

**BEFORE THE LAND USE HEARINGS OFFICER
FOR THE CITY OF WARRENTON, OREGON**

In the matter of a Type III application for the Oregon LNG Bidirectional Terminal and approximately 3-miles of an LNG Bidirectional Pipeline within the Corporate limits of the City of Warrenton, Oregon.

**CUP 14-3, VAR 14-1,
CUP 14-4 & VAR 14-2**

FINAL ORDER

This Order is the final decision of the Warrenton Land Use Hearings Officer denying this set of consolidated applications for a Bidirectional Liquefied Natural Gas (LNG) Terminal and approving the associated applications for a Bidirectional LNG Pipeline within the corporate limits of the City of Warrenton.

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I. Summary:

This Order addresses the following separate land use permit requests:

A. Bidirectional LNG Terminal.

- Site Design Review for a Large Scale Water-dependent Industrial Development
- Hardship variance for permanent impacts to locally significant wetlands
- Conditional Use Permit for wetland impact mitigation in the I-2 zone
- Conditional Use Permit for over-height tanks in the Airport Imaginary Surface
- Variance to maximum fence height

B. Bidirectional LNG Pipeline.

- Hardship variance for permanent impacts to locally significant wetlands
- Conditional Use Permit for wetland impact mitigation in the I-2 zone
- Conditional Use Permit for a pipeline under-crossing in the A-3 zone

II. Introduction to the Property and Applications:

Terminal Applicant.. LNG Development Company, LLC, dba Oregon LNG
 Attn: Peter Hansen
 8100 NE Parkway Drive, Suite 165
 Vancouver, WA 98662

Terminal Property ... Legal Description: The LNG Terminal is proposed for the east bank of the Skipanon Peninsula (ESP) and will occupy all or part of the following parcels located in Sections 10, 14, 15 & 22 of Township 8 North, Range 10 West of the Willamette Meridian (~96 acres):

Tax Lot	Owner
810140000300	Oregon DSL
810140000380	Oregon DSL
81015D000100	Port of Astoria
81015D000101	Oregon DSL
81015D000200	Port of Astoria
81015D000300	Port of Astoria
81015D000700	Port of Astoria
81015D000800	Port of Astoria
81015D001900	James Neikes/Pinnacle Long LLC

Pipeline Applicant... LNG Pipeline Company, LLC, dba Oregon LNG
 Attn: Peter Hansen
 8100 NE Parkway Drive, Suite 165
 Vancouver, WA 98662

Pipeline Property Legal Description: The approximately 3-mile portion of the LNG Pipeline that will be located within the corporate limits of Warrenton will occupy part of the following parcels located in Sections 15, 22, 23 & 26 of Township 8 North, Range 10 West of the Willamette Meridian:

Tax Lot	Owner
81015D000700	Port of Astoria
81015D001000	Port of Astoria
81015D001500	Port of Astoria
81015D001600	Port of Astoria
81022AB00100	Port of Astoria
81022AB00400	Port of Astoria
81022AA00200	Port of Astoria
81022AA00500	Port of Astoria
81022AB00500	Clatsop County
81022AA00400	Port of Astoria
81022AA00700	Port of Astoria
81023BC00100	Port of Astoria
81023BC00200	Port of Astoria
81023BC00300	Port of Astoria
81023BC00800	Port of Astoria
81023BC00700	Port of Astoria
81023BC01000	David & John Nygaard/Warrenton Fiber Co.
81023BD00600	David & John Nygaard/Warrenton Fiber Co.
81023BD00700	David & John Nygaard/Warrenton Fiber Co.
81023BD01500	Steadfast LLC
81023BD02002	Steadfast LLC
810230000200	Port of Astoria
810260000500	Port of Astoria
810250000500	Port of Astoria
810250000400	Port of Astoria

Laws Applicable to the Terminal: Warrenton Development Code (WDC), Ch. 16.12 Definitions; Ch. 16.64 Water-Dependent Industrial Shorelands District including 16.64.030; Ch. 16.72 Aquatic Development District; Ch. 16.88 Flood Hazard Overlay District; Ch. 16.92 Airport Hazard Overlay District including 16.92.040-.070; Ch. 16.96 Soils Hazard Overlay District; Ch. 16.104 Dredged Material Disposal Site Locations; Ch. 16.116 Design Standards; Ch. 16.120 Access and Circulation; Ch. 16.124 Landscaping, Street Trees, Fences and Walls including 16.124.050; Ch. 16.128 Vehicle and Bicycle Parking; Ch. 16.132 Clear Vision Areas; Ch. 16.136 Public Facilities Standards; Ch. 16.140 Stormwater and Surface Water Management; Ch. 16.144 Signs; Ch. 16.152, Grading, Excavating and Erosion Control Plans; Ch. 16.156 Wetland and Riparian Corridor Development Standards including 16.156.080; Ch. 16.160 Columbia River Estuary Shoreland and Aquatic Area Development Standards; Ch. 16.164 Impact Assessment and Resource Capability Determination; Ch. 16.192 Large-Scale Developments, including 16.192.020, .030,.040,.050, .070; Section 16.208.050 Type III Procedure –Quasi-Judicial; Ch. 16.212 Site Design Review including 16.212.040; Ch. 16.220 Conditional Use Permits; Ch. 16.244 Coastal Zone Consistency; Ch.16.256 Traffic Impact Study; Ch. 16.272 Variances, including 16.272.020, and the Warrenton Comprehensive Plan (WCP).

Laws Applicable to the Pipeline: Warrenton Development Code (WDC), Ch. 16.12 Definitions; Ch. 16.40 General Commercial District; Ch. 16.60 General Industrial District; Ch. 16.80 Aquatic Natural District; Ch. 16.84 Coastal Lake and Freshwater Wetlands District; Ch. 16.88 Flood Hazard Overlay District; Ch. 16.92 Airport Hazard Overlay District; Ch. 16.96 Soils Hazard Overlay District; Ch. 16.116 Design Standards; Ch. 16.120 Access and Circulation; Ch. 16.124 Landscaping, Street Trees, Fences and Walls; Ch. 16.128 Vehicle and Bicycle Parking; Ch. 16.132 Clear Vision Areas; Ch. 16.136 Public Facilities Standards; Ch. 16.140 Stormwater and Surface Water Management; Ch. 16.144 Signs; Ch. 16.152, Grading, Excavating and Erosion Control Plans; Ch. 16.156 Wetland and Riparian Corridor Development Standards; Ch. 16.160 Columbia River Estuary Shoreland and Aquatic Area Development Standards; Ch. 16.164 Impact Assessment and Resource Capability Determination; Ch. 16.192 Large-Scale Developments; Section 16.208.050 Type III Procedure –Quasi-Judicial; Ch. 16.220 Conditional Use Permits.

The underlying applications and this decision are divided into two parts, corresponding to the LNG terminal and the LNG pipeline. The LNG terminal includes a host of accessory uses, such as the marine facilities, LNG storage tanks, LNG vaporization facilities, natural gas liquefaction facilities and associated support facilities. The LNG pipeline is more limited and consists of a buried 36 inch (outside diameter) natural gas transmission pipeline and associated valves and pumping stations. The approximately 3-mile segment within the City of Warrenton that is the subject of this application is one end of an 86.8 mile pipeline that, at the other end, connects with an interstate gas pipeline in Woodland, Washington. The Officer is mindful that much of the argument and information in the record addresses the entire 86.6-mile pipeline and the larger project, e.g., FERC's DEIS on the project issued Aug 2015. This decision, however, is limited to those portions of the project located in the corporate limits of the City of Warrenton, Oregon and impacts in the City and cognizable under the WDC and WCP.

The Federal Energy Regulatory Commission (FERC) has exclusive jurisdiction, pursuant to the Natural Gas Act (NGA) over the review, approval and operation of LNG terminals and pipelines, except where the Coastal Zone Management Act (CZMA) applies, the implementation of which is vested through each coastal state with local jurisdictions, such as the City of Warrenton. Because portions of Warrenton's land use regulations were adopted as local implementation of the CZMA, at least in theory, this applicant must demonstrate compliance with the city's land use regulations. See WDC ch. 16.244 (Coastal Zone Consistency). For that reason these applications are before the City. The applicant, however, makes clear that it disputes the City's authority to require local land use approval for any aspect of this project and reserves the right to dispute at a later date the City's authority if it so chooses.

The site proposed for the LNG terminal is composed of dredge spoils deposited by the US Army Corps of Engineers (USACE) over many years. Presently, the USACE holds an easement on the property to continue dredge spoil disposal, but the USACE is not an owner on title to any of the parcels involved in this application. These parcels, comprising 96 acres of the ESP, were the subject of a consolidated comprehensive plan and zone text amendment and interpretation in 2005 and 2006 by the City when Skipanon Natural Gas LLC, predecessor to Oregon LNG, sought to have the land expressly designated for an LNG import terminal, as a use allowed outright. The proposal was approved by the City Commission, which was affirmed on appeal by LUBA and the Oregon Court of Appeals.¹ LUBA's description of that proceeding is instructive historical background to the present applications which essentially seek the approval of the various city permits and other land use approvals to implement the development that was anticipated in 2006:

The area subject to the challenged plan and zoning amendments is located in the Columbia River estuary, and consists of the East Skipanon Peninsula (ESP), a shoreland area created from dredge spoil deposits next to the Skipanon River, and a large area of adjoining estuarine waters to the north of the ESP. The ESP is part of Youngs Bay, and is located in close proximity to the Columbia River deep-draft navigation channel and the Skipanon River waterway. From 1979 to 2001, the ESP was designated and zoned for water-dependent industrial uses, but no industrial uses developed there during that period of time. In 2001, the city approved a request from the Port of Astoria to redesignate the ESP "other shorelands," and apply a "Conservation" plan designation, and a new Urban Resort and Recreation zone, in order to facilitate development of a proposed golf course. The golf course proposal did not come to fruition, however.

In 2005, intervenor applied to the city to redesignate 96 acres of the ESP as Especially Suited for Water-Dependent (ESWD) shorelands and

¹ See *People for Responsible Prosperity, et al. v. City of Warrenton*, 52 Or LUBA 181, *Aff'd w/out Opn.* 208 Or App 495, 143 P3d 775 (2006).

² *Id.* at 184-185 (citations omitted).

³ See *Beck v. City of Tillamook*, 313 Or 148, 153, 831 P2d 678 (1992). The City's 2006 legislative action also imposed 2 transportation-related conditions on the development of the ESP for an LNG terminal suggested by ODOT in a 2005 comment letter on that application. Those

rezone the same area as Water-Dependent Industrial Shorelands (I-2). The application also proposed redesignating approximately 370 acres of adjoining estuary as Aquatic Development and rezoning the same area Aquatic Development (A-1). In addition, intervenor requested that the city codify an earlier code interpretation that LNG importation, regasification and transfer is a permitted use in the I-2 zone. Intervenor did not seek permits for a particular use allowed in the I-2 zone, but it is undisputed that intervenor contemplates constructing an LNG terminal and regasification facility on the subject property, which will require federal, state and local permits. To address questions raised by the state Department of Land Conservation and Development intervenor submitted a conceptual plan of an LNG terminal. The plan depicts a 1500-foot ship berth and a large ship-turning basin in an A-1 zoned portion of Youngs Bay that is connected to the ESP via a 1000-foot dock and pipeline, with the proposed regasification and transfer facility located on the ESP.

The city planning commission recommended approval of the proposed plan and zoning map and text changes. After conducting a de novo hearing, the city commission voted to approve the requested amendments.²

To be clear, the City Commission's 2006 action did not approve the present applications, most notably this LNG terminal, but it was a legislative determination and a formal interpretation of the local code that an LNG terminal facility, as a matter of fact and law, is a use permitted outright in the City's A-1 and I-2 zones as a "marine cargo transfer facility" and as a "water dependent industrial use." This umbrella use category also includes its normal and customary accessory uses as allowed outright in the A-1 and I-2 zones. The City Commission in 2006 expressly stated, and LUBA affirmed, that any subsequent development proposal, such as this one, "will have to comply with numerous environmental impact avoidance, minimization and mitigation requirements imposed by the federal, state and local governmental permitting processes for in-water development in the Columbia River Estuary. Therefore, reclassification will also be consistent with the priority of maintaining the integrity of the estuarine ecosystem." Affirmances by LUBA and the Court of Appeals makes the City Commission's 2006 determination "law of the case" in the present proceeding with regard to whether the use proposed is allowed in the operative A-1 and I-2 zones.³

One change from the use at issue in the 2006 interpretation is that the current proposal is for a bidirectional terminal (export and import); whereas, the 2005 proposal was made before the current natural gas production boom and proposed only an import terminal. Several opponents have suggested that this difference is material and has the effect of making the 2006 decision not relevant to the present application. The Officer

² *Id.* at 184-185 (citations omitted).

³ See *Beck v. City of Tillamook*, 313 Or 148, 153, 831 P2d 678 (1992). The City's 2006 legislative action also imposed 2 transportation-related conditions on the development of the ESP for an LNG terminal suggested by ODOT in a 2005 comment letter on that application. Those conditions are incompatible with the current proposal and access configuration, and the applicant seeks their revision through a separate plan amendment and zone text change. The present applicant anticipates the approval of those changes.

disagrees. From a land use perspective, and as implicated by all of the applicable land use criteria, LNG import is not materially different from LNG export. Both relate to the City's land use regulations in exactly the same way, and the land use criteria do not make a material distinction between the two. Therefore, the Officer concludes that the City's 2006 decision has precedential relevance to the present application and the issues resolved in the 2006 proceeding will not be redecided here.

The LNG terminal application consists of two binders submitted June 2014 and revised in November 2014 that include a set of full-sized plans and supporting documentation. The LNG pipeline application consists of a single binder submitted June 2014 that includes a set of full-sized plans, maps and supporting documentation. Subsequently, the applicant submitted information related to seismic safety (Ex. 75), as well as additional argument and evidence as part of the public hearing process described in the next section (Exs. 138, 139, 140, 187, 191 & 193).

III. Summary of the Local Proceeding and the Record:

The applications in this case were submitted in June 2014 and subsequently revised (Nov 2014) and supplemented since then, and City planning staff produced two comprehensive reports corresponding to the two applications on August 26, 2015 recommending conditional approval of both. The City mailed notice of the applications and a September 3, 2015 hearing to the owners of the surrounding properties and interested parties who requested notice and published notice in *The Columbia Press* on August 21, 2015. At the commencement of the September 3rd hearing, the Officer explained the procedure and disclaimed any ex parte contacts, bias, or conflicts of interest. No one challenged the Officer or questioned him about potential ex parte contacts, bias or conflicts of interest or challenged the Officer's jurisdiction or his ability to decide the matter impartially. However, several witnesses objected to the adequacy of the city's notice and the venue selected for the hearing. In particular, these parties stated that the community meeting room was too small and that it was not clear from the city's notice that the hearing might be held over more than one day.

Present at the hearing was Skip Urling, Warrenton Community Development Director, who provided a verbal summary of the application, the process and the status of the record at that point in time. While no public agency representatives testified at the hearing, the following written communications were received from agencies:

- ODOT Region 2 comment letter (Ex. 5), Aug. 25, 2015
- ODFW comment letter (Ex. 21), Aug. 31, 2015
- Astoria City Council letter of opposition (Ex. 164), Sept. 10, 2015
- ODFW comments (Ex. 186), Sept 21, 2015

The applicant's design and consulting team, consisting of attorney Mike Connors, project manager from CH2M, Mark Bricker, geotechnical engineer, Don Anderson, transportation engineer, Terry Yuen, and environmental consultant, Jay Lorenz (collectively the "applicant"), each of whom presented different components of the project proposal through a PowerPoint overview (Ex. 138). The applicant also submitted the Draft EIS (DEIS) on the project recently released by FERC (Ex. 139) and a packet of supplemental information addressing specific approval criteria and factual issues (Ex.

140). The applicant's attorney expressed agreement with the staff reports and had no objections to staff's proposed conditions of approval.

Following the presentation by the applicant's design and consulting team, numerous members of the public spoke in favor of the project, followed by a few witnesses with neutral testimony or questions. Opponents to the project then testified, beginning with Loren Goldberg, representing Columbia RiverKeeper and others, testified and provided a written summary of her arguments along with supporting documentation (Ex. 44). Afterward, a significant number of individuals testified in opposition to the proposal. The Officer concluded public testimony at approximately 9:30 p.m. and continued the hearing to the following evening (September 4, 2015) beginning at 5:30 p.m. At the continued hearing, additional opponents to the project testified until no one else requested the opportunity to testify, after which the applicant's team provided a short oral rebuttal to the opponent testimony. The hearing concluded at approximately 10:30, at which time the Officer addressed requests to keep open the record.

Several opponents and the applicant requested that the record be kept open for concluding testimony, pursuant to which the Officer ordered the following open record schedule:

- September 18, 2015 - Submission of argument and evidence on any relevant topic by anyone.
- September 25, 2015 - Response to materials submitted on September 18th
- October 2, 2015 – Applicant's final rebuttal and closing arguments (no new evidence)

During this open record period, the following relevant documents were received into the record:

- Oregon LNG Written Evidentiary Submittal from Ch2m following September 3rd hearing (Ex. 187), Sept. 18, 2015; and
- RiverKeeper, et al., Testimony and exhibits (Ex. 83), Sept. 17, 2015
- Oregon LNG Response to Public Comments Received by September 18, 2015, submitted by Ch2m (Ex. 191), Sept. 25, 2015;
- RiverKeeper, et al., closing testimony (Ex. 188), Sept. 25, 2015
- Oregon LNG Closing Argument from Hathaway Koback & Connors (Ex. 193), Oct. 2, 2015.

