



May 3, 2011

To: Ari Steinberg – SSA Marine
Kristie Dunkin – AMEC Earth & Environmental

From: Brian Williams – WDFW
Mark O'Toole – WDFW

**Subject: WDFW Comments – Gateway Pacific Terminal Project Information
Document dated February 28, 2011, Cherry Point, Whatcom County, WRIA
1.9000**

Dear Mr. Steinberg,

WDFW has reviewed the Project Information Document (PID) dated February 28, 2011 and offers the following comments for your consideration. WDFW's comments on the above referenced document should be consider preliminary until Pacific International Terminals Inc. (PIT) formally initiates the formal permitting process for a Hydraulic Project Approval (HPA) by submitting a signed JARPA to WDFW. WDFW anticipates providing additional comments as the formal HPA permitting process for this project is initiated and progresses.

WDFW has elected to delay commenting on the Wetland Determination and Delineation dated February 22, 2008 and the Preliminary Conceptual Compensatory Mitigation Plan dated February 28, 2011 until WDFW has verified that the stream and ditch classifications presented in these documents are consistent with WDFW's stream classification relative to Hydraulic Code.

PROJECT INFORMATION DOCUMENT (PID)

CHAPTER 2 - PROJECT PERMITTING

Page 2-3

PID notes that the conditions added to the 1997 SSD permit by the Settlement Agreement are shown in Appendix A. What Appendix A? The PID does not include appendices. The 1997 SSD posted on the MAPTeam website does not include appendices. The Settlement Agreement includes 12 appendices (A through L) of which Appendix A is only pertinent to wetlands and does not include all of the conditions required by the Settlement Agreement. Please clarify this issue.

CHAPTER 4 - THE PROPOSED ACTION

4.4 PLANNED TERMINAL CONSTRUCTION STAGING

Page 4-47

The construction staging and operational phasing does not clearly identify the order in which the wharf berths will become operational. Please clarify this issue.

Page 4-47

The PID discussion regarding construction phasing and operational staging is confusing and needs to be clarified in that construction actions are included in both the construction phases and the operational staging. WDFW recommends that all construction actions be included in the discussion about construction phasing and not mixed up with the operational staging.

4.6 CONSTRUCTION

Page 4-65

PID notes that “no in-water work would occur below the level of mean higher high water (MHHW) between February 16 and July 14 of any year.” It is WDFW understands that USFWS imposes a work window closure from February 15 through July 15 for protection of bull trout. As this is different from your stated February 16 through July 14 closure, you need to verify this closure with USFWS.

Page 4-65

PID notes that “no in-water work would occur below the level of mean higher high water (MHHW) between February 16 and July 14 of any year.” It is important to note that MHHW is a tidal reference that is used to define the upper boundary of the Army Corps jurisdiction in marine waters but that Whatcom County’s Shoreline Program and WDFW’s Hydraulic Code are administered based on the Ordinary High Water Line. The Ordinary High Water Line is defined for WDFW by WAC 220-110-020 (69) which states “Ordinary high water line" or "OHWL"

means the mark on the shores of all waters that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual and so long continued in ordinary years, as to mark upon the soil or vegetation a character distinct from that of the abutting upland, provided that in any area where the ordinary high water line cannot be found, the ordinary high water line adjoining saltwater shall be the line of mean higher high water, and the ordinary high water line adjoining freshwater shall be the elevation of the mean annual flood.” Typically OWH is approximately 1.5 vertical feet higher than MHHW in north Puget Sound.

CHAPTER 5 - ENVIRONMENTAL RESOURCES AND PROJECT EFFECTS

Page 5-1

There are a number of studies required by the Settlement Agreement that have not been completed and are not included in the Pending Studies and Reports Table 5-1. These include a Vessel Mooring Study and Herring Behavior studies. Please include all of the studies required in the Settlement Agreement into Table 5-1.

Page 5-1

Though Table 5-1 includes a “Marine Current and Tides” study, it is unclear whether this study includes a wave study for the site. Please clarify whether a wave study will be conducted for the site.

Page 5-1

It would be beneficial to also include a table that lists completed studies that will be used to assist with project design and assesses potential project impacts.

Page 5-1

In the Pending Studies and Reports Table 5-1, “Nearshore Macroalgae” should be changed to “Marine Vegetation”. WDFW will require that the marine vegetation survey for the project include eelgrass species as well as macro algae species.

Page 5-1

WDFW will require that the marine vegetation survey noted above extend beyond deepest extent of eelgrass and macro algae species which will likely extend deeper than the -30.0 depth (MLLW = 0.00) used in the PID to define the outer boundary of the nearshore community (page 5-30 PID).

