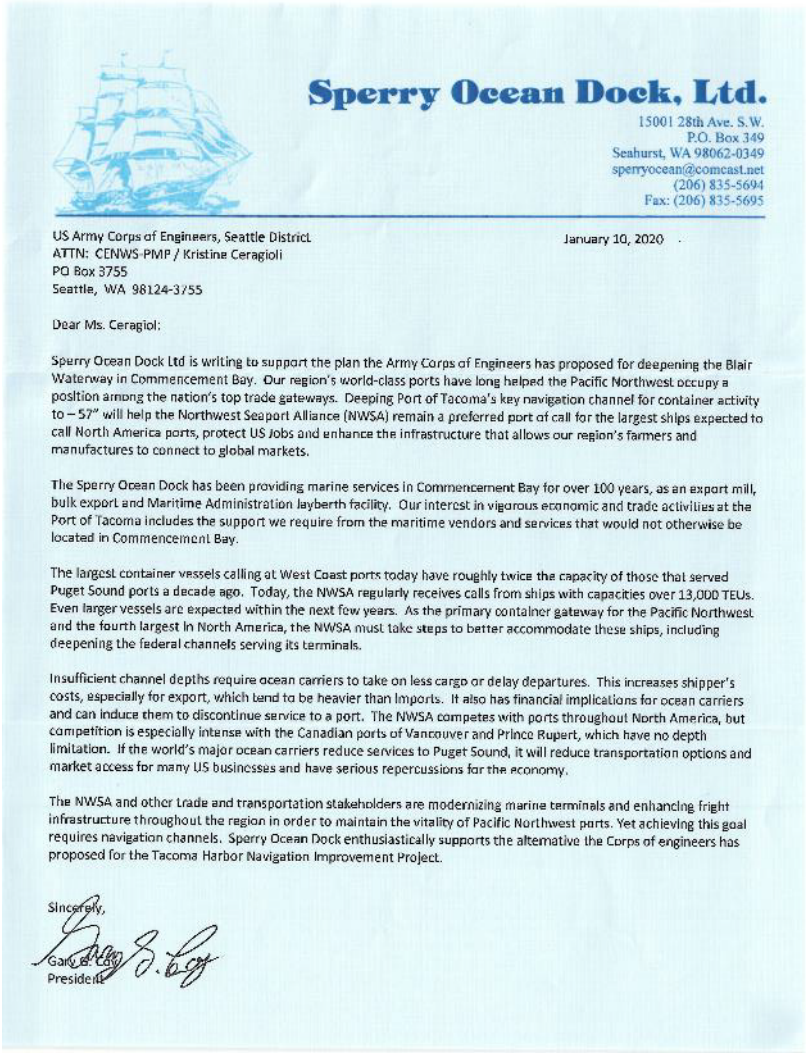
E42-1: Hylebos transits will be assessed in the detailed ship simulation study to be performed in the detailed design stage (PED). Morphology changes due to Saltchuk placement will be built into the bathymetry to ensure an accurate representation of the bathymetric conditions to develop at the site.

E42-2: After looking at current navigation charts, we acknowledge the concern regarding the anchorage point. At this point, it is still too early to determine if Saltchuk will affect moored vessels, and the refined analysis to be performed in PED will help inform this. A modified bathymetry containing the placement at Saltchuk will be modeled to determine the impacts the Saltchuk site will have on the area.

E42-3: Ongoing modeling efforts will continue into PED to assess the morphology in the Saltchuk site over time. In order to be implemented, the Saltchuck site must be designed to avoid impacts to navigation.

7 Individual Mailed Comments and Responses

7.1 Comment Letter M1—Sperry Ocean Dock



Sperry Ocean Dock, Ltd.

15001 28th Ave. S.W.
P.O. Box 349
Seahurst, WA 98062-0349
sperryocean@comcast.net
(206) 835-5694
Fax: (206) 835-5695

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle, WA 98124-3755

January 10, 2020

Dear Ms. Ceragiol:

Sperry Ocean Dock Ltd is writing to support the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Commencement Bay. Our region's world-class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deeping Port of Tacoma's key navigation channel for container activity to – 57" will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North America ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufactures to connect to global markets.