The record closed with the applicant's October 2nd Closing Arguments, at which point the Officer took the matter under consideration.

IV. Findings:

Only issues and approval criteria raised in the course of the application, during the hearing and before the close of the record are discussed in this section. All approval criteria not raised by staff, the applicant or a party to the proceeding have been waived as contested issues and are not addressed in these findings.⁴ The Officer concludes

⁴ If this decision is appealed to the City Commission, the Commission has the discretion to allow new evidence or argument at the appeal hearing. WDC 16.208.050(H)(2)(b). If the Commission
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that all uncontested approval criteria and issues addressed by the applicant and found to be met in the staff reports that are not challenged by any opponent to this proceeding are met. For those approval criteria and issues that are not challenged by any opponent to this proceeding, the Officer adopts as his own and incorporates herein by reference the corresponding findings from the staff reports. The Officer finds those criteria to be met, even though they are not specifically addressed in these findings. The Officer adopts the following findings in response to the approval criteria and issues that were challenged by focused testimony and argument by any opponent during the local process:

A. Procedural Objections:

In response to procedural objections voiced in public testimony, the Officer stated at the time, and reiterates here, that the city's notice was adequate and conformed to the requirements of ORS 197.763 and WDC 16.208.050 (procedures for Type III quasi judicial proceedings). The proof of that adequacy was the full hearing room and the lack of any objection by any party since then that they did not receive notice of the application or hearing. Those who complained about the notice were present at the hearing and did not also claim that any alleged defects in notice prevented them from preparing for the hearing. Absent any focused objection that would indicate that (1) the notice was defective in some material way relative to the legal requirements and (2) the person's ability to participate was prejudiced by those defects in a material way, the Officer concludes that the city's notice was adequate.

Regarding objections to the venue and the 2-day hearing, the Officer made sure that the hearing would be long enough to accommodate the testimony of everyone who wished to participate, and he took pains during the 2-day hearing to make sure that everyone that wanted to testify or submit written comments was invited and able to do so. At the end of the second day of hearing, the Officer closed the public testimony portion of the hearing after verifying that no one else wished to testify and kept open the record for subsequent submission of written materials. The Officer asked for objections, and no one objected to this process. On that basis, the Officer concludes that the venue was sufficient and a multi-day hearing only enhanced the public's opportunity to testify. The open-record period that ensued after the hearing was consistent with the requirements of ORS 197.763 pertaining to the submission of evidence and testimony after a public hearing. Therefore, everyone who wanted to participate had full opportunity to do so.

B. LNG Bidirectional Terminal Applications:

The terminal development requires multiple permits, which are subject to numerous sets of approval criteria contained in the WDC and WCP. Additionally, these permit applications are subject to numerous submission requirements, which take the form of information and documents required before an application can be deemed complete for purposes of processing. Many of the criteria for all of the permits are redundant, in that the same or very similar requirement applies to several of the permits. In the sections that follow, the Officer addresses the primary arguments of the main

declines to allow new evidence or argument, failure to raise a particular issue before the close of the record by the Officer will preclude any argument based on that issue before the Commission in a subsequent appeal.

opponents, *i.e.*, RiverKeeper, et al., and the applicant's responses to those primary arguments. Then the Officer addresses the specific permit approvals these consolidated applications seek.

1. Application requirements – ownership of the property WDC 16.208.070(D)(3) and the USACE dredge spoil disposal easement:

RiverKeeper asserts that the application cannot be approved because one of the primary submission requirements for a land use application is authorization by owners of the property. In particular, WDC 16.208.070(D)(3) requires "signed written authorization of the property owner of record if the applicant is not the owner." The USACE holds a dredge spoil easement over the ESP, and RiverKeeper asserts that this interest equates to an ownership interest that is implicated in this submission requirement (Ex. 44, p 16-17; Ex. 83, p 4-6; Ex. 188, p 3-4). The terminal application does not include a signed authorization from the USACE. After the hearing, RiverKeeper raised four specific arguments based on this issue (Ex. 83, p 4-6). First, RiverKeeper argues that WDC 16.208.070(D)(3) requires USACE authorization because it is a "record owner" of the terminal site. Second, RiverKeeper asserts that, without USACE authorization, the terminal cannot be deemed a "reasonable and legal use" of the parcel under WDC 16.156.080(B)(1) for purposes of the wetland hardship variance. Third, RiverKeeper speculates that, if the applicant uses the ESP for an LNG terminal, thus making it unavailable for dredge spoil disposal by the USACE, the taxpayers of Warrenton are responsible for providing the USACE with an alternative disposal site. Finally, RiverKeeper argues that, because of the strong position taken by the federal government in litigation related to the easement and in a December 14, 2015 letter to FERC, the Officer must assume that the federal government will never relinquish its easement rights on the ESP.

RiverKeeper's argument is misplaced for several reasons. First, application requirements are not necessarily land use approval criteria.⁵ Only if one of the relevant approval criteria requires a particular submission item can that item be deemed an approval requirement for the permit, *e.g.*, a complete site plan is a necessary prerequisite to determining compliance with the site plan approval criteria. In this case, RiverKeeper points to no permit approval standard that requires signed authorizations from all property owners. It appears that the requirement is attached only to the application completeness review. Second, the requirement is for the authorization by owners of record and does not implicate easement holders. The holder of an easement is not an "owner of record." Therefore, the Officer does not regard the applicant's failure to obtain USACE authorization for the application to be fatal to land use approval in this case, since the issue can be resolved through a condition of approval. Third, the Officer disagrees that the City of Warrenton may be responsible for obtaining an alternative dredge disposal site for the USACE. Even if that were the case, that does not relate to any of the approval criteria and cannot be a basis for denial. Finally, the Officer disagrees that the lack of USACE permission to use the property necessarily means the project is not a reasonable and legal use of the ESP for purposes of the wetland hardship variance. The applicant asserts that it will resolve the USACE dredge spoil

⁵ See *e.g.*, *LeRoux v. Malheur County*, 32 Or. LUBA 124 (1996); *Champion v. City of Portland*, 28 Or LUBA 618 (1995); *Wissusik v. Yamhill County*, 27 Or LUBA 94 (1994).

easement and will obtain clear title to the land for the project. The Officer takes that optimistic prediction at face value and a possible outcome. If that happens, the project proceeds; if not, the project is stopped and cannot proceed. The difference does not involve discretion and is a clear and objective determination of whether the USACE has relinquished its easement or not. Therefore, a condition of approval is warranted to the effect that the applicant shall obtain clear title to the entire site and that USACE must relinquish its easement before construction begins. See Terminal Condition 20.

2. WDC 16.64.020 & 16.72.020: Base Zone Requirements of the A-1 & I-2 Zones:

- a) Is the terminal a use allowed in I-2 Zone?** RiverKeeper asserts that the proposed use fails to comply with (violates) several provisions of WDC Ch. 16.64 and is therefore not a use allowed in the Water-Dependent Industrial Shoreland Zone. RiverKeeper begins by quoting the I-2 Zone purpose statement that “Uses of the [I-2 Zone] areas shall maintain the integrity of the estuary and coastal waters.” RiverKeeper asserts that the development does not maintain the integrity of the estuary and coastal waters and therefore is not a use allowed in the I-2 Zone. This argument is misplaced for two reasons. First, purpose statements are not necessarily approval standards for individual permit decisions, and there is no indication that the City Commission intended these purpose statements to serve as approval criteria.⁶ Second, the Officer interprets this purpose statement as being implemented by the numerous siting standards applicable to uses in the I-2 Zone, which necessarily means that the purpose statement does not serve as an independently applicable approval standard.⁷ In other words, compliance with the substantive requirements of the I-2 Zone necessarily fulfills and complies with the zone’s stated purpose.
- b) Compliance with the I-2 zone development standards.** RiverKeeper also points out that WDC 16.64.020 requires compliance with the WDC Ch. 16.64 and other applicable development standards and applicable comprehensive plan provisions. According to RiverKeeper, because the proposal does not comply with those development standards it is not a use allowed in the I-2 Zone. As a general proposition, this is a correct interpretation of the WDC, but it also presupposes that the project fails to comply with other substantive development standards. Compliance with those standards is addressed below.
- c) Is the terminal a Water-Dependent Industrial Use?** RiverKeeper and other opponents argued in a number of different ways that the use proposed did not qualify as a “Water-Dependent Industrial Use” under WDC 16.64.020. As a starting point, the terminal site is proposed for a site that is split zoned A-1 and I-2 and regulated by WDC chapters 16.72 and 16.64, respectively. Although the two zones use different phrasing, both zones allow outright water-dependent commercial or industrial uses. The I-2 zone imposes a number of different development standards in WDC 16.64.040, and the two zones have slightly different purpose statements.

The City Commission in 2005 and 2006 rendered a legislative interpretation of the A-1 and A-2 zoning regulations to the effect that an LNG import terminal is a water

⁶ See *Anderson v. Peden*, 284 Or 313, 320, 587 P2d 59 (1978).

⁷ See *LO 138 LLC v. City of Lake Oswego*, slip op. LUBA No. 2014-092 April 15, 2015.

dependent industrial use as envisioned by the A-1 and I-2 zones. That decision was affirmed on appeal and is law of the case with regard to this proceeding. As the Officer has previously determined, import and export do not constitute a material difference for purposes of determining that such an LNG terminal is a water dependent industrial use as that term is used in the A-1 and I-2 zones. From the 2006 City Commission interpretation, the Officer concludes that the use is allowed in the A-1 and I-2 zones, and the balance of the siting and development standards simply dictate how the use looks and operates. Only if there is something in the siting and development standards that can't be met either outright, through conditions, or avoided through a variance will those serve as a basis for denial of an otherwise allowed use such as this.

- d) Applicability of purpose statements.** RiverKeeper asserts that the use and this project in particular are inconsistent with the purpose statements of the I-2 (Ex. 44, p 18) and A-1 (Ex. 44, p 22) zones. The Officer rejects this because purpose statements are not necessarily approval standards for individual permit decisions, and there is no indication that the City Commission intended this purpose statement to serve as an approval standard.⁸
- e) Lack of DEQ air quality permits.** RiverKeeper argues under WDC 16.64.040(E) that, because the applicant has not provided DEQ air quality permits and has not provided proof that the construction and operation of the terminal will comply with state noise standards, the application must be denied. The applicant responded that it is not required to obtain any of the many state and federal discretionary permits before local land use approval, and that it is legally sufficient to impose a condition of approval requiring the applicant to obtain all such state and federal permits prior to operation (Ex. 191, p 15-16 and Ex. 193, p 9-10).

The Officer disagrees with RiverKeeper's challenge on this point for two reasons. First, where a local criterion requires the applicant to obtain state or federal discretionary permits, it is sufficient to impose a condition of local land use approval that the permits be obtained prior to operation. Second, RiverKeeper's argument creates a chicken & egg conundrum for this and other applicants where state or federal permits are required, but those discretionary approvals also require some sort of local confirmation, e.g., a land use compatibility statement, that the use is allowed under local zoning. Oregon cases on this point have held that a condition of local land use approval requiring the applicant to obtain the discretionary state or federal permit is appropriate where the record shows that obtaining those permits is feasible, and where nothing in the record shows that the applicant is precluded as a matter of law from obtaining them.⁹ The Officer takes that approach here because RiverKeeper has not demonstrated that the applicant is precluded as a matter of law from obtaining a state air quality permit or really any other state or federal permit, and it appears quite feasible that the applicant will obtain these permits.¹⁰ It is

⁸ *Anderson v. Peden, supra.*

⁹ *See Wal-Mart Stores, Inc. v. City of Bend*, 52 Or. LUBA 261 (2006), citing *Bouman v. Jackson County*, 23 Or LUBA 626, 647 (1992) and *Skerpetos v. Jackson County*, 29 Or LUBA 193, 210 n 14 (1995).

¹⁰ As explained *infra*, the Officer does not make the same assumption about the NMFS Section 7 consultation under the federal Endangered Species Act or that the project can obtain a non-jeopardy biological opinion.

sufficient to impose a condition requiring those permits before construction begins. See Terminal Condition 21. If the applicant fails to obtain any required state or federal permit, it cannot begin construction.

- f) **Gas flare heat and glare.** RiverKeeper also argues under WDC 16.64.040(N) that, because the application proposes periodic gas flares and the applicant admits that the gas flares will be visible from 4 of the 6 “key observation points” analyzed, the use violates the prohibition against exposed heat or glare in the A-2 zone (Ex. 44, p 2, 11, 20, 21). See WDC 16.64.040(N).¹¹ The Officer partly agrees and partly disagrees.

RiverKeeper correctly points out that there is no de minimus exception to the prohibition in WDC 16.64.040(N) against unenclosed industrial heat or glare sources. That said, the unenclosed gas flare problem is solved by imposition of a condition that the terminal operation shall not have any unenclosed gas flares. Gas flares certainly qualify as a heat source, which is subject to this siting standard. However, the Officer does not agree that an exposed gas flare necessarily constitutes a “glare,” certainly not the way that a directed or focused spotlight at night causes glare on adjacent properties. Simply because a gas flare is visible at night, does not mean that it also glares. While the underlying purpose of this code requirement is not clear, it is simply worded, applies to this use, and on its face prohibits operations producing heat or glare that are not “conducted entirely within an enclosed building.” Because the code does not provide for any de minimus exceptions to this requirement, it must be met, at least with regard to heat generated by the gas flare. See Terminal Condition 22.

3. WDC Ch. 16.88: Flood Hazard Overlay requirements, is the site appropriate for this use, earthquake and tsunami risks:

Portions of the terminal site are within the City’s Flood Hazard Overlay (FHO) and Special Flood Hazard Area (SFHA) and subject to WDC Ch. 16.88, which imposes several limitations on development within its borders. RiverKeeper cites the FHO purposes from WDC 16.88.010 in conjunction with WDC 16.220.030(A)(5), one of the CUP approval standards, and asserts that the site is not appropriate for the proposed use because of the risk of damage or catastrophic loss from a tsunami or severe earthquake (Ex. 44, p 23-26).

As a water-dependent industrial use with marine port facilities, the use is tied to the Columbia River and thus areas encumbered by the FHO and SFHA. By definition, the use must be located in or near the FHO and, at times, within the SFHA. Given the firmness of this connection and the need for close proximity to deep water port facilities, the Officer concludes there is virtually no way to locate this facility outside the boundaries of a FHO district.

WDC 16.88.040(G)(2)(b) acknowledges this practical reality by prohibiting critical facilities from the SFHA “to the extent possible,” *i.e.*, “unless no feasible alternative site is available.” This code section describes requirements for siting critical facilities

¹¹ WDC 16.64.040 provides specific development standards for the A-2 zone, including “Except for exterior lighting, operations producing heat or glare shall be conducted entirely within an enclosed building.”

that must be located in the SFHA. Most notably, the facility “shall have the lowest floor elevated above [base flood elevation] or the height of the 500-year flood, whichever is higher.” The applicant addresses this requirement by proposing an earthen berm around the facility to resist a storm surge and to prevent a flood or tsunami inundation. The applicant estimates the 500 year flood elevation at 13 feet, and the berm will be at elevation of 22 to 27 feet. The applicant’s engineer quantified the degree to which the facility and the berm will displace floodwaters and calculates that displacement will not be more than 1 foot at any point and has modeled flooding and inundation from a tsunami (Ex. 138, p 30-31; Ex. 187, p 13-16; Ex. 193, p 16-18). RiverKeeper asserts that a berm 22 to 27 feet high is not sufficient to withstand a Fukushima size tsunami (Ex. 44, p 23-26). RiverKeeper also asserts that the terminal facility cannot withstand a high magnitude earthquake associated with the Cascadia Subduction Zone because the site is subject to soil subsidence and liquefaction. If a significant tsunami were to occur right after and in combination with a large earthquake, RiverKeeper asserts that this facility and its design and safety measures will not be sufficient to prevent significant damage or complete destruction of the terminal facility. Relying on testimony from geologist Tom Horning (Ex. 175), RiverKeeper asserts that the Columbia River Fault underlies the terminal site, and the risks and possible damage from movement of that fault were not evaluated.

In response to these challenges, the applicant provided a summary of its geotechnical investigations at the site and seismic evaluation, including the results of tsunami inundation modeling (Terminal Application App F; Ex. 138, p 22-37). The applicant provided additional responses and analysis of the seismic and tsunami risk factors after the September hearing (Ex. 187, p 9-16 and Ex. 191, p 9-15), including a response to Tom Horning’s report on the Columbia River Fault (Ex. 175). In a nutshell, the applicant responded to the Horning Report with an evaluation of the Columbia River Fault from which it concluded the fault was too old and movement too remote a possibility (no more recent than 1.6 million years ago) for it to be considered relevant today (Ex. 187, p 10-13). These responses are in addition to the detailed engineering analysis and construction design in the application binders for the terminal facility to minimize flooding or damage due to flooding, including flooding due to a significant tsunami and earthquake.