5.2 UPLAND VEGETATION, WILDLIFE, AND HABITATS

Page 5-27

Though the PID notes that “bald eagle nesting sites would not be displaced by the proposed Terminal”, the PID does not specifically note whether bald eagle nests are present within and/or near the project site.

5.3 MARINE RESOURCES

Page 5-35

The macro algae and eelgrass survey required by the Settlement Agreement and noted in the PID will need to be conducted per WDFW’s revised 2008 Eelgrass/Macroalgae Habitat Interim Survey Guidelines ([Attachment 1](#)).

Page 5-39

The forage fish discussion should note the sand lance, surf smelt and herring are included in the category of fishes called forage fish.

Page 5-39

The forage fish discussion should note that surf smelt spawn has been documented in the Cherry Point vicinity and in proximity to the GPT site though spawn has not been documented at the GPT site. It should also note that sections of the shoreline at the GPT site supports substrates in the upper intertidal zone that have been identified in WDFW’s SalmonScape data base as potential smelt spawning habitat.

Page 5-39

The herring discussion needs to note that WDFW has identified the bathymetric contours in the immediate vicinity of the proposed wharf as a unique onshore migration corridor for pre spawning herring. This issue is addressed in detail in the Settlement Agreement and by documents generated over the past two years during Settlement Agreement re-negotiations.

Page 5-39

Per WDFW’s 2008 Washington State Herring Stock Status Report, the Cherry Point herring spawn from March 15 through June 30 and not April to mid June as noted in the PID.

Page 5-39

The PID statement that Figure 5.6 depicting offshore pre-spawner holding area is based on “reports from fisherman” is incorrect. Figure 5.6 is based on WDFW acoustic-trawl surveys conducted for herring stock assessment purposes. Neither of the two citations listed support this statement.

Page 5-39

The PID needs to clarify the difference between the “offshore pre-spawner herring holding area” and the “preferred nearshore herring migration corridor/schooling area”, which is the nearshore bathymetric trench area that encompasses the northwestern wing of the proposed GPT wharf

structure. In general, pre-spawner herring in the “offshore pre-spawner herring holding area” are generally stage 4 fish (ICES herring maturity scale), where as the pre-spawner herring found in the “preferred nearshore herring migration corridor/schooling area” are mostly stage 5 fish and the herring actively spawning in the intertidal and upper subtidal areas are stage 6 fish.

Page 5-39 PID states “most spawning occurs between 0 and 10 feet MLLW”. It should say - 10.0 feet (MLLW = 0.00).

Page 5-45

A detailed discussion of work window closures needs to be included in the “Effects of Construction on Marine Resources” section, i.e. juvenile salmon, herring, bull trout, ect.

Page 5-45

The “Effects of Construction on Marine Resources” section needs to address construction barge related impacts, i.e. grounding, shading, anchoring, noise, contaminant spills, ect.

Page 5-45

The “Effects of Construction on Marine Resources” section needs to address noise impacts associated with driving or proofing steel piles with an impact hammer.

Page 5-45

The “Effects of Construction on Marine Resources” section needs to address impacts associated with the operation of motorized equipment on the beach, i.e. access points to the beach, transportation corridors on the beach, construction material storage, ect.

Page 5-45

The “Effects of Construction on Marine Resources” section needs to address impacts associated with construction of the trestle and wharf super structure with fresh concrete.

Page 5-45

The “Marine Biological Communities” section needs to note that the steel piles will not only potentially impact 333 square feet of invertebrates in the nearshore but also marine vegetation.

Page 5-45

The potential impact footprint of the piling on marine vegetation in the nearshore is underestimated. The “Marine Biological Communities” section needs to address the halo effect that occurs around the piling from that the biological community colonizing the piling.

Page 5-45

Construction related alternations and impacts to the backshore and riparian vegetation at the site needs to be addressed in more detail.

Page 5-46

The statement that construction related noise will not affect forage fish needs to be substantiated. This statement dismisses noise related impacts from driving steel piling and from vessel traffic.

Page 5-47

The statement that “Surf smelt and sand lance may occur within the proposed project area, but do not spawn in the vicinity of the project area” is inaccurate. WDFW’s SalmonScape data base clearly illustrates that surf smelt spawn immediately to the north and south of the project site and as such are clearly in the vicinity of the project area.

Page 5-47

Herring pre spawn staging, on shore migration, spawning and spawn can be significantly impacted by construction related impacts. These risks need to be clearly identified and acknowledged. How these impacts will be avoided also needs to be identified and discussed. A discussion of work window closures as a protection measure is appropriate in this section.