The Sperry Ocean Dock has been providing marine services in Commencement Bay for over 100 years, as an export mill, bulk export and Maritime Administration layberth facility. Our interest in vigorous economic and trade activities at the Port of Tacoma includes the support we require from the maritime vendors and services that would not otherwise be located in Commencement Bay.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today, the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shipper's costs, especially for export, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue service to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which have no depth limitation. If the world's major ocean carriers reduce services to Puget Sound, it will reduce transportation options and market access for many US businesses and have serious repercussions for the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing fright infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal requires navigation channels. Sperry Ocean Dock enthusiastically supports the alternative the Corps of engineers has proposed for the Tacoma Harbor Navigation Improvement Project.

Sincerely,

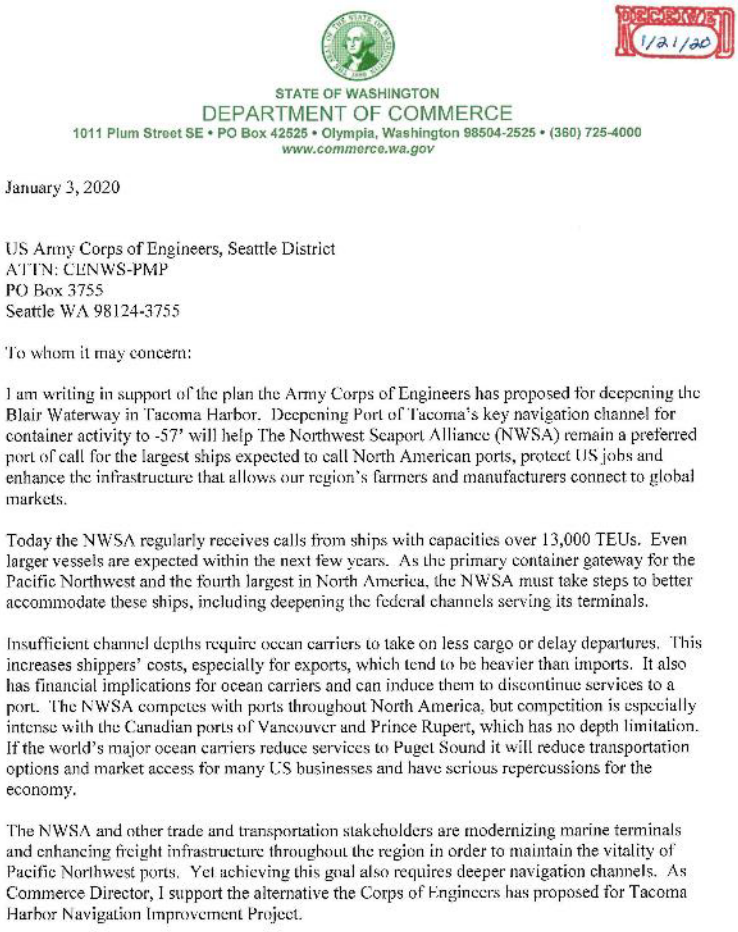
Gary B. Loy
President

M1-1

7.1.1 Response to Comment Letter M1

M1-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.2 Comment Letter M2—Washington Department of Commerce



STATE OF WASHINGTON
DEPARTMENT OF COMMERCE
1011 Plum Street SE • PO Box 42525 • Olympia, Washington 98504-2525 • (360) 725-4000
www.commerce.wa.gov

RECEIVED 1/21/20

January 3, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP
PO Box 3755
Seattle WA 98124-3755

To whom it may concern:

I am writing in support of the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help The Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound it will reduce transportation options and market access for many US businesses and have serious repercussions for the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. As Commerce Director, I support the alternative the Corps of Engineers has proposed for Tacoma Harbor Navigation Improvement Project.