While the issues involved in tsunami and earthquake prediction and damage that might result from a catastrophic event are complicated, and the magnitude of damage from design failure would be staggering, the resolution of the FHO requirements are not that difficult. At its core, the FHO regulations in WDC ch. 16.88 are basic FEMA requirements for construction and building design to minimize the degree of damage that might result from a flood event. WDC ch. 16.88 does not contain any absolute prohibitions or design/construction requirements that would preclude this facility. RiverKeeper’s reliance on WDC 16.88.010 is misplaced because these purpose statements are not approval criteria, but, at most, articulate aspirational objectives of the FHO to minimize risk and the degree of damage from flooding. These purposes are implemented by the design requirements for buildings in the FHO. RiverKeeper’s attempt to implicate WDC 16.220.030(A)(5) and assert that a site in the FHO is not appropriate for terminal facility is inconsistent with the Code’s requirements because the only aspects of the terminal project that are subject to the CUP criteria are the wetland fill mitigation in the I-2 zone and the over-height storage tanks in the Airport Hazard Overlay zone. The CUP criteria are not

applicable to the terminal facility as a whole because it is a use allowed outright in the A-1 and I-2 zones. In fact, the Officer concludes that only a site in the FHO district is likely to be appropriate for a marine industrial terminal such as this, and the applicant's foundation and other reinforced designs, including tsunami berm that are designed to minimize flood damage, are sufficient to satisfy the mandatory requirements of the FHO.

4. WDC Ch. 16.96: Soils Hazard Overlay requirements:

The site is underlain by Coquille-Clatsop complex and Tropopsammments soils, both of which qualify it for the City's Soil Hazard Overlay (SHO) regulations in WDC ch. 16.96. Also, the soils of the ESP are mapped as being moderate to highly compressible, and the site is almost entirely composed of old dredge spoils, all of which implicates the SHO regulations. RiverKeeper asserts that the site's location close to the Cascadia Subduction Zone fault and right on the Columbia River Fault make it inherently unsuitable and unreasonably dangerous for this use. RiverKeeper cites an August 2012 DOGAMI report *Earthquake Risk Study for Oregon's Critical Energy Infrastructure Hub* (Ex. 44, attachment 32) in support of its argument that this site is not appropriate for a major LNG terminal. Similar to its arguments under the FHO, however, RiverKeeper attempts to boot-strap the conditional use criteria, particularly WDC 16.220.030(A)(5) which requires that the site be appropriate for the use, into the SHO requirements of WDC ch. 16.96. While it is true that WDC 16.96.020(A) requires compliance with the other applicable development code standards, the CUP criteria in WDC 16.220.030 are not applicable to the terminal facility as a whole, but only to the wetland mitigation in the I-2 zone and the over-height storage tanks in the Airport Hazard Overlay zone, both of which are discussed *infra*.

Fairly read, the SHO regulations in WDC ch. 16.96 do not include a requirement that a site so encumbered be deemed "generally suitable." That requirement is found in the conditional use permit criteria of WDC ch. 16.220, but only applies to certain limited aspects of the development, not the terminal. Nonetheless, the soil suitability analysis for Large-Scale Development in WDC 16.192.030 is applicable and is addressed *infra*. As things stand, however, the requirements of the SHO for this development are not that stringent and largely discretionary:

16.96.040 Areas with Coquille Variation or Coquille-Clatsop Complex Soils. The City may require an on-site soil survey report and a report by a licensed engineer for large-scale commercial, industrial or governmental structures, multifamily residences, or other structures which would cause a heavy loading of soil in areas of the City with Coquille variant silt loam or Coquille-Clatsop complex soils.

16.96.050 Additional Provisions.

A. The City may charge the owner or developer a reasonable fee for the cost of reviewing the adequacy of the soil survey, the methods proposed to avoid soils hazards and the methods actually used to avoid these hazards.

B. The City may require the owner or developer to post a performance bond to assure that adverse effects that may occur from a proposed development in the SH zone can be corrected. The size of the bond shall be

no larger than necessary for correcting potential adverse effects. The bond shall be released when the City determines that performance pursuant to the applicant's approved engineered plan is satisfactory.

The SHO does not impose any particular performance or design standards on this development, only that the site's soils be investigated by a suitably qualified geotechnical engineer and that the results of that investigation be reflected in the design of foundations and structures. The applicant provided a thorough geotechnical investigation (Terminal Application App F) and addressed the SHO requirements (Terminal Application p 5-33 to 5-34). The application described engineering steps and foundation designs that, according to the applicant, would withstand earthquake damage (Ex. 138, p 32-34; Ex. 187, p 9-13; Ex. 191, p 9-15; Ex. 193, p 16-18). The applicant also analyzed the seismic and tsunami risk factors and provided design details of the 22-27 foot tall earthen berm around the plant that would reduce the risk of inundation from a major tsunami (Ex. 138, p 30-31, 35-36). After the September hearing the applicant provided an analysis of these issues including a response on the Cascadia Subduction Zone hazards and specifically addressed the implications of the site being underlain by the Columbia River Fault and a response to Tom Horning's report (Ex. 175). According to the applicant, the Columbia River Fault, while located basically under this site, was too old and movement too remote a possibility (no more recent than 1.6 million years ago) for it to be considered a relevant threat today (Ex. 187, p 10-13). There was no countervailing or comparably credible evidence that detracted from the applicant's geotechnical evidence, its engineering and foundation design, nor its response to these arguments about tsunami and earthquake risk. The Officer concludes that the applicant's geotechnical investigation (Terminal Application App F), related analyses and documentation, the specifically proposed ground improvements, and the deep foundation designs are sufficient to satisfy the requirements of SHO.

5. WDC Ch. 16.156: Wetland and Riparian Corridor Development standards:

The terminal project will result in 3.2 acres of temporary wetland impacts due to construction activities that will be restored and ~35 acres of permanent wetland impacts for the terminal improvements. See Terminal Application Figs 5-1 & 5-4, respectively and Terminal Application narrative 5-81 to 5-89. The wetlands that will be impacted are on the City's local Goal 5 inventory and are classified as Significant Wetlands. The same wetland areas are also encompassed within the City's acknowledged Goal 16 (Estuarine Resources) boundary, and most of the terminal site is within the City's acknowledged Goal 17 (Shoreline Resources) boundary. Oregon DSL reviewed and concurred with the applicant's wetland delineation (Terminal Application App. H). The temporary wetland impacts will be mitigated and restored in-place and in-kind (Terminal Application Fig 5-1).

The permanent wetland impacts are the subject of a separate removal and fill application to Oregon DSL and the USACE, neither of which have been approved. The City regulates wetland fills under WDC 16.156.030, for significant locally inventoried Goal 5 wetlands, such as these, by requiring Oregon DSL permit approval and a hardship variance issued pursuant to WDC 16.156.080. The applicant argues, however, that where resource areas are subject to both Goal 5 and Goals 16 and/or 17, OAR 660-023-0240(2) provides in pertinent part that "[t]he requirements of Goals 15, 16, 17, and 19 shall supersede requirements of [Goal 5]

for natural resources that are also subject to and regulated under one or more of those goals.” See also Warrenton Comprehensive Plan §4.100 referring to the administrative rule. Thus, according to the applicant, where wetlands, such as these, that are protected by Goals 5, 16 and 17, state law and the City’s Comprehensive Plan specify that the Goal 16 and/or Goal 17 protection program controls the regulation of those wetlands, not Goal 5 or the local Goal 5 wetland regulations.

Notwithstanding Warrenton Comprehensive Plan §4.100 and OAR 660-023-0240(2), RiverKeeper argues that the ~35 acres of permanent wetland fill is subject to the City’s Goal 5 wetland protections in WDC ch. 16.165 (Ex. 44, p 29-31). On this basis, RiverKeeper asserts that the applicant needs a hardship variance for this fill under WDC 16.165.080. In essence, RiverKeeper asserts that both Goal 5 and the Goal 16 & 17 protection schemes apply to this proposed wetland fill. In support of its argument, RiverKeeper points to references in the Comprehensive Plan (§5.100) and the I-2 Zone regulations in WDC 16.64.040(T), which reference WDC ch. 16.156.

Based on the pretty clear language in Warrenton Comprehensive Plan §4.100 and OAR 660-023-0240(2), the Officer concludes that the applicant’s proposed filling of these significant Goal 5 wetlands is not subject to WDC ch. 16.156 and does not require a hardship variance, but rather is subject only to the City’s Goal 16 and 17 protections in WDC ch. 16.160 (Columbia River Estuary Shoreland and Aquatic Area Development Standards) and ch. 16.164 (Impact Assessment and Resource Capability Determination). Otherwise, the applicant would have to obtain a variance for the ~35 acres of permanent wetland impacts under WDC 16.156.080. Therefore, the primary regulatory matrix for the proposed permanent fill of ~35 acres of locally significant wetlands, as well as the massive estuary impacts this project presents are addressed under WDC Chs. 16.160 and 16.164 which implement the CZMA and State-wide Planning Goals 16 and 17.

6. WDC 16.160.020: Columbia River Shoreland and Aquatic Area standards, Deep-Water Industrial Development:

As previously noted, the lead permitting agency for this project is FERC, pursuant to the Natural Gas Act, and the only regulatory connection to local land use criteria is the Coastal Zone Management Act (CZMA), which is implemented and administered by local governments pursuant to State-wide Planning Goals 16, 17, 18 & 19. The City Commission’s 2006 decision expressly did not address, and it reserved for another day, consideration of Goals 16 and 17 – two of the four State-wide Planning Goals that implement the CZMA. In Warrenton, the CZMA and Goals 16 and 17 are implemented through the City’s acknowledged Comprehensive Plan (portions of Articles 4, 5 and 6) and WDC Chs. 16.160 and 16.164. Consequently, the Officer concludes that an important legal function of this proceeding is to address CZMA consistency through the City’s acknowledged comprehensive plan and land use regulations, pursuant to Goals 16 and 17. While the applicant generally disputes the applicability of local land use regulations to the project, it concedes that it is subject to CZMA regulations that are implemented locally, which in this case include WDC chs. 16.160 and 16.164 and WCP Articles 4, 5 and 6.

This project is a port industrial development with significant estuary and coastal shoreland impacts, including a 109-acre dredge area and a ~35-acre permanent wetland impact (fill) and construction of new pilings, docks and dolphins. Such activities in the A-

1 and I-2 zones must demonstrate compliance with the standards in WDC ch. 16.160, most notably WDC 16.160.020(B) and (C) – subsection (B) applies to dredging impacts and subsection (C) applies to the construction, installation and use of the piers, pilings and dolphins – both of which require findings of compliance with all of the following discretionary standards:

B. New or expanded facilities for deep-water navigation, port or industrial development requiring aquatic area dredging or filling may be allowed only if all of the following criteria are met:

- 1. The proposed use is required for navigation or other water-dependent use requiring an estuarine location, or is specifically allowed in the applicable aquatic zone; and*
- 2. A need (i.e., a substantial public benefit) is demonstrated; and*
- 3. The proposal does not unreasonably interfere with public trust rights; and*
- 4. Feasible alternative upland locations do not exist; and*
- 5. Potential adverse impacts are minimized.*

C. Deep-water navigation, port or industrial development requiring new piling or dolphin installation, construction of pile-supported structures, or other uses or activities which could alter the estuary may be permitted only if all of the following criteria are met:

- 1. A need (i.e., a substantial public benefit) is demonstrated; and*
- 2. The proposal does not unreasonably interfere with public trust rights; and*
- 3. Feasible alternative upland locations do not exist; and*
- 4. Potential adverse impacts are minimized.*

a) Need/substantial public benefit for the use. The applicant provides extensive documentation about the global demand for natural gas and the importance of national and global energy markets and how this project will generate significant local and regional economic benefits in terms of jobs, wages and tax revenue. See Terminal Application at p 5-91 to 5-92, App. 5A, Exs. 69, 193, p 12-13 & 54-55. In addition to these economic analyses, the Officer heard compelling testimony from a substantial number of local and regional residents as to the importance of such economic drivers to create jobs and economic prosperity, especially following the collapse of the region's timber and fishing industries. While this industrial facility will not create the number of jobs anywhere comparable to the former timber and fishing industries, it is undeniable that this facility will create a significant number of jobs for the construction phase and a smaller number for operation of the facility going forward.

RiverKeeper and other witnesses argue that there is no (or at least not a sufficient) public need or benefit for the natural gas that will be exported or imported through this facility (Ex. 44, p 36-39). Under current market and production conditions, it is clear that this will be an export terminal for the foreseeable future. RiverKeeper cites to a number of research and economic reports that discuss the current and future market for natural gas (Ex. 44, p 36-39 and references cited therein). RiverKeeper and other opponents point out that the small number of long-term operational jobs undercuts the applicant's claims of an economic boon to the region.

The Officer takes a slightly different view than either party. First, the facility in question is an LNG import/export terminal, and the Officer is tasked with evaluating these conflicting claims of economic benefit/detriment in the context of the local land use criteria. This is not a debate about world or regional natural gas markets or the advisability of the world's reliance on fossil fuels, but rather an application to site a terminal facility in Warrenton's shoreline area and estuary. Second, the question under WDC 16.160.020(B) & (C) is not whether there is a public need for natural gas, but whether there is a public need or benefit in constructing this terminal facility in this shorelands location. The Officer takes at face value the applicant's assertions that there is a regional and global market demand for natural gas, and he declines to decide whether that is a good thing or not. The applicant's significant investment in this facility is prima facie evidence of the strength and optimism of the global gas market. The Officer declines RiverKeeper's invitation to evaluate the fluctuations of global gas consumption or the wisdom of relying on carbon fuels. Such an economic analysis is beyond the scope of these local land use criteria, and the Officer concludes it is not contemplated in this criterion. The locational question under WDC 16.160.020(B) & (C), therefore, is more simple than that: is there a public need for this deep water industrial port facility to be located in the shoreline area? The objective of the code section appears to be the prohibition of superfluous port facilities, docks and piers that don't necessarily have to be situated in Warrenton's estuary and shoreland area. The Officer concludes that such a need and connection exists here because the particular use proposed requires close and immediate access to a deep water marine port. This is a use that must be sited in an estuary and near-shore area, and cannot be sited in upland areas away from an estuary.

Almost by definition, this industrial marine terminal plus its docks, pilings and piers must be located close to deep water port and marine areas that deep draft vessels can access. Such would not be the case, and there may not be a public need for a shoreland or estuary location, if this were anything but a deep-water marine industrial terminal development. It would be extremely inefficient and illogical for the City to create an aquatic industrial zone and then determine that a marine port terminal does not need to be situated in a shoreland or estuary area such as this one that is specifically zoned for that use. The only conclusion to be drawn from the City's creation of the A-1 and I-2 zones, application of those zones to the ESP and implication of WDC ch. 16.160 is that the City Commission specifically wanted this sort of use to occur and that it be located in close proximity to the shore and estuary. The fact that the City Commission has zoned areas for this use is compelling evidence of a need and public benefit for precisely this sort of use in this location. The applicant's evidence of job creation, albeit, not equivalent to previous resource job numbers, and the economic significance of the proposed operation are compelling evidence of a public benefit. The evidence of future tax revenues (Ex. 69) compounds this evidence, as do arguments for strengthening of an energy distribution network. This conclusion is confirmed by the Commission's 2006 interpretation that deep water port facilities and water-dependent industrial uses such as this one are allowed in the A-1 and I-2 Zones and therefore must be located in shoreline areas and estuaries. On this basis, the Officer concludes that a preponderance of evidence in the record demonstrates a sufficient need and substantial public benefit to locating this terminal in this location.

b) Does the use unreasonably interfere with public trust rights? WDC 16.160.020(B)(3) requires a finding, based on a preponderance of evidence in the record, that the proposed use will not unreasonably interfere with public trust rights. The application spends little time addressing the public trust impacts of the proposal and essentially limits the discussion to explaining why and how fishing will not be unduly inconvenienced as a result of the exclusion zones. See Terminal Application p 5-92. The applicant's hearing submissions (Ex. 138 & 140) provide some acknowledgement of recreational and commercial fishing in and around the terminal basin and some explanation as to how these public trust activities would be impacted by the terminal operations (Ex. 140, p 6-7). For example, the applicant acknowledges for the first time a 500-yard exclusion zone for LNG vessels while in transit, a 200-yard exclusion zone for LNG vessels moored at dock, and a 50-yard exclusion zone from the dock facilities with no vessels present. The applicant also discusses possible impacts to popular Buoy 10 fishing and offers vaguely to minimize impacts by "restrict[ing] LNG marine carrier arrivals and departures to nighttime periods or when the number of fishermen has decreased during the Buoy 10 fishing season" (Ex. 140, p 7).

Not until its second post-hearing submission does the applicant acknowledge other elements and programs in the lower Columbia River and Youngs Bay designed to preserve dwindling salmon and steelhead stocks and which affect recreational and commercial fishing (Ex. 187, p 25-29). The applicant discusses for the first time the closure of Young's Bay off-channel area to recreational fishing and the Select Area Fisheries Enhancement (SAFE) site in Youngs Bay, which was established as one of the reasonable and prudent alternatives directed by NMFS as mitigation in its Biological Opinion (BiOp) for the Federal Columbia River Power System (FCRPS).¹² In short, the applicant takes the position that, because of these existing fishing restrictions, local fishers are, or should be, accustomed to restrictions similar to what will be imposed by the operation of the LNG terminal facility (Ex. 187, p 27-29). From this, the applicant concludes that fishing restrictions caused by this project will have little or no practical impact on local fishing.