Page 5-49

The discussion of the potential shade related effects of the proposed trestle on the macro algae community is inconsistent with the Settlement Agreement. The facts provided in the PID represent only the perspective of the consultant representing the interest of GPT at the time the shade study was conducted and ignores the facts and conclusions presented in the Settlement Agreement. Though the PID contends that the shade study conducted by Shapiro and Associates concluded that the proposed trestle will have minimal shade impacts on the macro algae community, in fact the Settlement Agreement notes in Section 2.2 and Appendix B that “The majority of the Shad Model Group has acknowledged that changes to the macro algae community as a result of altering the available light, coupled with non shade environment factors cannot be predicted with certainty.” Appendix B of the Settlement Agreement goes to great length to define the potential impacts to macro algae and to define a macro algae mitigation requirement.

Page 5-49

WDFW does not typically consider biological communities that attach to artificial substrates (i.e. piling, docks) of comparable value and function to biological communities displaced from natural substrates or habitats.

Page 5-50

The statement that “Surf smelt and sand lance may occur within the proposed project area, but do not spawn in the vicinity of the project area” needs to be clarified. WDFW’s SalmonScape data base clearly illustrates that surf smelt spawn immediately to the north and south of the project site and as such are clearly in the vicinity of the project area.

MARK OTOOLE RESPONES

Page 5-50

The PID concludes that the noise associated with vessel traffic is not anticipated to affect Cherry Point herring adversely. Based on the professional experience of WDFW staff working with Cherry Point herring from motorized vessels and the available literature, it is WDFW's contention that staging and pre spawning herring will be temporarily displaced by the noise of a passing vessel. This temporary displacement of pre spawner herring staging in what WDFW believes to be a preferred onshore migration corridor at the GPT site by vessel traffic noise could affect the onshore movement, distribution and spawning success of the Cherry Point herring.

Page 5-50

Regarding potential noise effects, PID correctly states "herring often spawn near the BP Cherry refinery pier". However, the PID needs to address the potential noise differences between offloading crude oil and coal or other dry bulk products.

Page 50

The PID incorrectly states that the bathymetric trench is located "along the southern boundary of the proposed GPT site". The bathymetric trench that WDFW has identified as a preferred onshore migration corridor for pre spawner herring is immediately northwest of the proposed trestle. WDFW's rational and supporting evidence for the above referenced bathymetric trench being used as a preferred onshore migration corridor for pre spawner herring is presented in [Attachment 2](#).

Page 5-51

The conclusions reached in the PID specific to herring behavior and the 1998 and 2004 hydroacoustic surveys are incorrect. WDFW reviewed the 1998 and 2004 hydroacoustic surveys and concluded that the results were inconclusive. In retrospect, WDFW has also concluded that the hydroacoustic survey methodology was flawed. In addition, the 1998 and 2004 hydroacoustic survey results were reviewed by representatives for the other parties to the Settlement Agreement and the parties agreed that conclusions regarding herring behavior could not be made.

Page 5-51

Based on the input of the PIT consultant responsible for the 1998 and 2004 hydroacoustic surveys (Resource Analysts International), the PID states that there is "no evidence that herring favor one area over another for entering or leaving the spawning grounds". WDFW considers this statement to be incorrect given that the results of the surveys were inconclusive and the study design flawed.

Page 5-51

The PID states that “the results of these hydroacoustic surveys are corroborated by data from tagging studies conducted by PIT (Hay et al. 2001) that indicate Cherry Point herring do not follow specific migration patterns.” The Hay’s study was not conducted by PIT and did not look at the movement patterns of pre-spawners between offshore holding areas and spawning areas. In addition, WDFW is not aware of any herring tagging studies that have looked at the movement patterns of pre-spawners between offshore holding areas and spawning areas at Cherry Point or elsewhere in the Salish Sea.

Page 5-51

The PID states that herring spawn “with some tendency towards increased spawning frequency when vessels are present”. From WDFW’s perspective, this statement is incorrect. In addition, the citation for this statement is incorrect and should be PIT consultant Marginex (Mark Pedersen) rather than WDFW’s O’Toole.

Page 5-52 to 5-58

The “Proposed Design Features Intended to Reduce Impacts” section misses the mark. From a regulatory perspective, mitigation is a process that includes actions to reduce, minimize and avoid potential impacts and not just compensation actions. The Proposed Design Features Intended to Reduce Impacts section of the Marine Resources Chapter of the PID focuses only on the mitigations (compensations) that will and/or may be implemented but fails to identify the actions that have and/or will be taken to design, configure and operate the trestle and wharf elements to reduce, avoid and minimize potential marine resource impacts. This section of the PID needs to clearly identify the actions that have and/or will be taken to design, configure and operate the trestle and wharf elements to reduce, avoid and minimize potential marine resource impacts. This section needs to be taken very seriously.