Sincerely,

Lisa J. Brown

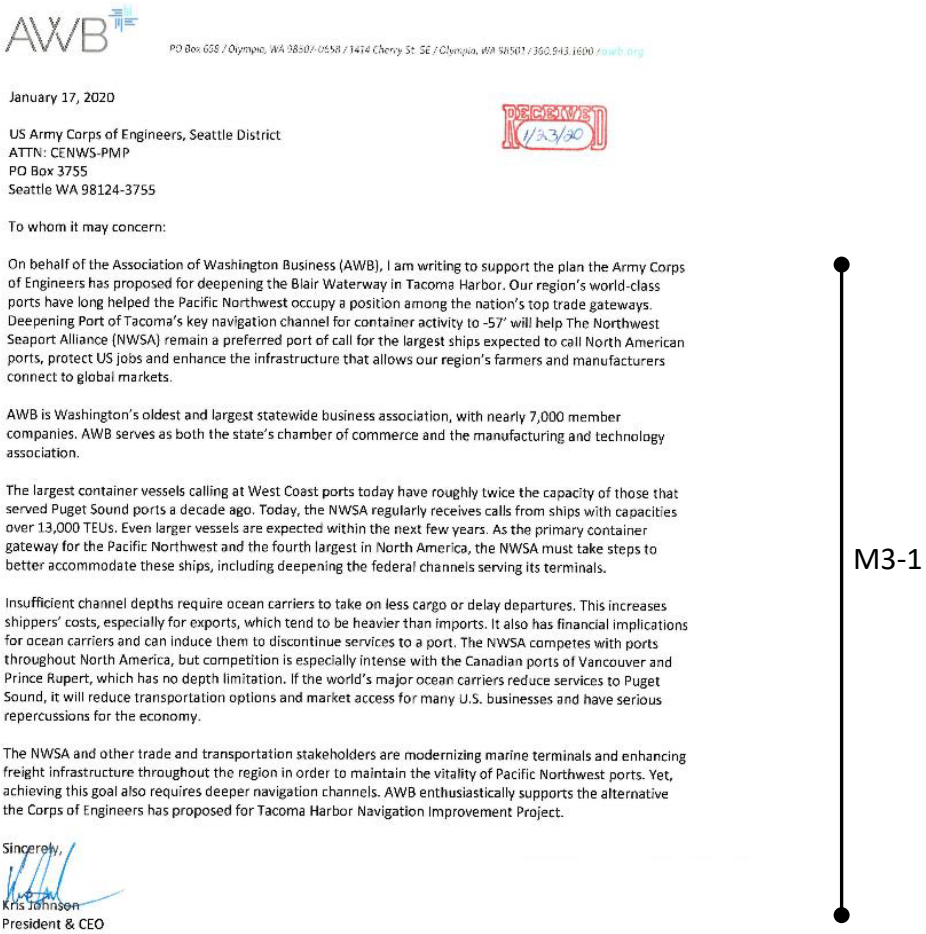
Lisa Brown
Director

M2-1

7.2.1 Response to Comment Letter M2

M2-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.3 Comment Letter M3—Association of Washington Business



AWB

PO Box 658 / Olympia, WA 98507-0658 / 1414 Cherry St. SE / Olympia, WA 98501 / 360.943.1600 / awb.org

January 17, 2020

RECEIVED 1/23/20

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP
PO Box 3755
Seattle WA 98124-3755

To whom it may concern:

On behalf of the Association of Washington Business (AWB), I am writing to support the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world-class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help The Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

AWB is Washington's oldest and largest statewide business association, with nearly 7,000 member companies. AWB serves as both the state's chamber of commerce and the manufacturing and technology association.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today, the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound, it will reduce transportation options and market access for many U.S. businesses and have serious repercussions for the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet, achieving this goal also requires deeper navigation channels. AWB enthusiastically supports the alternative the Corps of Engineers has proposed for Tacoma Harbor Navigation Improvement Project.