The applicant's third post-hearing submission offers little more discussion (Ex. 191, p 4-5), but it provides a comprehensive summary in its closing argument of the project's impacts on fishing (Ex. 193, p 31-33) and other public trust rights (Ex. 193, p 56-57). The applicant asserts that the area to be impacted by dredging, construction of the marine facilities, and on-going vessel operations has "minimal biological significance," citing findings adopted in 2006 by the City Commission in support of its zone change decision for the ESP (Ex. 193, p 57). It also asserts that the limitations that might be imposed on fishing by LNG terminal operations are dwarfed by the more onerous restrictions imposed on fishing by the Young's Bay Closure Zone and the Young's Bay SAFE area designation. From this the applicant concludes that the terminal facility will have

¹² The FCRPS is a collaborative program of the US Army Corps of Engineers, the Bonneville Power Administration and the Bureau of Reclamation for the operation of 31 federal hydroelectric dams on the Columbia River and its major tributaries. NMFS issued its BiOp in 2008, which was supplemented in 2010 and 2014.

some impacts on public trust rights, but will not unreasonably interfere with those rights.

While the applicant acknowledges that the scope of the Public Trust Doctrine (PTD) encompasses aquatic habitat for fish, it asserts that the state has ample authority to allow the dredge and removal of estuary fish habitat, even for non-water related uses (Ex. 193, p 56-57). The applicant also argues that the estuary habitat that would be lost to the 109-acre dredge (1.2 million cy) for the vessel turning basin, would not eliminate or impact significant fish habitat, at least significant fish habitat that is in short supply. *Id.* The applicant relies in part on the A-1 zoning and the City's 2006 code interpretation as conclusive determinations that the City Commission has already taken this habitat loss into account and found it acceptable because of the estuary's "minimal biological significance" (Ex. 193, p 23 & 57).

RiverKeeper and other opponents similarly spend a lot of time arguing that the exclusion zones present a significant and unreasonable interference with public trust rights because they would preclude fishing access to significant areas for significant amounts of time, as does the exclusion of the public from the ESP (Ex. 44, p 40-44; Ex. 83, p 15-18; Ex. 183, p 11-15). RiverKeeper also relies on agency comments from Oregon Department of Fish and Wildlife to the USACE in January 2015 (Ex. 44, attachment 63), an August 29, 2015 ODFW comment to City of Warrenton (Ex. 21), and a September 21, 2015 ODFW comment to Warrenton (Ex. 186). RiverKeeper also focuses on the broader scope of the PTD to include wildlife and fish and the critical habitat identified as necessary for the sustainability of those populations in trust for the people of the State, including setting fishing limits and protecting habitat to prevent the extinction of those species (Ex. 44, p 42-44; Ex. 188, p 15).

The starting point for addressing this criterion is the language of the standard: "the proposed use does not unreasonably interfere with public trust rights." The applicant correctly notes that the standard expressly allows some degree of infringement and does not preclude all interference with public trust rights, only unreasonable interference. Quite clearly, a new marine port facility and the passage of these LNG ships will temporarily exclude boat-based fishing for 500 yards on either side of an LNG vessel while ships are in passage. A longer temporary 200-yard exclusion will apply while vessels are at dock, and a permanent 50-yard exclusion will apply around the dock facilities when vessels are not present. The Officer heard testimony that these exclusion zones also apply to the large ocean-going commercial passenger vessels, not just LNG vessels, but there was testimony that these are significant limitations on both commercial and recreational fishing that are already heavily-constrained by other exclusions, temporal and spatial limitations.

The Officer finds the evolution of ODFW comments on this project from January 2015 to late September 2015 are compelling evidence of the project's impacts on fish, fishing, fish habitat, on-going fish recovery efforts, and thus public trust rights. The testimony of affected fishing organizations and individual fishers is also compelling and credible evidence that these impacts are real and that they significantly (unreasonably) impact public trust rights (Exs. 4, 7, 9, 25, 43, 48, 51,

80, 96, 103, 108, 118, 119 & 123). ODFW's final comment letter (Ex. 186), submitted just before the record closed, is most telling:

1) The Applicant suggests that ODFW's failure to raise issues other than those expressed in our August 29, 2015 letter to the City of Warrenton [Ex. 21] is an indication that our other concerns (such as those raised in our response to the Corp's Joint Permit Application [Ex. 44, attachment 63]) had been resolved... We can assure Warrenton that ODFW continues to have substantial issues with the project proposal ranging from the adequacy of proposed compensatory mitigation to the potential impacts of fish entrainment in ballast and cooling water intakes.

* * *

3) The Applicant states that the presence of the Young's Bay Control Zone (YBCZ) already restricts recreational fishing access, therefore safety zones will not further impact recreational fishing in the area. Warrenton should be aware that the YBCZ only restricts angling for a portion of the year, while the proposed security zones are effective the entire year. Further, Warrenton should also be aware that the Department is currently evaluating the area at the mouth of Young's Bay for potential expansion of the Young's Bay terminal commercial fishery. The expected east boundary for the expanded fishing area would be adjacent to the proposed OLNG terminal, and therefore, commercial fishing activity in this area could be impacted by security zones around docked and marine carriers in transit and maneuvering in the turning basin.

In addition, it is also important to point out that recreational vessels will be periodically prohibited (about 250 times each year) from movement in and out of the Skipanon River during the times that the LNG marine carriers travel between the berth and the federal navigation channel. These safety closures will permanently prohibit recreational fishing and crabbing from a 100 acre area at the marine terminal, and will prohibit transit through the turning basin area over a period of about 125 hours each year.

Given the potential impacts to recreational and commercial fisheries listed above, the Department suggests that the Applicant should be providing more detail characterizing the local importance of the commercial recreational fisheries and how those fisheries will (or may) be affected during construction and operation of the OLNG terminal, berthing dock, and other facilities. We also suggest that the Applicant include a detailed description of proposed mitigation actions designed to offset any losses of recreational and/or commercial boating and fishing opportunities that result from adherence to the proposed Oregon LNG safety/security zones. (Ex. 186, emphasis added)

Echoing these concerns, in its scoping comments on the project, NMFS requested, among other things, "[a]n estimation of potential monetary losses

incurred by both commercial and recreational fisheries and fishing communities due to the proposed project as well as other existing and foreseeable LNG projects within the same geographic area” (Ex. 44, attachment 5).

The Officer does not view the applicant’s response to ODFW comment letters or NMFS scoping comments to be adequate. The Officer finds that the applicant has not adequately characterized and quantified the impact of its operations on commercial and recreational fishing, nor has it demonstrated that these impacts will not be unreasonable. These impacts to fishing and where fishing vessels can go is a direct result of the construction, installation and operation of the pilings, piers and docks as anticipated by WDC 16.160.020(C) – mostly the operation and less so the construction/installation. It is not sufficient to simply state that the impacts are of the same type that local fishing already experiences with other large vessel traffic and closures due to the YBCZ and Young’s Bay SAFE Area restrictions. These preexisting fishing restrictions are significant and do not subsume the LNG terminal’s impacts within their temporal or geographic scope. The YBCZ and Young’s Bay SAFE Area restrictions are designed to preserve and help recover the estuary’s dwindling and endangered fish populations, not to provide industrial operations, such as this LNG terminal, with greater latitude to degrade fish habitat and impact fish populations. The existing restricted fishing areas and periods are intended to help endangered and diminished fish populations recover to the point that fishing can again expand. It appears from ODFW’s comments that the agency either believes that the LNG terminal operation will work against those recovery efforts by causing unacceptable habitat impacts, or that the applicant has not provided enough detailed information for ODFW to determine that it won’t have that adverse effect. Either way, ODFW is the state agency with expertise in this area, and at the time the record closed, it was not satisfied with the project’s analysis of the magnitude of impacts, the proposed mitigation or both. On this basis, the Officer finds that this application falls short of the mark under WDC 16.160.020(C), from which the Officer concludes that operation of the piers, docks and other in-water constructed elements will (or is likely to) unreasonably interfere with these public trust rights. As discussed in more detail in response to WDC ch. 16.164 (Impact Assessment and Resource Capability Determination), the Officer concludes that the mitigating measures are not sufficient to prevent unacceptable losses, irreversible damage, unacceptable degradation or reduction in estuary resources from this project, all of which affects public trust rights.

The Officer reaches a similar conclusion with regard to the project’s impact on fish habitat, caused by 109 acres of estuary dredging (1.2 million cy) and ~35 acres of permanent wetland impacts, which is a recognized resource within the scope of the public trust doctrine (PTD) and thus a public trust right. As a starting point, Oregon’s view of the PTD is broad and encompasses public ownership in the state’s fish and wildlife resources¹³ and wetlands.¹⁴ Oregon’s Supreme Court has upheld state authority to regulate fish harvests so that fish “may have an opportunity to propagate their species, and be preserved from

¹³ *Simpson v. Department of Fish and Wildlife*, 242 Or.App. 287, 255 P3d 565, 569-73 (2011).

¹⁴ *See Morse v. Oregon Div. State Lands*, 34 Or App 853, 581 P2d 520, *aff’d* 285 Or 197, 590 P2d 709 (1979).

extermination.”¹⁵ The Court subsequently reiterated that the state holds “migratory fish in the navigable waters ... in its sovereign capacity in trust for all its citizens ... and as an incident of the assumed ownership, the legislative assembly may enact such laws as tend to protect the species from injury by human means and from extinction by exhaustive methods of capture.”¹⁶ On this basis, the Officer takes a similarly expansive view of the PTD and protected public trust rights under WDC 16.160.020(B)(3) and (C)(2) to include fish habitat within the lower Columbia River, its estuary and related estuary tidal wetlands.¹⁷

The record contains credible, compelling evidence that the Lower Columbia River Estuary, which includes the area proposed for the LNG turning basin and dock facilities, is habitat for ~76 fish species, 16 of which are federally listed as threatened or endangered and 3 of which are listed Species of Concern by Oregon (Terminal Application App G, Table 3-1; Ex. 44, attachment 5). The Officer views the Williams Report (Ex. 44, attachment 1) as credible and compelling evidence of use of the terminal area and Young’s Bay by juvenile endangered salmon and steelhead. The Officer notes the applicant’s concession that its consultants did not take into consideration several of the sources cited by the Williams Report because they were published after the applicant’s Biological Assessment was prepared (Ex. 187, p 33-35; Ex. 193, p 29). The applicant states, however, that the studies evaluated in its Biological Assessment considered data that were used in the later studies cited in the Williams Report. The Officer is not convinced by the applicant’s statements that it has sufficiently considered the Williams Report, the sources it cites, nor the damage to estuary habitat used by ESA-listed salmonids.

With regard to impacts to listed salmon and steelhead, the application states that it will take certain steps to minimize potential impacts to listed fish species by curbing its dredging activities (Terminal Application p 5-135 to 5-136, App G, p 3-74 to 3-87, terminal staff report at 211) including the following:

- Dredging will be conducted during ODFW approved in-water work periods (Nov 1 to Feb 28) to “minimize potential impacts to listed fish species through the avoidance of vulnerable salmonid life stages and peak migration periods.
- Dredging will occur in relatively deep water areas and, therefore, should ‘avoid’ areas where subyearling Chinook and chum salmon are present. Dredging may also be performed with a clamshell bucket dredge, which is unlikely to entrain salmonids or other ESA-listed or proposed species.
- If at any time during dredging activities, listed salmonids are observed in distress or a listed salmonid is killed, operations will cease and NMFS will be notified.

¹⁵ *State v. McGuire*, 24 Or. 366, 33 P. 666 (1893).

¹⁶ *State v. Hume*, 52 Or. 1, 5-6, 95 P. 808 (1908)

¹⁷ See generally Michael C. Blumm & Erika Doot, *Oregon’s Public Trust Doctrine: Public Rights in Waters, Wildlife, and Beaches*, 42 *Env’tl Law* 375 (2012) - attachment 78 to Ex. 44.

The applicant concludes in its Columbia River Estuary Impact Assessment (Terminal Application App G) that, while the terminal project and operations going forward “represents a potential degradation or reduction of estuarine resources,” these along with the other mitigation measures it proposes are sufficient to “eliminate or minimize to an acceptable level” the expected adverse impacts (Terminal Application p 5-141).

RiverKeeper and numerous other opponents disagree that the project’s impacts to estuary resources, especially habitat for listed fish species, are as de minimus as the applicant claims or that the mitigation measures will reduce those impacts to acceptable levels. ODFW appears to agree with the opponents, and in its final comment letter on September 21, 2015 (Ex. 186) ODFW incorporated its prior concerns and comments about the project (Ex. 21; Ex. 44, attachment 63) and maintained the following relevant concerns:

4) As indicated above, Warrenton should also be aware that ODFW has concerns regarding the Applicant’s proposal to withdraw water from the Columbia River for OLNG carrier ballast and cooling water. Our review of OLNG’s proposal to not provide fish screens on these intakes has raised some concerns about potential negative effects to hatchery fish reared in the Young’s Bay SAFE area. Should our concerns regarding fish screening not be satisfactorily addressed, we will be recommending mitigation for the potential loss of those and other fish.

5) Lastly, ODFW has concerns that the proposed Young’s River Mitigation site will not adequately mitigate for impacts to estuarine wetland habitat at the proposed OLNG terminal and marine facility site. Specifically, we do not believe that the proposal is consistent with ODFW’s Habitat Mitigation policy (OAR 635-415-000 through 0025) which governs the Department’s provision of biological advice and recommendations concerning mitigation for losses of fish and wildlife habitat caused by development actions. ODFW considers the estuarine wetland habitat at the terminal site to be Category 3 Habitat per the Habitat Mitigation Policy. For this habitat category, ODFW recommends (1) no net loss of either habitat quantity or quality; (2) avoidance of impacts through alternatives to the proposed development action; or (3) mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality. The primary issue with the Applicant’s proposal is that: (1) mitigating loss of tidal saltmarsh habitat with restoration of freshwater marsh habitat would be considered by ODFW to be out-of kind habitat mitigation; and (2) the assemblage species impacted at the terminal site would not be the same as those benefitting from the restoration of the Young’s River site and would therefore be considered out-of-proximity mitigation. If the mitigation standard is not met, per OAR 635-415-0025(3)(c) the “Department shall recommend against or shall not authorize the proposed development action.” (Ex. 186)

RiverKeeper provided several studies that analyzed the use of the Lower Columbia River Estuary, Young's Bay and the terminal site by listed fish species and the value of these areas as fish habitat (Ex. 44, attachments 1 & 2 and sources cited therein). The most relevant and compelling conclusion about the importance of these areas and the project's impact on ESA-listed salmonids that are supposed to be protected here, is the summary of impacts from the Williams' report (Ex. 44, attachment 1):

Based on these results, it is clear that construction and operation of the proposed Oregon LNG project would negatively impact ESA-listed salmonids of a variety of species and life stages throughout the entire year. The habitats surrounding the proposed Oregon LNG site, both shallow water and deeper water, are used extensively by salmonids including fry for rearing, by juvenile salmonids for rearing and outmigration, and by returning adult salmon. Impacts would likely be greatest for fry-stage juvenile subyearling Chinook and chum salmon, which use the shallow water habitats of the Lower Columbia River estuary extensively for rearing and growth prior to outmigration.

While the importance of LCRE habitats for salmon production in general is increasingly recognized, the LCRE's Reach A may be an especially important nursery, rearing, and transitional stage for aggregated production from the lower Columbia River and its tributaries, particularly for the Youngs Bay watershed and for coho and chum salmon recovery efforts in the lower river. The fry migrant life history type (i.e., subyearling) contributes to Chinook salmon spawner success in the Columbia River basin, especially to the lower-river populations. For example, chum salmon are predominantly fry migrants and historically comprised a large biomass of adults returning to the lower Columbia River basin (Johnson et al. 1997). Both of these ESA-listed species (chum and fall Chinook) are dependent upon utilizing shallow water habitats for extended periods that conflict with the construction and operation of the proposed OLNG project.

Impacts to nearshore habitats from turbidity and sedimentation associated with project construction and dredging will have long-term negative effects on these species and their recovery. Similarly, construction of the OLNG project site immediately adjacent and downstream of significant restoration efforts involving a suite of stakeholders (and large investments) that include federal, state, tribal and local constituents does not seem wise. (Ex. 44, attachment 1).

Evidence in the record shows that the Lower Columbia River Estuary, and Young's Bay in particular, play a critical role in the 2008 BiOp for the FCRPS and the two subsequent Supplemental BiOps (2010 and 2014), which identify funding for the Youngs Bay SAFE Area and others as a Reasonable and Prudent Alternative, *i.e.*, as mitigation for impacts to ESA-listed fish species caused by operation of the federal hydro dam system. The fact that the FCRPS BiOp is a "jeopardy opinion" and specifically identifies Youngs Bay for mitigation projects, that it is designated as a SAFE Area, that there is a designated closure zone that includes the terminal area, and that the area is identified by credible scientific

studies as habitat for several ESA-listed salmonids at different times of the year for different lengths of time, is strong evidence of a significant and unreasonable impact on this important public trust resource. The ODFW comments demonstrate to the Officer that maintaining the integrity of these fish protection areas and the ESA-listed species they harbor is very important, that the applicant has not addressed those or other impacts sufficiently, and that the mitigation measures offered are not sufficient. The fact that the FCRPS BiOp includes Youngs Bay as part of the mitigation for the likely take of ESA-listed species and the size and scale of the impact this project will have on salmonid habitat in the Lower Columbia River Estuary strongly suggests to the Officer that the NMFS BiOp that will be issued for this project in the future will also be a jeopardy opinion.¹⁸ The Officer regards ODFW and NMFS to be the two agencies with primary credible expertise in evaluating impacts of projects such as this one on salmonid habitat and the effectiveness of mitigation to prevent or minimize those impacts.