Examples of the types of actions WDFW will expect PIT to seriously consider/study as a means to reduce, minimize and avoid potential marine resource impacts include:

1. Move the proposed wharf element to the south of the existing trestle location in order to avoid impacts to pre spawner herring on shore migration via the priority onshore migration corridor identified by WDFW at the project site and documented in the Settlement Agreement and re-negotiation meetings over the past 2 years.
2. Incorporate light permeable grating into the deck of the trestle and/or reflective panels on the side of the trestle to reduce potential shadow impacts from OHW to the -30.0 bed elevation (MLLW = 0.00).

Page 5-52

Relative to the Proposed Design Features Intended to Reduce Impacts section of the Marine Resources Chapter, the PID needs to identify what mitigations would result in response to ongoing investigations.

Page 5-52

Relative to the Proposed Design Features Intended to Reduce Impacts section of the Marine Resources Chapter, the PID needs to identify what mitigations have been agreed to under the Settlement Agreement (1999).

Page 5-57

The Marine Biological Communities sub section of the Proposed Design Features Intended to Reduce Impacts section of the Marine Resources Chapter focuses only on the mitigations (compensations) that will and/or may be implemented but fails to identify the actions that have and/or will be taken to design, configure and operate the trestle and wharf elements to reduce, avoid and minimize potential marine resource impacts.

Page 5-57

The Best Management Practices sub-section of the “Proposed Design Features Intended to Reduce Impacts” section refers to unspecified BMPs that will be included in a future “Final Operations Plan”. The lack of specificity in this subsection provides little upon which to comment. Many of the plans noted in this sub-section, i.e., ballast water, storm water, and marine spill avoidance/response have already been significantly developed and addressed in the Settlement Agreement. The PID should provide specific references to the appropriate sections of the Settlement Agreement and/or provide more information from the Settlement Agreement in the PID document.

5.4 WETLANDS, STREAMS, AND OTHER DRAINAGES

Page 5-59

The PID indicates that the project area is drained by two watersheds that drain to the Strait of Georgia and 68 acres of the site drain to a Birch Bay watershed (third watershed). Figure 5-9 does not illustrate the 3 watersheds referred to in the PID. Figure 5-9 also does not illustrate what areas of the GPT site contribute to which watershed. Figure 5-9 needs to be modified to illustrate the three watersheds and the relationship of the GPT site to these watersheds.

Page 5-60 and Figure 5-10

WDFW needs to verify that the stream and ditch classifications presented in Figure 5-10 and referenced in the Wetland, Streams and Other Drainages Chapter of the PID are consistent with WDFW’s stream classification relative to the Hydraulic Code. WDFW will coordinate our

review of the stream and ditch classifications with Whatcom County Planning Department staff. We anticipate that our review will take a minimum of 2 weeks.

Page 5-65

Please provide the reports (i.e. time, location, effort, methods, and catch) for fish sampling efforts in Stream 1 and 2.

Page 5-65

Please provide the reports (i.e. time, location, effort, methods, and catch) for fish sampling efforts in the coastal lagoon into which stream 2 flows.

Page 5-75

Unlike the Marine Resources Chapter, the Proposed Design Features Intended To Reduce Impacts sub section of the Wetland, Streams and Other Drainages Chapter of the PID clearly identifies the actions that have and/or will be taken to design, configure and operate the upland elements to reduce, avoid and minimize potential stream and wetland impacts. Thank you for taking the mitigation sequencing seriously in this chapter.

Pages 5-77 to 5-83

In general the Wetland, Streams and Other Drainages Chapter of the PID is focused, thorough, well reasoned and specific. WDFW elects to provide additional comments regarding wetland and stream issues after WDFW has verified that the stream and ditch classifications presented in Figure 5-10 are consistent with WDFW's stream classification relative to Hydraulic Code.

WDFW GENERAL OVERALL COMMENTS:

1. With the exception of the Wetland, Streams and Other Drainages Chapter, the PID is a very preliminary document and provides very few specifics upon which to comment. For the PID to be an effective tool in the regulatory process, it needs to be much more specific, provide much greater detail and provide appendices specific to the various plans, studies and mitigations noted in the document.
2. Some the issues generally touched upon in the PID have been significantly developed in the Settlement Agreement and expanded upon during the past two years of Settlement Agreement re-negotiations. With the exception of the Wetland, Streams and Other Drainages Chapter, very little of that information is incorporated into the PID and in some cases (i.e. herring pre spawner onshore migration corridor and trestle shading) presented inaccurately.