Sincerely,

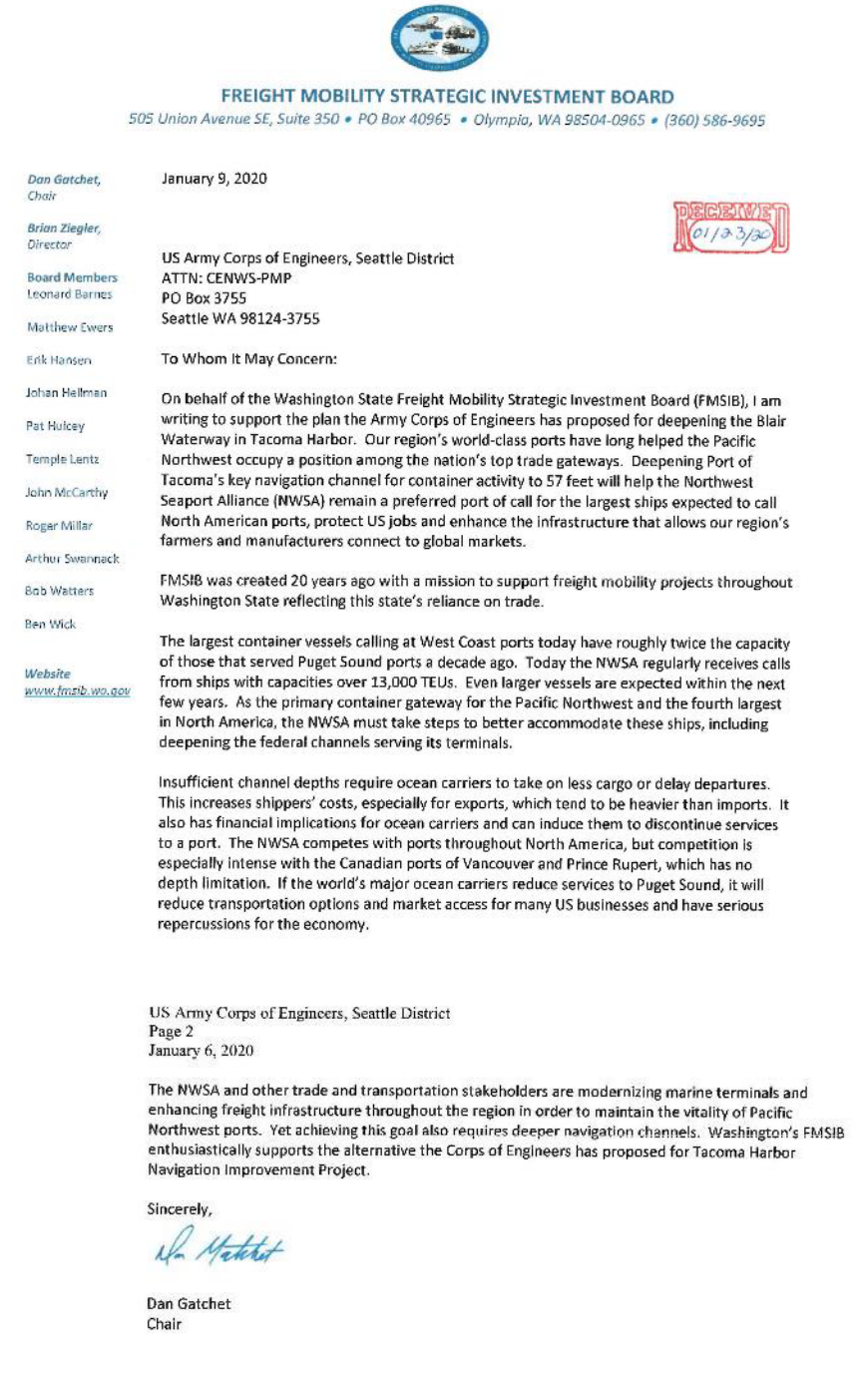
Kris Johnson
President & CEO

M3-1

7.3.1 Response to Comment Letter M3

M3-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.4 Comment Letter M4—Freight Mobility Strategic Investment Board



FREIGHT MOBILITY STRATEGIC INVESTMENT BOARD

505 Union Avenue SE, Suite 350 • PO Box 40965 • Olympia, WA 98504-0965 • (360) 586-9695

Dan Gatchet, Chair

Brian Ziegler, Director

Board Members
Leonard Barnes
Matthew Ewers
Erik Hansen
Johan Hellman
Pat Hulcey
Temple Lentz
John McCarthy
Roger Millar
Arthur Swannack
Bob Watters
Ben Wick

Website
www.fmsib.wa.gov

January 9, 2020

RECEIVED
01/13/20

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP
PO Box 3755
Seattle WA 98124-3755

To Whom It May Concern:

On behalf of the Washington State Freight Mobility Strategic Investment Board (FMSIB), I am writing to support the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world-class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to 57 feet will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

FMSIB was created 20 years ago with a mission to support freight mobility projects throughout Washington State reflecting this state's reliance on trade.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound, it will reduce transportation options and market access for many US businesses and have serious repercussions for the economy.