The Officer expressly rejects the applicant's suggestion (Ex. 193, p 57) that the portion of the Lower Columbia River Estuary that will be impacted by the 135-acre turning basin, the 109-acre dredge area or the 35-acre permanent wetland fill has "minimal biological significance," simply because the City Commission reached that conclusion in 2006 in support of its zone change decision for the ESP. That 2006 proceeding and that general non-specific finding was no substitute for this specific estuary impact inquiry under Goals 16 and 17, as LUBA so found. More to the point, the City Commission found in the 2006 proceeding, and LUBA agreed, that Goal 16 compliance would be determined, along with any required mitigation needed to meet Goal 16's estuary protection requirements in the subsequent development permit process.¹⁹ The Officer reaches the same conclusion about the 35-acre permanent wetland impact (fill).²⁰ The present process is the one that LUBA was referring to in its 2006 opinion,

¹⁸ To date, the NMFS has not issued a BiOp for the Oregon LNG project, for which FERC is the lead federal agency. As explained under WDC ch. 16.164 *infra*, evidence and argument in the record from ODFW (Ex. 21 & 186, Ex. 44, attachment 63) and protections for Youngs Bay imposed by the FCRPS jeopardy BiOp as mitigation for take caused by the FCRPS operations, strongly suggests that a jeopardy opinion from NMFS is likely in the present case. Either that or there is simply not enough credible evidence in this record for the Officer to conclude that the project's impacts to the Lower Columbia River Estuary resources are acceptable or will be mitigated to acceptable level.

¹⁹ In its affirmance of the City in the 2006 proceeding, LUBA held that "the development standards applied during federal, state and local permitting processes are sufficient to ensure that any [estuary resource] loss is mitigated. While the city did not impose a specific condition requiring mitigation, it did require in condition 2 that any subsequent development proposal comply with all applicable local laws, including code provisions implementing Goal 16 that appear to require that loss of significant habitat be mitigated. We agree with intervenor that Goal 16 does not require more in the context of the present plan and zoning amendments." *People for Responsible Prosperity, et al., v. City of Warrenton*, 52 Or LUBA at 204.

²⁰ As the Officer already concluded, the 35-acre permanent wetland impact is analyzed under Goal 16 *infra* and not Goal 5 *supra*. According to LUBA's affirmance of the City Commission's 2006 decision, the Goal 16 analysis under WDC ch. 16.164 was not conducted in 2006, but is conducted today in light of the present spate of land use permits and documentation of the project's anticipated impacts to these Goal 16 resources. The 35-acre permanent wetland fill also poses unresolved and therefore unreasonable impacts on this public trust right, as confirmed by ODFW's most recent comment letter (Ex. 186).

and the Officer now determines this project's compliance with Goals 16 and 17 *infra* under the WDC ch. 16.164 discussion.

On this basis, the Officer concludes that the project will unreasonably interfere with significant public trust rights in the form of adverse impacts to fish habitat in this portion of the Lower Columbia River Estuary and by impacting habitat that is a state and federally acknowledged as important mitigation area for ESA-listed salmonids that use this and near-by shallow water and medium depth habitat.²¹ This conclusion relates to the 109-acre dredge footprint and the ~35-acre permanent wetland impact. The Officer agrees with the arguments asserted by RiverKeeper in this regard (Ex. 44, p 40-44; Ex. 83, p 16-18; Ex. 188, p 11-16), and the concerns expressed by ODFW (Exs. 21 & 186; Ex. 44, attachment 63) and finds the opponents' evidence compelling and credible (Ex. 44, attachments 1, 2 & 3).

- c) **Feasible alternative upland locations do not exist.** WDC 16.160.020(B) and (C) require a demonstration that feasible alternative upland locations do not exist for the proposed facility. The applicant asserts that, as a water-dependent industrial use, locations for the LNG terminal are limited to shorelands with deep water access and appropriate industrial zoning (Terminal Application at 5-92). The applicant also points out that it considered alternative locations and arrangements to achieve the stated purpose and need for this project. See DEIS §3.0 (Alternatives), especially §3.3 (LNG Terminal Alternatives). The applicant asserts that the DEIS alternatives analysis satisfies this criterion (Ex. 187, p 52-56). In its alternative sites analysis, the applicant identified multiple upland locations for the terminal, but rejected each one for a variety of reasons related to legal obstacles, logistical problems, distance in-land, number of bridges that would have to be underpassed to get to them, and the like (DEIS §3.3.2).²² Only the preferred site, however, was encumbered by Warrenton's Columbia River Estuary Shoreland and Aquatic Area regulations, and none of the applicant's reasons for rejecting these alternative upland sites were related to concerns listed in WDC ch. 16.160.

RiverKeeper and other opponents assert that the applicant has failed to carry its burden of proof with regard to this criterion (Ex. 44, p 44). According to RiverKeeper, to the extent the proposal is basically a liquefaction facility, it could be located elsewhere away from the Lower Columbia River Estuary, and the

²¹ The Officer recognizes that the majority of the dredge area for the terminal is not shallow water habitat. However, the record shows that the area is still out of the main shipping channel and is medium depth habitat for several ESA-listed salmonids during several life stages, throughout most of the year and for differing durations depending on the species (Ex. 44, attachment 1).

²² In the DEIS the applicant says it considered and reject alternative sites in the Puget Sound area for the terminal due to likely legal challenges. It also states that alternative sites in Coos Bay Oregon and Grays Harbor Washington were considered and rejected due to inadequate shipping channel depth (DEIS p 3-13). The applicant goes on to state that "Eight locations along the lower Columbia River with reasonable access to the Portland metro area were initially considered as potential terminal locations." *Id.* All of these are feasible upland locations for the LNG terminal in that they are outside of the Columbia River Estuary Shoreland and Aquatic Area regulated by WDC ch. 16.160.

liquid super-cold natural gas could be piped to ships in the estuary. In support of its argument that this is a feasible arrangement, RiverKeeper cites one example from Maryland (Ex. 44, p 44).

As a general proposition, RiverKeeper is correct that this facility could be designed similarly to the Dominion Cove Point LNG terminal in Maryland, where the liquefaction plant is about one mile from the coast and loading terminal. In that sense, there are almost a limitless number of suitable upland alternatives, but the Officer interprets this criterion to require alternatives that are consistent with the project's stated purpose and need (DEIS p 1-8). It is also true that WDC 16.160.020(B)(4) and (C)(3) do not articulate an alternatives analysis type requirement; rather, WDC ch. 16.160 requires the applicant to prove that "feasible alternative upland locations do not exist for the proposed facility." This is a relatively high standard that basically requires the applicant to prove a negative. In that light the Officer does not believe that DEIS §3.3 alternative sites analysis satisfies the city's criterion.

The unique aspect of the applicant's preferred location is that the entire site was zoned A-1 and I-2 for this specific purpose, where the liquefaction facility can be situated in conjunction with a loading terminal. This is a lot of the applicant's justification under this criterion (Ex. 187, p 54). However, the first criterion in WDC 16.160.020(B) requires that the new industrial use be water dependent or specifically allowed in the applicable aquatic zone. The unique nature of the zoning therefore is already taken into account in these criteria and cannot be used basically to invalidate the "feasible alternative upland location" criterion. The objective of WDC ch. 16.160 appears to be to ensure that uses that don't have to be sited in the Columbia River Estuary will not be approved there, thus the relatively high burden of proof which this standard imposes on an applicant. Again, WDC ch. 16.160 appears to be one of those Goal 16 siting standards that was not addressed in the 2006 proceeding in which the A-1 and I-2 zones were applied to the ESP. It is applied here for the first time to this specific project.

The record shows that multiple alternative upland locations exist for this LNG terminal – 8 of them in the Lower Columbia River, but not necessarily in the LCRE, and all with reasonable access to Portland (DEIS p 3-13). The applicant rejected all of those, except the preferred site, for reasons unrelated to Warrenton's protections of the Lower Columbia River Estuary under WDC ch. 16.160. Even though the applicant asserts that alternative sites farther up-stream from the ESP would require more dredging (Terminal Application at 5-87), many of those sites are not in the Lower Columbia River Estuary, and none are in Warrenton's Goal 16 Estuary and Shorelands Area. From this, the Officer concludes that Warrenton has placed a high priority on the preservation of its estuary and shoreland areas, and that preservation objective should be given a higher priority in the list of considerations for alternative sites than appears to have happened here. In that light, the alternative sites identified by the applicant in the DEIS were rejected for reasons unrelated to Goal 16 considerations or Warrenton's Estuary and Shoreland Area protections; therefore, none of those reasons render these alternative sites infeasible in the context of WDC ch. 16.160. All or most of these alternative sites are upland relative to the preferred site, and the Officer concludes they are still feasible for purposes of avoiding impacts to Warrenton's Columbia River Estuary Shoreland and Aquatic Area.

From this, the Officer concludes that the applicant has not met its burden of proof under WDC 16.160.020(B)(4).

With regard to WDC 16.160.020(C)(3) and whether there are suitable alternative upland locations for the in-water constructed elements, i.e., pilings, piers and docks, the Officer reaches a different conclusion. Unlike the terminal plant as a whole, for which there are other alternative upland locations outside of Warrenton's Goal 16 and 17 protected areas, docks, piers and pilings really have no other alternative location. It might seem to be a trite conclusion, but docks, piers and pilings, as a general proposition, can only be sited in estuary areas, and the structure of WDC 16.160.020 appears to require a separate analysis of the terminal facility as a whole versus the docks, piers and pilings. Thus, the Officer concludes that such a need exists because this particular proposed use requires close and immediate access to a deep water marine port. This is a use that must be sited in an estuary or near-shore area and cannot be sited in upland areas away from an estuary. This is the same analysis but a different conclusion than the Officer reached regarding the same criterion and the LNG terminal facility as a whole because of the narrow focus of WDC 16.160.020(C) on the in-water and over-water pier and piling elements.

- d) Does the proposal minimize potential adverse impacts as required by WDC 16.160.020(B) & (C)?** The applicant describes its potential mitigation measures for the project impacts to estuary resources in its Impact Assessment (Terminal Application, App G, §3.2.3; Terminal Application p 5-93 to 5-94). The Officer notes that these measures are "potential," because the Impact Assessment expressly states that "Oregon LNG has not determined the exact type [of dredge technology] to be used." (Terminal Application, App G, p 3-75). As NMFS said in its NEPA scoping comments on this project, the specific dredging technology and methods matter and will dictate the precise extent of impact to fish that use the turning basin as habitat (Ex. 44, attachment 5). ODFW also described what it viewed as the impacts of the dredge proposal and questioned severely the lack of clarity on methods, timing and the efficacy of the mitigation measures (Ex. 44, attachment 63). The applicant responds to RiverKeeper's criticism by describing the many ways that it has "minimized" impacts to recognized resources and has responded to ODFW comments (Ex. 191, p 17-22) and NMFS scoping comments (Ex. 191, p 15-17).

The Officer's resolution of this criterion again turns on the precise wording of the standard, viz., "[p]otential adverse impacts are minimized." The standard contains no qualifications such as "to the extent practicable" or otherwise. As with the previous standard, this one presents a relatively high burden of proof for the applicant. Given the Officer's conclusions regarding the project's unreasonable interference with acknowledged public trust rights, ODFW's continuing concerns about the project and its mitigation (Ex. 186) and the likelihood that NMFS will find jeopardy, the Officer concludes that the proffered mitigation (Terminal Application p 5-93 to 5-94; App G, §3.2.3; Ex. 191, p 15-22) does not meet the standard because there remain unreasonable impacts to protected public trust rights and the feasible alternative upland locations were rejected for reasons unrelated to Warrenton's Estuary protections in WDC 16.160. Therefore, the project impacts of the terminal as a whole do not appear to have been minimized as this criterion requires.

With regard to the piers, docks and pilings under WDC 16.160.020(C)(4), however, the Officer reaches a different conclusion than he did for the plant as a whole under WDC 16.160.020(B)(3). First, the impact of just these in-water and over-water constructed elements is far less than the 109-acre dredge and ~35-acre permanent wetland fill required for the larger terminal. Second, the unacceptable impact of the pilings, piers and docks is the significant exclusion zones imposed on other vessels by the Coast Guard. The Officer finds that the existence and size of these exclusion zones is out of the applicant's power to control. The Officer concludes that, arguably, the applicant has provided sufficient evidence that potential adverse impacts of the pilings, piers and docks are minimized because the exclusion zones associated with LNG vessels and the dock are imposed by the Coast Guard. Consequently, there does not appear to be anything the applicant can do to reduce these exclusion zones short of abandoning the project altogether. The Officer also believes that the applicant has taken sufficient steps to lessen and mitigate the harmful impacts of construction and installation of these in-water and over-water elements by the timing of construction, use of bubble curtains, vibratory pile drivers and other sound dampening techniques and construction methods (Terminal Application p. 5-135 to 5-136; DEIS p 4-85 to 4-91). The Officer is not overly convinced that these techniques will be enough or be deemed sufficient to satisfy NMFS. The Officer concludes from this evidence that other/different techniques will be required as reasonable and prudent alternatives in its BiOp, when it is issued.²³ For purposes of WDC 16.160.020(C)(4), however, the applicant has, over time, proposed an increasing number of construction techniques to reduce harmful impacts of the construction and installation of the in-water and over-water elements. The Officer concludes that the applicant has met this standard.

7. WDC 16.160.040: Columbia River Shoreland and Aquatic Area standards, Dredging standards and Mitigation/Restoration standards:

Another local land use provision implementing State-wide Planning Goals 16 and 17 is WDC 16.160.040 (Dredging and Dredged Material Disposal), which applies to dredging operations in the Columbia River Shoreland and Aquatic Area, and was not addressed by the City Commission in the 2006 proceeding.

- a) Need, interference with public trust rights, feasible alternative upland sites, potential adverse impacts minimized.** WDC 16.160.040(A), applicable to all estuary dredging and dredge disposal projects including this one, provides that:

Dredging in estuarine aquatic areas ... shall be allowed only if all of the following criteria are met:

- 1. Dredging is specifically allowed by the applicable aquatic zone ...*
- 2. A need (i.e., a substantial public benefit) is demonstrated; and*

²³ NMFS provided original scoping comments on the harmful effects of underwater noise and concussion on sub-adult ESA-listed salmonids (Ex. 44, attachment 5, p 7), as did ODFW (Ex. 44, attachment 63, p 3). In-water construction techniques are common concerns of these agencies, who frequently impose permit conditions specifying how pile driving and dock construction shall be done. That will likely happen here when NMFS issues its BiOp for this project.

3. *The proposal does not unreasonably interfere with public trust rights; and*
4. *Feasible alternative upland locations do not exist; and*
5. *Potential adverse impacts are minimized.*

As a starting point, it is uncontested that the use is allowed pursuant to WDC 16.160.040(A)(1) as an “approved water dependent use of aquatic areas or adjacent shorelands that requires an estuarine location.” With regard to the balance of the WDC 16.160.020(A) requirements, they restate the criteria from WDC 16.160.020(B) and (C), which the Officer addressed *supra*. Those findings with regard to those same criteria are incorporated herein by this reference. The Officer concludes, based on a preponderance of credible evidence in the whole record, that the application fails to demonstrate compliance with WDC 16.160.020(A)(3), (4) and (5). Beyond that, RiverKeeper asserts that this project fails to meet the standards in WDC 16.160.040(B), (C), (F) and (G), all of which are discussed next.

b) Dredging shall be the minimum necessary to accomplish the proposed use.

WDC 16.160.040(B) requires that, “[w]hen dredging is permitted, the dredging shall be the minimum necessary to accomplish the proposed use.” RiverKeeper claims the project fails to demonstrate compliance with WDC 16.160.040(B) because the applicant “does not evaluate designing the turning basin to accommodate smaller LNG vessels” (Ex. 44, p 48). The applicant responds that “80% of the LNG vessels will already be smaller vessels” (Ex. 193, p 60) and, besides, the applicant cannot restrict the LNG vessels serving the terminal to a specific size (*Id.*). The project’s anticipated vessel sizes are discussed at Terminal Application p 2-2, 2-3 & 5-87. Alternative basin dredge footprints (anything less than 109 acres) do not appear to have been considered in the DEIS.

Resolution of this issue turns on whether there is a preponderance of credible evidence in the record to demonstrate that it is met. The applicant states that most (80%) of the vessels are of the smaller size, which presumably means that a turning basin smaller than 109 acres would suit. Beyond that, all the applicant says is that it can’t restrict LNG vessels based on size. The Officer is aware of no legal basis for that statement and sees no evidence in the record that a smaller turning basin (anything smaller than 109 acres) was considered, despite the fact that most vessels do not appear to need a turning basin that big. The most that can be said is that the basin size and dredge volume are the smallest needed to accommodate the largest LNG vessel that is likely to serve the terminal. This does not address the requirement in WDC 16.160.040(B), and it does not appear that the applicant has sized the dredge volume to be the “minimum necessary to accomplish the proposed use.” From this lack of evidence, the Officer concludes that the applicant has not met this standard.

c) Undesirable erosion, sedimentation, increased flood hazard and other changes in circulation shall be avoided:

WDC 16.160.040(C) requires that “[u]ndesirable erosion, sedimentation, increased flood hazard, and other changes in circulation shall be avoided at the dredging and disposal site and in adjacent areas.” This dredge criterion, implementing Goals 16 and 17, imposes another relatively strict standard with no qualifying language such as “to the extent

practicable” or “to an acceptable level.” Instead, the standard requires that the applicant demonstrate that “[u]ndesirable erosion, sedimentation, increased flood hazard, and other changes in circulation shall be avoided at the dredge and disposal site and in adjacent areas.” RiverKeeper simply says (Ex. 44, p 48) that the standard is not met and cites to its §404 comments to the USACE on the dredge and fill permit (Ex. 44, attachment 70). The applicant responds that it provided extensive hydrodynamic modeling of the dredge operation and that the “DEIS addressed the impacts in detail and determined that they can be acceptably mitigated by the proposed mitigation measures.” (Ex. 193, p 60-61). The staff report reiterates all of the modeling, studies and analyses that the applicant has undertaken and the mitigation measures it will employ to achieve this standard (staff report at 147-149) and concludes that the standard is met. The applicant also cites to the city’s outside expert review (Staff report Ex. 2), and asserts that the consultant “reviewed and concurred with the Impact Assessment.”

The Officer begins with the language of the standard that must be met, which is expressed in pretty mandatory terms without modifiers. Basically, WDC 16.160.040(C) requires that “undesirable” impacts “shall be avoided.” The City Commission, for whatever reason, adopted a standard with little wiggle room for an applicant that proposes a project with any unavoidable undesirable dredge impacts. The applicant has provided abundant (a preponderance of) evidence that it has evaluated the dredge impacts, modeled those impacts and has minimized the impacts to the extent practicable, including mitigating conditions. However, the applicant does not claim that it will avoid all undesirable impacts of the dredge. The record has considerable information about the undesirable impacts of the dredge, beginning with the applicant’s own expert studies (DEIS §4.1.5.2), including RiverKeeper’s §404 comments to the USACE (Ex. 44, attachment 70, p 50-53), RiverKeeper’s expert studies of the undesirable impacts of the dredge (Ex. 44, attachment 1, p 21-25), and ODFW’s §404 comments to the USACE (Ex. 44, attachment 63, p 4-6). The most that can be said is that the applicant may have minimized the potential adverse impacts to the extent practicable (Terminal Application p 5-95 & 5-97), but the standard in WDC 16.160.040(C) is more demanding than that. Based on the strict language in WDC 16.160.040(C) and the applicant’s own concession that there will be undesirable impacts from the dredge, the Officer cannot conclude that the standard is met.

- d) Adverse short-term effects of dredging shall be minimized:** WDC 16.160.040(F) requires that *“[a]dverse short-term effects of dredging and aquatic area disposal such as increased turbidity, release of organic and inorganic materials or toxic substances, depletion of dissolved oxygen, disruption of the food chain, loss of benthic productivity, and disturbance of fish runs and important localized biological communities shall be minimized.”*

Unlike the standards discussed above, this standard is not expressed in absolute avoidance terms, but requires mere minimization. It is clear from the record that there will be adverse short-term impacts from the dredge operation. See impact citations in preceding section. However, the record does demonstrate with a preponderance of evidence that the applicant has taken significant measures to minimize those impacts (Staff Report p 151-152). As the applicant points out

(Ex. 193, p 61), a lot of the minimization measures it formulated happened after RiverKeeper's §404 comments to the USACE (Ex. 44, attachment 70, p 50-53) and therefore don't reflect the current/final proposal. Based on a preponderance of evidence, the Officer finds that the applicant has demonstrated compliance with this relatively flexible standard.

- e) **Effects of initial and subsequent maintenance dredging shall be considered prior to approval:** WDC 16.160.040(G) requires that the *"effects of both initial and subsequent maintenance dredging, as well as dredging equipment marshaling and staging, shall be considered prior to approval of new projects or expansion of existing projects. Projects will not be approved unless disposal sites with adequate capacity to meet initial excavation dredging and at least five years of expected maintenance dredging requirements are available."*

Again, this standard, WDC 16.160.040(G), is not expressed in mandatory and absolute terms, but requires that effects be considered and that the applicant demonstrate that its dredge spoil disposal site has at least 5 years of capacity. RiverKeeper claims the applicant has not made an adequate demonstration (Ex. 44, p 48-49), but cites only its §404 comments to the USACE (Ex. 44, attachment 70, p 50-53) from January 15, 2015. The applicant points out that RiverKeeper's January 2015 comments are stale (Ex. 193, p 61-62), and in any event, that it has demonstrated that it did consider both initial and subsequent maintenance dredging and that it has demonstrated 5-year capacity at its disposal site. Based on a preponderance of evidence, the Offer finds that the applicant has demonstrated compliance with this relatively flexible standard.

- f) **Is mitigation and restoration for impacts from wetland fill and shallow to medium depth dredging adequate:** The last set of WDC ch. 16.160 criteria upon which RiverKeeper challenges the project is WDC 16.160.120, which requires specific project design mitigation actions and compensatory mitigation actions (Ex. 44, p 49) *"to ensure that the integrity of the estuary ecosystem is maintained" and that will "maintain the functional characteristics and processes of the estuary, such as its natural biological productivity, habitats, and species diversity, unique features and water quality."* WDC 16.160.120(A) & (B). These are the fundamental discretionary approval criteria in WDC 16.160.120 governing mitigation for impacts to shoreland and estuary resources. The balance of the subsections do not provide discretionary approval standards so much as submittal requirements and mitigation plan elements.

RiverKeeper claims that the applicant's mitigation plan is not sufficient under these standards, citing the Williams and Bierly reports (Ex. 44, attachments 1 & 2) and its §404 comments to the USACE (Ex. 44, attachment 70). The applicant provides extensive discussion about this approval standard (Terminal Application 5-114 to 5-122 & 5-206), plus the mitigation discussion in the DEIS (DEIS §2.1.1.3), in post-hearing comments (Ex. 187, p 40-41, 44-46 & 60-61), and in closing arguments (Ex. 193, p 62-63). Staff concluded that the applicant's evidence and argument were sufficient to demonstrate that the standards in this section were met (Staff Report p 175-189).

The starting point, again, must be the specific language and requirements of the City's code standard. WDC 16.160.120 is aimed at the adequacy and efficacy of

mitigation for estuary and shoreland impacts. Subsection (B)(1) provides a non-exclusive list of options for mitigation design elements, the object of which is to avoid, reduce or rectify the impact. If “after consideration of impact avoidance, reduction or rectification, there are still unavoidable impacts,” the applicant must implement the Subsection (B)(2) compensatory mitigation options. Ultimately, the package of mitigation must achieve the functional requirements in WDC 16.160.120(A) & (B), *i.e.*, “to ensure that the integrity of the estuary ecosystem is maintained” and that it will “maintain the functional characteristics and processes of the estuary, such as its natural biological productivity, habitats, and species diversity, unique features and water quality.” There must be a preponderance of credible evidence in the record that these discretionary standards are met.

The applicant provides the following compensatory mitigation measures, conceding that it cannot avoid, reduce or rectify impacts to estuary or shoreland (wetland) resources under Subsection (B)(1):

- enhancement of about 120 acres of estuarine wetland habitat on the Youngs River near its mouth at Youngs Bay, through dike breaching and access channel enhancement and creation;
- removal/replacement of eight road culverts that represent complete barriers to listed salmonids;
- creation and enhancement of wetlands in the floodplain of the Nehalem River;
- long-term protection (through either conservation lease or purchase) of mature riparian habitat along one or more reaches of high-quality salmonid waterbody habitat; and
- habitat acquisition to maintain and restore old-growth habitat for northern spotted owl and marbled murrelet

“At this time the proposed compensatory mitigation is conceptual and is based on the input from the FWS, NMFS, and state agencies. However, Oregon LNG has stated that it is committed to implementing the minimum elements of compensatory mitigation measures described in this EIS if FERC authorizes the project. For undefined mitigation actions, such as locations of fish barrier removal, Oregon LNG would organize an interagency Adaptive Management Team consisting of representatives from FWS, NMFS, ODF, ODFW, and WDFW that would review specific mitigation projects prior to implementation to ensure their consistency with the mitigation commitments described in this EIS.” (DEIS p. 2-17)

The applicant’s closing arguments perhaps best sum-up its approach to mitigation (Ex. 193, p 62-63): enhancement of ~140 acres (or ~120 acres) of shallow-water estuarine wetland habitat in Youngs Bay near the mouth of Youngs River by breaching a mile-long dike at 2 or 3 points to allow tidal re-flooding of the area:

“Construction and operation of the Terminal will require permanent and temporary aquatic area and wetland impacts. Thus, Oregon LNG identified approximately 120 acres situated on three existing parcels in rural Clatsop County at the mouth of the Youngs River to mitigate

for permanent wetland impacts at the Terminal within the Lower Columbia Watershed [4th HUC]. The conceptual plan at the compensatory wetland mitigation site is to reconnect the historic floodplain that is behind a dike to tidal marsh habitat. This wetland enhancement will comply with the ODSL-recommended enhancement mitigation ratio of 3:1 (3 acres of enhancement for every 1 acre of impact). Thus, Oregon LNG will enhance approximately 105 acres of the 120-acre mitigation site as wetland to compensate for the approximately 34.9 acres (ODSL 3:1 enhancement ratio) of permanent wetland impacts within the Lower Columbia Watershed at the Terminal site. Oregon LNG has discussed the proposed mitigation site at the mouth of the Youngs River with ODSL and other state and federal agencies. While no formal approval commitments have been made, state and federal agencies indicated the location of the site and conceptual plan to reconnect the historic wetland floodplain with the estuary are consistent with state and federal requirements.” (Terminal Application at 5-206)

From this, it is clear that the applicant has not yet firmed-up this mitigation with DSL, the USACE or a cooperating environmental organization to manage the project. Summarizing the mitigation benefits in its closing remarks, the applicant appears to increase the acreage from 120 to 140 acres, and reconfirms that the state (DSL), and federal (USACE) agencies have yet to review, ratify, permit or even endorse the applicant’s proposed mitigation:

“Oregon LNG responded to EPA and Bierly’s comments on the mitigation site. Oregon LNG demonstrated that the Youngs River mitigation site would provide in-kind mitigation because the impacts are primary to freshwater wetlands and marshes with low salinities comparable to salinities at the mitigation site. Comparisons of site elevations show that elevations at the mitigation site are appropriate for restoration of vegetated low marsh habitat, the very type of fringe habitat that opponents have identified as being important for salmonids. Hydrodynamic modeling showed good water circulation throughout the mitigation site. Furthermore, at a mitigation ratio of 3 to 1, the mitigation site would provide a greater area of tidal marsh than the area of wetlands that would be impacted. Whereas diking has repeatedly been listed as a primary cause to loss of historic tidal wetland floodplain habitat, the proposed mitigation would contribute to reversing the cause of the historic loss of tidal floodplain. Oregon LNG also committed to coordinating with USACE and EPA, as commenting agency, in the development of the wetland mitigation plan to ensure compliance with Section 404(b)(1) guidelines.” (Ex. 193, p 62-63)

In evaluating the feasibility or efficacy of proposed mitigation, the Officer must look to at least preliminary comments from reviewing agencies and outside experts who have reviewed the mitigation plans. In this regard, the Officer is persuaded by ODFW comments that the validity of the mitigation plan is far from settled (Ex. 186 & Ex. 44, attachment 63). Just before the record closed in this

proceeding, ODFW reiterated its prior concerns about the applicant's proposed mitigation plan:

"Lastly, ODFW has concerns that the proposed Young's River Mitigation site will not adequately mitigate for impacts to estuarine wetland habitat at the proposed OLNNG terminal and marine facility site. Specifically, we do not believe that the proposal is consistent with ODFW's Habitat Mitigation policy (OAR 635-415-000 through 0025) which governs the Department's provision of biological advice and recommendations concerning mitigation for losses of fish and wildlife habitat caused by development actions. ODFW considers the estuarine wetland habitat at the terminal site to be Category 3 Habitat per the Habitat Mitigation Policy. For this habitat category, ODFW recommends (1) no net loss of either habitat quantity or quality; (2) avoidance of impacts through alternatives to the proposed development action; or (3) mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality. The primary issue with the Applicant's proposal is that: (1) mitigating loss of tidal saltmarsh habitat with restoration of freshwater marsh habitat would be considered by ODFW to be out-of kind habitat mitigation; and (2) the assemblage species impacted at the terminal site would not be the same as those benefitting from the restoration of the Young's River site and would therefore be considered out-of-proximity mitigation. If the mitigation standard is not met, per OAR 635-415-0025(3)(c) the "Department shall recommend against or shall not authorize the proposed development action." (Ex. 186, p 3-4)

See also Ex. 44, attachment 63, p 15-16. This comment echoes the concerns expressed in the Bierly Report (Ex. 44, attachment 2, p 10-11):

"The site proposed for Oregon LNG's development has been proposed for development multiple times in the past. The environmental studies of those proposals have been extensive (Slotta and Boley, 1975; Higley and Holton, 1975; Montagne & Associates, Inc., 1976). These analyses of the physical and biological conditions of the site and surrounding Youngs Bay ecosystem have been significantly updated with work done through the Lower Columbia River Estuary Partnership and others to provide a broader context of the significance of shallow intertidal marshes and flats to juvenile salmon and other ecosystem functions. Given the history of ecological alterations to the Youngs Bay shallow tidal areas and the growing understanding of the significance of these systems to juvenile salmon, further alteration cannot be considered insignificant.

"The proposed development will impact some 35 acres of tidal marsh at the terminal site. Oregon LNG's assumption that the site meets ODFW Priority Habitat Category 5 is based on personal opinion and is not supported by subsequent evaluation of comparable marsh sites throughout the estuary (LCREP, 2013). The ecological evaluations of the East Skipanon Peninsula conducted for other development proposals have not resulted in the conclusion that the marshes of the

Skipanon are “degraded” or “non-essential”. On the contrary, the tidal marshes of the site were considered to constitute a significant impact. The proposed terminal project will likely result in significant impacts to the tidal marshes at the mouth of the Lower Columbia River estuary.

“The proposed site lies in the area of the most significant historical loss of intertidal wetlands in the Lower Columbia River estuary. Nearly all the intertidal wetlands of the Skipanon and Alder Creek area have been diked and alienated from the estuary. Most of the remaining intertidal marshes in the reach have established on unconfined dredge material disposed more than eight decades earlier. Recent research on juvenile salmonid use of the estuary has documented extensive use of similar marshes established on disposal material (Thom et. al., 2012).

“The proposed mitigation site lies nearly 5 to 6 miles up Youngs River, a significantly different relationship to the Columbia River than the impact site. The proposed restoration action also raises questions about the functional benefits to juvenile salmon if the diked area is to be breached in only two or three locations. There is no biological basis for the proposal other than the results of the hydrological modeling that shows flooding of the entire site but has no evaluation of the biological outcomes from restoration.”

To a certain extent the applicant successfully rebuts many specific statements in the Bierly Report regarding the technical aspects of the proposed mitigation in Youngs Bay (Ex. 187, p 41-47, Ex. 193, p 24-25, 29-30). The applicant even rebuts ODFW’s comments (Ex. 193, p 28, Ex. 191, 17-21). But, the applicant fails to address the fundamental determination that the Officer must make, *i.e.*, that its mitigation will “ensure that the integrity of the estuary ecosystem is maintained” and will “maintain the functional characteristics and processes of the estuary, such as its natural biological productivity, habitats, and species diversity, unique features and water quality.” WDC 16.160.120(A) & (B).

Based on all of the evidence in the record regarding the permanent wetland impact and whether the proposed mitigation is (or is likely to be) adequate, the Officer takes several lessons: (1) Historically, there has been a tremendous loss of prime tidal marsh wetland from the Lower Columbia River Estuary, from which 89% (9,100 acres) has been filled and drained, including ~6,000 acres of emergent tidal marsh wetland from the Skipanon and Youngs Bay area. These are biologically active areas that are vital to the ecological health of the estuary. (2) Mitigation wetlands, in this case a reclaimed pasture, often do not work because they do not replicate or replace the biological or ecological functions lost from the tidal wetlands that were filled. The near-by Astoria Airport mitigation area is cited as an example, and DSL’s required 3:1 mitigation ratio is symptomatic of the problem. This does not mean that this mitigation plan will not work; however, it eliminates any presumption that the plan will work unless there is credible and relevant supporting biological and ecological evidence. (3) The applicant has not conducted any focused, systematic or quantitative analysis of the biological or ecological function (or likely function) of the proposed mitigation area (reclaimed pasture); the applicant conducted only hydrological modeling to

determine that the area will flood at high tide. The applicant is depending solely upon the future review and hoped-for approval of state and federal resource agencies, e.g., DSL, ODFW, USACE and USFW , to corroborate its unsupported statements that the mitigation area will function from an ecological perspective. While that could happen, credible and compelling evidence in the record leads the Officer to doubt that these agencies will simply ratify the applicant's proposal as-is. The Officer finds that the applicant has not successfully rebutted these points that are expressly stated in the Bierly Report and clearly reflected in ODFW comments.

From this, the Officer concludes that the record does not contain substantial evidence that the proposed mitigation for the permanent wetland impacts will function from an ecological or biological perspective, certainly there is no credible or convincing evidence that this 120 (or 140) acres of reclaimed pasture will function or replicate/replace the 35 acres of permanent wetland impact, which is an increasingly scarce and valuable resource in the Lower Columbia River Estuary. Absent some such credible evidence, the applicant has not demonstrated that the proposed mitigation will "ensure that the integrity of the estuary ecosystem is maintained" or that it will "maintain the functional characteristics and processes of the estuary, such as its natural biological productivity, habitats, and species diversity, unique features and water quality," as WDC 16.160.120(A) and (B)(2) require. Even though the state and federal resource agencies, upon whose future ratification the applicant depends (Ex. 193, p 62-63) might agree, there is no evidence that that is likely to happen.