M4-1

US Army Corps of Engineers, Seattle District
Page 2
January 6, 2020

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. Washington's FMSIB enthusiastically supports the alternative the Corps of Engineers has proposed for Tacoma Harbor Navigation Improvement Project.

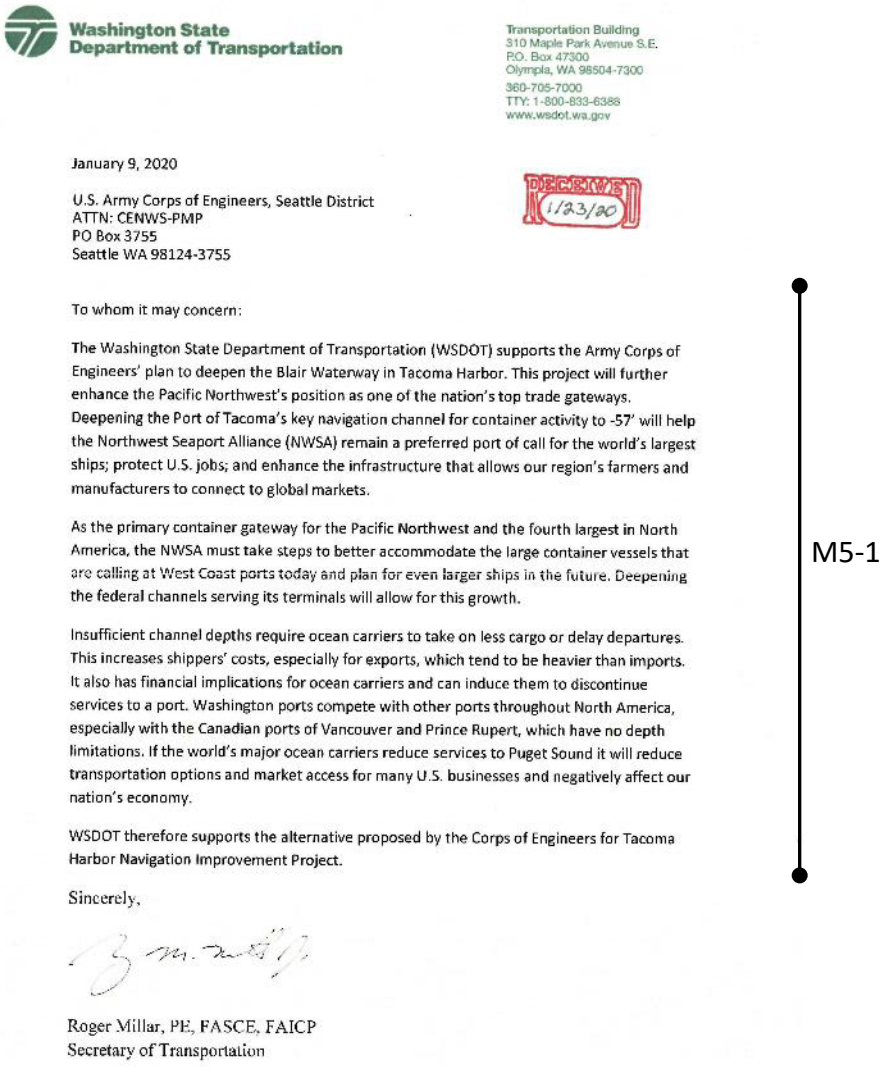
Sincerely,

Dan Gatchet
Chair

7.4.1 Response to Comment Letter M4

M4-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.5 Comment Letter M5—Washington Department of Transportation



Washington State Department of Transportation

Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300
360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

January 9, 2020

RECEIVED 1/23/20

U.S. Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP
PO Box 3755
Seattle WA 98124-3755

To whom it may concern:

The Washington State Department of Transportation (WSDOT) supports the Army Corps of Engineers' plan to deepen the Blair Waterway in Tacoma Harbor. This project will further enhance the Pacific Northwest's position as one of the nation's top trade gateways. Deepening the Port of Tacoma's key navigation channel for container activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the world's largest ships; protect U.S. jobs; and enhance the infrastructure that allows our region's farmers and manufacturers to connect to global markets.