This is not a situation controlled by *Gould*²⁴ or *Wetherell*,²⁵ where a condition that the applicant simply obtain a discretionary state or federal permit was sufficient and there were no corresponding local code criteria that had to be met. To be clear, the opponents have not demonstrated that the applicant is precluded as a matter of law from obtaining its DSL or USACE fill permits. Rather, this applicant has a substantial burden of proof under WDC 16.160.120, and it is promising to someday obtain discretionary state and federal permits as a substitute for demonstrating today that it complies with the local criteria implementing Goals 16 and 17.²⁶ If DSL or the USACE had already issued their fill permits based on the applicant's mitigation plan, after consultation with the state and federal wildlife agencies, that might be compelling evidence that the mitigation plan was

²⁴ *Gould v. Deschutes County*, 54 Or LUBA 205, 266 (2007). It is sufficient for the local government to require that the applicant obtain the discretionary state or federal permit as a condition of approval unless there is evidence that the applicant is precluded as a matter of law from obtaining those permits. Stated differently, the applicant need not prove compliance with the state and federal permit criteria as part of the local land use process and as a precondition for obtaining local land use approval. See also *Bouman v. Jackson County*, 23 Or LUBA 628, 647 (1992)], in which LUBA held in the context of water availability, that "a decision approving the subject application simply requires that there be substantial evidence in the record that [the applicant] is not precluded from obtaining such state agency permits as a matter of law."

²⁵ *Wetherell v. Douglas County*, 44 Or LUBA 754, 764 (2003), standing for the same proposition, but LUBA's holding was based, in part on the particular language of the Douglas County Code.

²⁶ As mentioned previously, the City's 2006 decision has no precedential relevance to this determination because the City Commission's findings in that earlier proceeding expressly stated that the local criteria implementing Goals 16 and 17 would be evaluated in the first instance in the context of a specific development proposal, which is now.

sufficient to meet the WDC 16.160.120 criteria. Absent any such permits, however, and with a preponderance of credible evidence in the record that the mitigation plan may be wholly illusory from a biological and ecological perspective, this application falls short of the mark.

8. WDC Ch. 16.164: Impact Assessment and Resource Capability Determination standards, Impact Assessment Conclusion and Resource Capability Determination:

WDC ch. 16.164 contains the fundamental Goal 16 and 17 evaluation and discretionary approval criteria for a project such as this, which presents significant impacts to the City's Goal 16 and 17 coastal and estuary resources. This chapter is also the focus of the natural resource evaluation for impacts to the City's Goal 5 inventoried wetlands that are also contained within the City's Goal 16 and 17 boundaries.²⁷ See OAR 660-023-0240(2) and WCP §4.100. This project's impacts to the City's Goal 16 and 17 resources include 35 acres of permanent wetland fill and 109-acres (1.2 million cy) of estuary dredge impact, plus associated construction of docks and placement of pilings. WDC ch. 16.164 requires a substantial amount of information and analysis by way of submission requirements (WDC 16.164.030) and provides the following relevant decisional options:

16.164.040 Impact Assessment Conclusion. Based on the information and analysis in Section 16.164.030, one of the following four conclusions shall be reached:

A. The proposed uses and activities do not represent a potential degradation or reduction of estuarine resource.

B. The proposed uses and activities represent a potential degradation or reduction of estuarine resources. The impact assessment identifies reasonable alterations or conditions that will eliminate or minimize to an acceptable level expected adverse impacts.

C. The proposed uses and activities will result in unacceptable losses. The proposed development represents irreversible changes and actions and unacceptable degradation or reduction of estuarine resource properties will result.

D. Available information is insufficient for predicting and evaluating potential impacts. More information is needed before the project can be approved.

16.164.050 Resource Capability Determination. Some uses and activities may only be approved when consistent with the resource capabilities of the area and the purposes of the zone. This section describes procedures for making this determination. A completed resource capability determination consists of the following elements:

A. Identification of the affected area's zone, and its purpose.

²⁷ Wetlands of Warrenton, Oregon Technical Report Number 1, Wetland Conservation Plan Inventory, October 15, 1993. The ESP is identified as estuarine wetlands at p 295.

B. Identification of the types and extent of estuarine resources present and expected adverse impacts. This information is included in the impact assessment.

C. A determination of whether the use or activity is consistent with the resource capabilities of the affected zone. A use or activity is consistent with the resource capabilities of the area when either:

- 1. Impacts on estuarine resources are not significant; or*
- 2. Resources of the area will be able to assimilate the use and activity and their effects and continue to function in a manner which:
 - a. In natural aquatic zones, protects significant wildlife habitats, natural biological productivity, and values for scientific research and education; or*
 - b. In conservation aquatic zones, conserves long-term use of renewable resources, natural biological productivity, recreation and aesthetic values and aquaculture.**

As a starting point, the items listed in WDC 16.164.030 (Information Needed for an Impact Assessment) appear to be submission requirements and are not expressed as approval criteria.²⁸ While it is questionable that the applicant has fully complied with item I (demonstration that the project's potential public benefits will equal or exceed expected adverse impacts), this application was deemed complete long ago, and the Officer finds that the applicant has achieved substantial compliance with all such submission requirements. For this reason, the Officer rejects RiverKeeper's assertion that the application should be denied simply because it believes that the applicant's submissions are insufficient relative to the list in WDC 16.164.030 (Ex. 44, p 51-54).

a) Impact Assessment Conclusion: WDC 16.164.040 requires a threshold decision to be made about the environmental (estuary and shoreland) impacts of the project by picking one of the following based on a preponderance of evidence in the record:

- 1) No potential degradation or reduction of estuarine resources; or*
- 2) Potential degradation or reduction of estuarine resources, but alterations or conditions will eliminate or minimize impacts to an acceptable level; or*
- 3) There will be unacceptable losses, irreversible changes and unacceptable degradation or reduction of estuarine resources; or*
- 4) More information is needed before the determination can be made and the project approved.*

²⁸ *LeRoux v. Malheur County*, 32 Or. LUBA 124, 129 (1996), ("The fact that application requirements may not have been satisfied provides no basis for remand absent a showing that the failure to satisfy the requirements resulted in non-compliance with at least one mandatory approval criterion.") citing *Champion v. City of Portland*, 28 Or LUBA 618 (1995); *Wissusik v. Yamhill County*, 27 Or LUBA 94 (1994).

The applicant's Columbia River Estuary Impact Assessment is in Appendix G to the application and is further explained in the DEIS (DEIS §§4.1.4 & 4.1.5). On this basis, the applicant asserts that the project, as proposed, will eliminate or minimize impacts to an acceptable level (Terminal Application p 5-141). RiverKeeper and virtually all of the opponents assert that the estuary and shoreline impacts of the project are so severe that the project will result in "unacceptable losses," "irreversible changes" and "unacceptable degradation or reduction of estuarine resource properties" (Ex. 44, p 49- 50, Ex. 188, p 16-20). RiverKeeper relies on its own expert evaluations of the project and its impacts on estuary and shoreland resources by Bierly and Williams (Ex. 44, attachments 1 & 2). Additionally, RiverKeeper relies on comments it submitted on the §404 water quality certification (Ex. 44, attachment 70) as well as those of EPA (Ex. 44, attachment 64) and ODFW (Ex. 44, attachment 63). The Officer recognizes that the §404 comments were submitted at an early stage of the project (January 2015) and address the entire project, and not just the Warrenton components.

In response to these comments, the applicant has repeatedly emphasized that it has and continues to coordinate with state and federal agencies to refine and improve the project, reduce its impacts and perfect its mitigation for unavoidable impacts (Ex. 187, p 56-67; Ex. 191, p 15-22; Ex. 193, p 7-10). The applicant also has endeavored to respond point-by-point to the technical aspects of the opponents' arguments and agency comments (Ex. 187, p 60-67; Ex. 193, p 24-25, 28-33).

Again, the record on these issues is large and contains conflicting information and opinion about (1) the value of those resources as habitat in the ecology of the Lower Columbia River Estuary, (2) the magnitude of the project's impact on estuary and shoreland resources, and (3) the efficacy and adequacy of the proposed mitigation to restore the biological function of these resources. With regard to the first consideration, habitat value, the Officer views as credible ODFW's characterization of the estuary and wetland habitat values in its comments to the USACE. With regard to the habitat value of the portion of the 109-acre estuary dredge area, ODFW said the following:

"3.3 Habitat and Species Use: Subtidal soft-sediment habitats provide a series of diverse, productive, and dynamic ecological functions and values in the LCR estuary. These ecological functions include (among others) provision of habitat for foraging by invertebrates, fish, birds, and marine mammals. In addition, some species of fish may use the soft-sediment habitat as a nursery area, and the subtidal zone provides an important source of detritus, which serves as a food source for a number of species. Soft-sediments also play an important role in the microbial and biogeochemical transformations of organic materials/compounds for nutrient cycling, and they typically serve as a sink or reservoir for the deposition of water-borne particles. In some benthic zones large quantities of nutrients (i.e. phosphorus) and organic material are essentially stored for a period and subsequently released in pulses with seasonal current and thermal variations. Diverse communities of motile, epifaunal, and infaunal invertebrates inhabit subtidal soft-sediments, and the communities of arthropods, annelids, cnidarians, mollusks, echinoderms, and other invertebrates are specifically adapted to survive,

feed, grow, and reproduce themselves in the unconsolidated sediments. Microbial activity and deposition of organic matter associated with fine-grained sediments together support a complex food web that includes resident (infaunal, epifaunal, motile) and transitory (seasonal, migratory) species. Mixed communities of shellfish, such as Dungeness crab, bay shrimp, seastars, gaper clams, butter clams, littleneck clams, softshell clams, cockles, and many other species may occur in the subtidal areas of Oregon estuaries, and many of these species may inhabit the proposed OLNG dredge impact area. Some of these shellfish are motile (e.g. crabs, shrimp, snails, seastars, etc.) and may inhabit or migrate through the subtidal zone, while others are sessile (e.g. cnidarians, bivalves, etc.) and remain in place over the duration of their adult lives. Ambient environmental conditions such as the composition and organic content of the substratum, salinity, depth, water temperature, depth of the aerobic layer, sedimentation rate, and degree of disturbance are often critical factors that determine the specific locations where shellfish occur. The mixed communities of living bivalves and the beds of their non-living shells (e.g., shell rubble or shell hash) function to help stabilize unconsolidated sediments and provide heterogeneous habitat for numerous species of adult and juvenile fishes, crabs, shrimp, amphipods, worms, and other estuarine organisms. In some cases, filter-feeding populations of bivalves play an important role in the removal of phytoplankton and smaller particulate materials, thereby decreasing turbidity and increasing light penetration throughout the water column.

“Several species of demersal fishes inhabit Oregon estuaries, and many of these (e.g., Starry flounder, English sole, sand sole, staghorn sculpins, sturgeon) are benthic feeders that utilize subtidal habitat to locate their prey, as well as for spawning and rearing. Subtidal habitat is also used by many species of migratory fishes such as fall Chinook salmon, coho salmon, steelhead, chum salmon, coastal cutthroat trout, eulachon, topsmelt, Pacific herring, longfin smelt, surf smelt, northern anchovy, etc., and other species (e.g., lingcod, greenling, rockfishes, gobies, sand lance, surfperches, threespine stickleback, Pacific tomcod, and sturgeons). As stated by the applicant (Section 4 / Description of Resources in Project Area) the OLNG terminal portion of the project could potentially impact salmonid rearing and migration habitat, lamprey migration habitat, eulachon rearing, spawning and migration habitat, and green sturgeon feeding habitat within the LCR estuary. As estuarine fish grow they typically move into deeper subtidal areas (often as their ability to avoid predation increases) to meet their survival needs. Species such as sole, sand lance, and sculpin create burrows in subtidal soft-sediments to escape predation and to forage for benthic food resources. Salmonids and other fish species also rear and migrate through subtidal soft-sediment habitats to access high energy, primary, or alternate food sources such as burrowing amphipods and other epibenthic or benthic invertebrates. Soft-sediment habitat is also utilized by numerous shallow-water fish (i.e., sculpins) during periods of low tide when they seek refuge in the deeper subtidal areas that are continuously under water. The subtidal habitat zone provides a critically important food source (e.g., epibenthic and infaunal invertebrates) for these species during low tides.”

(Ex. 44, attachment 63, p 5-6)

With regard to the habitat value of the ~35 acres of wetland that will be impacted, ODFW said the following:

Terminal Wetland Impacts Characterization: The proposed wetland impacts at the terminal and ancillary facilities consist of 3.15 acres of temporary impacts and approximately 34.92 acres of permanent impacts. ODFW's understanding is that DSL has reviewed and approved the OLNG terminal wetland delineation report. The proposed wetland impacts at the terminal occur primarily in estuarine intertidal emergent marsh habitat (29.35 ac.) which in this area ODFW considers to be Category 3 Habitat per the FWHMP. This shallow-water habitat is critical for rearing habitat for several ESA-listed salmonids and is also used by a variety of other estuarine-dependent species. For this habitat category, ODFW recommends (1) no net loss of either habitat quantity or quality; (2) avoidance of impacts through alternatives to the proposed development action; or (3) mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality." (Ex. 44, attachment 63, p 15).

EPA provided general and preliminary §404 comments on the project, where in pertinent part it said:

"EPA has some concerns that the proposed project will not provide the level or degree of economic benefit that the applicants and local governments are anticipating, but will instead contribute to further degradation of environmental conditions within the lower Columbia River estuary while eliminating or changing very valuable in-channel and near shore habitat conditions. ... EPA is concerned that while this project will add some ecological benefits to the overall system, it does not result in a net gain in wetland habitat in the estuary. Due to the many complexities associated with this mitigation proposal, EPA recommends that the Corps consider providing additional interagency review into the proposed CWMP to provide more detailed input towards its completion and approval." (Ex. 44, attachment 64, p 2 & 4).

While EPA's §404 comment pre-dates the applicant's full wetland mitigation plan, its Impact Assessment (Terminal Application App G) and the DEIS (released August 2015), EPA makes relevant and credible comments about the ecological and habitat value of the Lower Columbia River Estuary and the development site.

Collectively, these comments that describe the ecological importance of the habitats that stand to be affected by this project are mirrored in the literature review and descriptions provided in the Bierly Report on wetland impacts (Ex. 44, attachment 2, p 6-8) and the Williams Report on estuary impacts (Ex. 44, attachment 1, p 5-21). In its closing arguments, the applicant describes RiverKeeper's characterization of the estuary habitat as "bizarre" and claims that "the evidence demonstrates that the area is already deep water habitat and has 'minimal biological significance'," citing the City's findings from 2006 (Ex. 193, p 23 & 57). The Officer disagrees.

The Officer regards the ODFW description of the habitat value of the estuary and wetlands that will be impacted as credible and compelling evidence that is corroborated by EPA's 404 comments and the Bierly and Williams Reports, which are also credible and compelling. Granted, these are not the best estuary or wetland habitats, but in the Lower Columbia River Estuary, even suboptimal habitat is significant because so much has been lost over the years to filling, diking, dredging and diversions. In light of this history of habitat loss and extensive review of relevant ecological studies confirming use of these and near-by estuary and wetland habitat by many fish and invertebrate species, the Officer finds the applicant's rebuttal in Ex. 187 to be not credible. The applicant's rebuttal states that, while some of the more recent studies cited by Bierly and Williams post-date the applicant's Impact Assessment and the DEIS, the data used in those studies were considered (Ex. 187, p 33-39, 41-47). Bierly and Williams cited these papers for more than just the data they rely upon, but also their analysis of the data and their conclusions. Therefore, the Officer regards the Bierly and Williams Reports as more credible than the applicant's on the issue of habitat value and the severity of the project's impact on those habitats. For the applicant to claim that "the mere presence of ESA-listed fish in the vicinity of the proposed project does not necessarily imply negative impact" (Ex. 187, p 34) defies logic. To then rely upon relatively ill-defined and unproven mitigation measures to reduce or eliminate negative effects is similarly specious, especially in light of the removal of 1.2 million cy of sediment and a wetland mitigation plan that lacks sound biological and ecological evaluation and verification. The applicant's hydrologic modeling of the Youngs Bay mitigation area is no substitute for an ecological/biological evaluation. Thus, the Officer disagrees with the applicant's attempt to minimize the significance of the estuary and shoreland habitat that will be permanently impacted. A preponderance of the credible evidence shows the opposite.

Regarding the significance of the project's impact, again, the Officer cannot credit the applicant's attempts to minimize the impacts of the 109-acre dredge footprint and ~35-acre permanent wetland impact, which state and federal environmental agencies regarded as significant (Ex. 44, attachment 63, p 4-6 & 15; Exs. 21 & 186). The Officer regards a 109-acre dredge footprint and removal of 1.2 million cy of sediment to be significant, perhaps not when compared to the USACE's Columbia River channel deepening dredge program, but it is a significant loss when compared to any recent project in shallow to medium depth areas of the Lower Columbia River Estuary. The Officer is not persuaded that other dredge projects cited by the applicant (Ex. 187, p 30-33) are comparable to this one. In this regard, the Officer finds that RiverKeeper has persuasively rebutted the applicant's arguments (Ex. 188, p 16-18). The Port of Astoria dredging project of an initial 364,000 cy is far smaller than what is proposed here, especially when the DEIS states that the Youngs Bay impact will be 148 acres (DEIS, p ES-1). The Port Westward project does not appear to involve any dredging, so its relevance to this case is not apparent. Finally, while the Columbia River Channel Deeping Project involves a massive amount of dredging, all of that dredging will occur in the main shipping channel, which is a far different part of the estuary than the area at issue here.