As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate the large container vessels that are calling at West Coast ports today and plan for even larger ships in the future. Deepening the federal channels serving its terminals will allow for this growth.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. Washington ports compete with other ports throughout North America, especially with the Canadian ports of Vancouver and Prince Rupert, which have no depth limitations. If the world's major ocean carriers reduce services to Puget Sound it will reduce transportation options and market access for many U.S. businesses and negatively affect our nation's economy.

WSDOT therefore supports the alternative proposed by the Corps of Engineers for Tacoma Harbor Navigation Improvement Project.

Sincerely,

Roger Millar, PE, FASCE, FAICP
Secretary of Transportation

M5-1

7.5.1 Response to Comment Letter M5

M5-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.6 Comment Letter M6—Foss Waterway Development Authority

FOSS WATERWAY DEVELOPMENT AUTHORITY
535 Dock Street, Suite 204 – Tacoma, WA 98402-4630
Phone: (253) 597-8122 www.theafoss.com

RECEIVED FEB 03 2020

January 24, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle, WA 98124-3755

RE: Tacoma Harbor, WA Navigation Improvement Project

Dear Ms. Ceragioli:

On behalf of the Board of Directors of the Foss Waterway Development Authority, we would like to add our support for the proposed deepening of the Blair Waterway in Tacoma Harbor. The Northwest Seaport Alliance continues to be an important economic engine for the Pacific Northwest. The Port of Tacoma (Port) as a member of that alliance needs to be able to provide continued services to the evolving maritime industry through this upgrade. The proposed changes to the Blair Waterway will also enable the Port to continue to be an important employer for the region for years to come.

As ship designs continue to advance, it will be reassuring to know that the maritime industry is be able to continue utilizing a modified Blair Waterway to convey freight. Deeping of the Blair Waterway will enable the Northwest Seaport Alliance to keep pace with changing maritime technologies. It will enable the Port of Tacoma in particular, to continue as global destination for shipping.

Thank you for your consideration.

Sincerely,

Norman Gollub
Executive Director

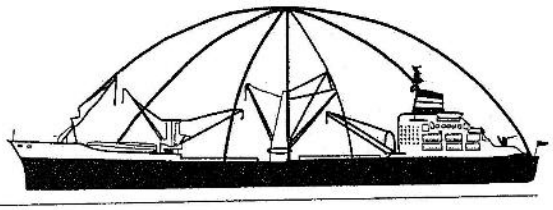
M6-1

7.6.1 Response to Comment Letter M6

M6-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.7 Comment Letter M7—International Longshoremen's and Warehousemen's Union

International Longshoremen's and Warehousemen's Union
LOCAL 23
(253) 383-2468
1306 ALEXANDER AVE. E.
FIFE, WASHINGTON 98424



RECEIVED FEB 03 2020

January 17, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle WA 98124-3755

Dear Ms. Ceragioli:

On behalf of the International Longshore and Warehouse Union Local 23, I am writing to support the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world-class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

ILWU Local 23 is a labor union that represents over 1700 longshoremen/women in the Port of Tacoma. The deepening of the Blair Waterway is vital not only to the members that we represent, but also to the local/state/and regional economy as a whole.

M1-1

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound it will reduce transportation options and market access for many US businesses and have serious repercussions for the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. ILWU Local 23 enthusiastically supports the alternative the Corps of Engineers has proposed for Tacoma Harbor Navigation Improvement Project.

M1-1 cont'd

Sincerely,

Jared Faker
President, ILWU Local 23

7.7.1 Response to Comment Letter M7

M7-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.8 Comment Letter M8—Washington Apple Commission

January 21, 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP / Kristine Ceragioli
PO Box 3755
Seattle WA 98124-3755

RECEIVED FEB 0 3 2020

Dear Ms. Ceragioli:

On behalf of the Washington Apple Commission, I am writing to support the plan the US Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help the Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

The Washington Apple Commission is a promotional organization dedicated to increasing consumer demand through marketing activities in international markets. Washington state represents 95% of all U.S. apple exports and one-third of the Washington fresh apple crop is exported to over 60 markets worldwide each year. The Washington Apple Commission has 12 promotional programs in major export markets with in-country representatives.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases costs, especially for exports, which tend to be heavier than imports. The Washington apple industry faces intense competition in overseas markets. In this business environment, it is critical that our industry is able to access efficient, reliable supply chains. We also recognize that failing to provide adequate channel depths can have financial implications for ocean carriers and induce them to discontinue services to a port. The NWSA has lost cargo to the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound it will have serious repercussions for our industry and the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. The Washington Apple Commission enthusiastically supports the alternative the Corps of Engineers has proposed for the Tacoma Harbor Navigation Improvement Project.

Sincerely,

Todd Fryhover

M8-1

7.8.1 Response to Comment Letter M8

M8-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

7.9 Comment Letter M9—Laurie Jinkins

STATE REPRESENTATIVE
27th LEGISLATIVE DISTRICT
LAURIE JINKINS

State of Washington House of Representatives

SPEAKER OF THE HOUSE

February 6, 2020

RECEIVED FEB 0 6 2020

US Army Corps of Engineers, Seattle District
ATTN: CENWS-PMP
PO Box 3755
Seattle WA 98124-3755

To whom it may concern:

I am writing to support the plan the Army Corps of Engineers has proposed for deepening the Blair Waterway in Tacoma Harbor. Our region's world-class ports have long helped the Pacific Northwest occupy a position among the nation's top trade gateways. Deepening Port of Tacoma's key navigation channel for container activity to -57' will help The Northwest Seaport Alliance (NWSA) remain a preferred port of call for the largest ships expected to call North American ports, protect US jobs and enhance the infrastructure that allows our region's farmers and manufacturers connect to global markets.

The largest container vessels calling at West Coast ports today have roughly twice the capacity of those that served Puget Sound ports a decade ago. Today the NWSA regularly receives calls from ships with capacities over 13,000 TEUs. Even larger vessels are expected within the next few years. As the primary container gateway for the Pacific Northwest and the fourth largest in North America, the NWSA must take steps to better accommodate these ships, including deepening the federal channels serving its terminals.

Insufficient channel depths require ocean carriers to take on less cargo or delay departures. This increases shippers' costs, especially for exports, which tend to be heavier than imports. It also has financial implications for ocean carriers and can induce them to discontinue services to a port. The NWSA competes with ports throughout North America, but competition is especially intense with the Canadian ports of Vancouver and Prince Rupert, which has no depth limitation. If the world's major ocean carriers reduce services to Puget Sound it will reduce transportation options and market access for many US businesses and have serious repercussions for the economy.

The NWSA and other trade and transportation stakeholders are modernizing marine terminals and enhancing freight infrastructure throughout the region in order to maintain the vitality of Pacific Northwest ports. Yet achieving this goal also requires deeper navigation channels. I enthusiastically supports the alternative the Corps of Engineers has proposed for Tacoma Harbor Navigation Improvement Project.

M9-1

Sincerely,

Laurie Jinkins
Speaker

LEGISLATIVE OFFICE: PO BOX 40600 • OLYMPIA, WA 98504-0600 • 360-786-7930
DISTRICT OFFICE: 1901 JEFFERSON ST, SUITE 103 • TACOMA, WA 98402 • 253-593-2033
E-MAIL: Laurie.Jinkins@leg.wa.gov
TOLL-FREE LEGISLATIVE HOTLINE: 1-800-562-6000 • TTY: 1-800-833-6388 • www.leg.wa.gov

7.9.1 Response to Comment Letter M9

M9-1: Thank you for your comment and support of the Tacoma Harbor Navigation Improvement Project.

References

Newell, R.C., L.J. Seiderer, and D.R. Hitchcock. 1998. The Impact of Dredging Works in Coastal Waters: A Review of the Sensitivity to Disturbance and Subsequent Recovery of Biological Resources on the Sea Bed. Oceanography and Marine Biology: an Annual Review. 1998(36): 127-178.