Similarly, the Officer finds that a ~35-acre permanent wetland impact is also a significant loss of habitat in the context of the Lower Columbia River Estuary, which has seen big wetland losses since pre-settlement times (Ex. 44, attachment 2, p 2-5). The preponderance of credible evidence is against the applicant on this issue.

Finally, RiverKeeper indicts the applicant's dredge mitigation measures and its wetland fill mitigation plan. As discussed under WDC 16.160.120, the Officer has already determined that the wetland mitigation plan is unproven and unverified from a biological or ecological perspective. In light of the significance of the estuary and shoreland habitat loss that will occur, a mitigation plan with a sound and verified ecological evaluation is warranted. It is not sufficient to simply rely upon on-going agency review, a future evaluation of the plan and hoped-for ratification by state and federal agencies to validate the mitigation plan. As the Officer indicated in response to WDC 16.160.020, the Lower Columbia River Estuary, and Young's Bay in particular, play an important role in the 2008 BiOp for the FCRPS and the two subsequent Supplemental BiOps, which identify funding for the Youngs Bay SAFE Area and others as a Reasonable and Prudent Alternative. The fact that the FCRPS BiOp is a jeopardy opinion and identifies Youngs Bay for mitigation projects, that it is designated as a SAFE Area, that there is a designated closure zone that includes the terminal area, and that the area is identified by credible scientific studies as habitat for several ESA-listed salmonids at different times of the year for different lengths of time, is strong evidence that these will be deemed important habitats and the project's impact on these habitats will be significant. It is also strongly suggestive that USACE will not simply ratify the mitigation plan after consultation by NMFS and issuance of its BiOp on this project, which could well be a jeopardy opinion.

Based on the foregoing findings, the Officer cannot conclude there will be no potential for degradation or reduction of estuarine resources. Also, it is not possible to impose conditions of approval to rectify the above-mentioned deficiencies. The applicant has the burden of proving by a preponderance of evidence that all of the mandatory approval criteria are met or can be met through the imposition of conditions. Compliance with several mandatory approval criteria in WDC ch. 16.160 cannot be determined based on the existing record, and those discretionary determinations cannot be deferred through conditions to another time. Therefore, the question is whether the record demonstrates that those criteria are not and cannot be met, or whether, through the submission of additional evidence, could the applicant make the required demonstration.

The Officer concludes that it is theoretically possible, through the submission of more or different evidence, that the mandatory approval criteria could be met. In particular, given the lack of a biological or ecological assessment of the wetland mitigation site, the mitigation plan could be modified to overcome the above-noted deficiencies, especially if federal and state agencies provide positive substantive comments on the plan. For other criteria, rehabilitation is much less likely, but nonetheless possible. For that reason, the Officer concludes that the record is currently insufficient for him to determine there will be no unacceptable losses, irreversible changes or unacceptable degradation or reduction of estuarine resources. The record is insufficient, but more or different information

could allow the Officer or City Commission to make that determination; although, that seems unlikely based on the fundamental nature of the project and the estuary and shorelands that will be impacted.

b) Resource Capability Determination: WDC 16.164.050 provides that some uses may only be approved when consistent with the resource capabilities of the area and the purposes of the zone. In this case, those limitations are the local implementation of State-wide Planning Goals 16 and 17, the substance of which have been discussed under the preceding sections corresponding to WDC ch. 16.160 and 16.164. To pass muster under this criterion, the record must be sufficient to support one of following alternative findings, with the implication that if neither determination can be made, the project cannot be approved:

1. *Impacts on estuarine resources are not significant; or*
2. *Resources of the area will be able to assimilate the use and activity and their effects and continue to function in a manner which:*
 - a. *In natural aquatic zones, protects significant wildlife habitats, natural biological productivity, and values for scientific research and education; or*
 - b. *In conservation aquatic zones, conserves long-term use of renewable resources, natural biological productivity, recreation and aesthetic values and aquaculture.*

Based on the Officer's conclusions under WDC 16.160.020(B) & (C) and 16.160.120, related to adverse impacts to estuary and shoreland resources, public trust rights and the application's failure to minimize those impacts, and similar findings under WDC 16.164.040, the Officer concludes that the project poses significant impacts on estuarine resources. The remaining question is whether the estuarine resources of the area will be able to assimilate the project's impacts (construction and operations) and still continue to function at an acceptable level. This is an evidentiary question, and the applicant bears the burden of proving with a preponderance of evidence in the record that WDC 16.164.050(C)(2)(b) is or can be met.

RiverKeeper claims that the impacts of the terminal construction on estuary resources are simply too traumatic, most notably the 109-acre (1.2 million cy) dredge and ~35 acre wetland fill, to pass muster under this standard (Ex. 44, p 54). In support of its argument, RiverKeeper relies on the Bierly and Williams Reports (Ex. 44, attachments 1 & 2) and EPA's §404 comments to the USACE from January 2015 (Ex. 44, attachment 63). The applicant has responded throughout the process by emphasizing its efforts to avoid and minimize the project's impact on estuary resources, reduce its dredge and wetland fill footprint, and to use construction methods and operational techniques that, according to the applicant, ensure that the estuary continues to function at acceptable levels (Terminal Application p 5-141 & 5-142 and App G; Ex. 193, p 68). The applicant simply states that the proposal is for a use allowed outright in the City's A-1 zone, the applicant has submitted all of the required materials and analyses, and Appendix G demonstrates compliance with the standard.

The Officer cannot decide this criterion based on EPA's §404 comments that were submitted at such a preliminary stage of the process (January 2015); however, as noted earlier, EPA's comments contain a reliable description of the importance of the affected estuary resources in the ecology of the Lower Columbia River Estuary and the importance for maintaining their function. EPA's comments are strongly supported by the Bierly and Williams Reports and sources cited therein, and ODFW's comments (Exs. 21 & 186; Ex. 44, attachment 63) all of which the Officer finds to be credible and persuasive evidence on this issue. From this, the Officer concludes that the project's impact on the estuary and shoreland resources will be significant. The only question is whether the record is sufficient to demonstrate that the proposed mitigation will off-set those impacts sufficiently to allow the estuary resources to function at acceptable levels. The Officer concludes that it is not.

The Officer finds, based on a preponderance of evidence in the record, that the project's impacts have not been mitigated adequately, most notably the 109-acre dredge and 35-acre wetland fill. At least the record is not sufficient to demonstrate that the mitigation is adequate. The record clearly establishes the ecological importance of the remaining shallow to mid-depth habitat in the Lower Columbia River Estuary to ESA-listed salmonids and other fish and invertebrates. This status and ecological importance is confirmed by the 2008 FCRPS jeopardy BiOp and the two subsequent Supplemental BiOps, which identify funding for the Youngs Bay SAFE Area, among others, as Reasonable and Prudent Alternatives. The state's closure zone that includes Youngs Bay and the terminal area further demonstrate the importance of this estuary area as habitat. Similarly, a ~35-acre wetland fill will be a significant loss in the context of the massive loss of tidal wetlands in the Lower Columbia River Estuary over the past 30 to 40 years. The preponderance of evidence in the record demonstrates the ecological significance of the affected estuary resources and the significance of the project's impact on them.

What is missing from the record is any comparably credible evidence that the applicant's mitigation measures will work, much less, that the mitigation measures will make-up for these significant losses and allow the estuary resources to continue to function. As the Officer reads the application and record, however, Youngs Bay mitigation site where 120 acres (or 140 acres) of diked pasture will be reclaimed (flooded) is intended to mitigate for the ~35-acre wetland fill. There is no comparable mitigation area for the loss of 109-acres of benthic habitat removed by dredge and which will be re-dredged every 2 to 3 years thereafter. In this regard, the Officer agrees with RiverKeeper's conclusion that the 109-acre (1.2 million cy) dredge is a significant estuary habitat impact with little or no demonstrably sufficient mitigation (Ex. 44, p 45-47). No matter how carefully dredge operations are conducted, they still remove benthic habitat and still cause sedimentation and turbidity.²⁹ Granted, the 109-acre area to be dredged has only a small portion of shallow-water habitat, but the balance is mid-

²⁹ The applicant has not determined how dredging will occur or by what method (Application App G, p 3-75). RiverKeeper notes this a significant omission since it affects the degree of impact so significantly (Ex. 44, p 45-47). The Officer agrees that the lack of detail is a significant omission because it affects the kind and degree of impact.

depth off-channel habitat, which the record shows is important resting habitat for ESA-listed salmonids. On this point, even EPA's and ODFW's preliminary §404 comments are relevant and valid. Where these comments are deficient is they lack an evaluation of the applicant's mitigation measures and plan, which was not released until after the comments but still lacks detail.

The basic wetland fill mitigation plan is to breach an existing mile-long dike in two or three places and allow tidal flooding of the area that has been used since the early 1900's as pasture land (Terminal Application App G, p 3-76 to 3-83). In support of its wetland mitigation plan, the applicant performed a hydrological modeling exercise to verify that the pasture area would flood. Conspicuously absent, however, is a biological or ecological evaluation of the pasture's recovery potential and whether the techniques proposed for this particular mitigation site will be sufficient, based on comparable and relevant data. The Officer concludes that it is impossible to determine the likely success and effectiveness of the mitigation plan without such an expert evaluation. Absent such an evaluation, the record is not sufficient to demonstrate that the estuary or shoreland impacts of the project will be assimilated to such a degree as to allow the estuary resources to continue to function as required by WDC 16.164.050(C)(2).

Additionally, the record reflects a fundamental dispute between the applicant and ODFW as to whether the mitigation offered would be in-kind and in-proximity as required by Oregon's mitigation policy in OAR 635-415-0000 to 0025 (Ex. 186, p 3-4). Despite the applicant's adamant assertions that the mitigation is both in-kind and in-proximity (Ex. 193, p 25), the Officer finds the agency's position to be more credible and reliable until proven otherwise, which it has not. As previously stated, absent from the conversation to date is an evaluation and opinion by NMFS of the applicant's biological assessment and the project's impact on ESA-listed fish. While a non-jeopardy opinion might be sufficient to validate the applicant's claims about the project's impacts and the effectiveness of its mitigation, the record is not currently sufficient to allow the Officer to make, in effect, such a non-jeopardy determination under the City's Goal 16 and 17 code requirements. As things stand, these evidentiary deficiencies are fatal to a finding of compliance with WDC 16.164.050.

9. WDC Ch. 16.192: Large-Scale Development standards, Soil Suitability and Utilities.

Large-scale developments, such as this one, must demonstrate compliance with the applicable provisions of WDC ch. 16.192. RiverKeeper has challenged the project only with regard to two of these standards: Soil Suitability under WDC 16.192.030, and Utilities under WDC 16.192.050 (Ex. 44, p 54-55). Each of these sections are addressed separately.

- a) **Soil Suitability under WDC 16.192.030.** The site is underlain by Coquille-Clatsop complex and Tropopsamments soils, both of which qualify it for the City's Soil Hazard Overlay regulations in WDC ch. 16.96. While the project's compliance with these regulations is addressed above, WDC 16.192.030 requires that all Large-Scale Development provide a soil survey, additional geotechnical information and demonstrate that one of following is met:

1. *The detailed soil survey indicates that there is not a significant amount of hazardous soils on the portion of the site proposed for development; or*
2. *A method of eliminating hazards which could result from soils on the site prepared by a licensed geotechnical engineer and submitted to the City of Warrenton Planning and Building Department for review by a City-appointed engineer who will be paid by the developer and/or property owner.*

The applicant responds to the Soil Hazards Overlay requirements (Terminal Application p 5-33 to 5-34) and to the WDC 16.192.030 requirements (Terminal Application p 5-144 to 5-146) based upon a comprehensive geotechnical investigation (Terminal Application, App F). RiverKeeper asserts that the site's location close to the Cascadia Subduction Zone fault and right on the Columbia River Fault make it inherently unsuitable and unreasonably dangerous. RiverKeeper cites an August 2012 DOGAMI report *Earthquake Risk Study for Oregon's Critical Energy Infrastructure Hub* (Ex. 44, attachment 32) in support of its argument that this site is not appropriate for a major LNG terminal.

In response to these challenges, the applicant provided a summary of its geotechnical investigations at the site and seismic evaluation, including the results of tsunami inundation modeling (Terminal Application App F; Ex. 138, p 22-37). The applicant provided additional responses and analysis of the seismic and tsunami factors and risk after the September hearing (Ex. 187, p 9-16 and Ex. 191, p 9-15), including a response to Tom Horning's report on the Columbia River Fault (Ex. 175). The applicant concluded by stating that it has complied with all of the soil suitability requirements in WDC 16.192.030 (Ex.193, p 69).

Due to the prevalence of moderately to highly compressible soils on the ESP, the Officer concludes that the site is dominated by hazardous soils, thus eliminating the first criterion as a possibility. Therefore, the question is whether the applicant's geotechnical investigation (Terminal Application App F) and foundation and construction design measures (Terminal Application p 5-144 to 5-146) will be sufficient to eliminate the hazards that could result from soils on the site.

The subject of geotechnical investigations, soil suitability, foundation design and damage risk assessments are technical in nature. The only technical information in the record about this particular facility at this particular site and the risks of earthquake damage due to hazardous soils is provided by the applicant. None of the opponents have provided comparably credible, site-specific information on the subject. Even the 2012 DOGAMI report provides only basic advice to incorporate seismic reinforcement and mitigation into facility design and does not recommend against siting energy facilities in the region (Ex. 44, attachment 32, p 12-13).³⁰ The record is sufficient to convince the Officer that the applicant has

³⁰ DOGAMI's primary recommendation is that "Energy sector companies must pro-actively integrate seismic mitigation into their business practices for Oregon's energy sector to adequately recover from a magnitude 8.5 to 9 Cascadia earthquake in a reasonable time period."

Additionally "Energy sector companies and the State of Oregon should build Oregon's seismic

done that. The applicant's geotechnical investigation appears to be sufficiently thorough and based on subsurface data from the site. From this factual information, the applicant has distilled a set of foundation and building design features that respond to the DOGAMI recommendations, in that they incorporate suitable seismic mitigation sufficient to withstand a significant earthquake, the primary result of which would be to cause liquefaction of the site's soil substrate. While general information about the risks and potential damage from a large Cascadia earthquake is unsettling, the apparent response recommended by DOGAMI involves thorough geotechnical investigations and appropriate foundation and building design. The preponderance of credible evidence in the record is sufficient to convince the Officer that the applicant has complied with WDC 16.192.030.

- b) **Utilities under WDC 16.192.050.** WDC 16.192.050 requires a developer to provide complete information about the public utilities and facilities (water, sanitary sewer and transportation) needed to serve the project, at what levels and whether there is adequate existing capacity to serve the anticipated need. Pertinent to this project, this section requires:

The development will only be allowed if sufficient capacity exists or suitable evidence indicates it will exist prior to completion of the development construction. In deciding the sufficiency of capacity, consideration will be given to possible increases in flows resulting from activities of existing system users and from facilities which are likely to be built due to the proposed use, but are not part of the development.

RiverKeeper's focus under this section is the amount of process water the terminal will require and whether the applicant has demonstrated that a sufficient supply is available (Ex. 44, p 55; Ex. 83, p 13-14). The application provided basic information about the terminal's process water demand and the available supply (Terminal Application p 5-147), and the applicant responded to RiverKeeper's challenge on the subject in its post-hearing submissions (Ex. 187, p 8; Ex. 191, p 7-9; Ex. 193, p 69-70).

The plain language of WDC 16.192.050 does not present a high bar to an applicant, but appears to require the applicant to evaluate (quantify) its public utility and service needs and verify that adequate supplies or capacity exists. This is not a demanding standard at this stage of the process, since it clearly anticipates that adequate supplies will not become available until the facility is ready for operation, *e.g.*, use of the standard "suitable evidence," setting a compliance deadline of "prior to completion of the development," and allowance for other users of the system. The record, especially the applicant's post-hearing submissions (Ex. 191, p 7-9), shows that this relatively low standard is or can be met prior to completion of the development with regard to water supply. While RiverKeeper correctly points out that water rights would be needed for some of

resilience to a Cascadia earthquake. Adopting pro-active practices and a risk management approach will help achieve seismic resilience. Encouraging a culture of awareness and preparedness concerning the seismic vulnerability of the energy sector including long range energy planning should be conducted." (Ex. 44, attachment 32, p 12-13).

the excess process water anticipated by the application, the applicant has demonstrated with sufficient certainty that it can acquire the right to the necessary quantity of water in time. On this basis, the Officer concludes that the applicant has met its burden under WDC 16.192.050.

10. WDC Ch. 16.220: Conditional Use Permit (CUP) criteria.

The fundamental CUP review criteria are set forth in WDC 16.220.030 and require affirmative findings of the following, based on a preponderance of evidence in the whole record.³¹

1. *The proposed use is in conformance with the Comprehensive Plan.*
2. *The location, size, design and operating characteristics of the proposed use are such that the development will be compatible with, and have a minimal impact on, surrounding properties.*
3. *The use will not generate excessive traffic, when compared to traffic generated by uses permitted outright, and adjacent streets have the capacity to accommodate the traffic generated.*
4. *Public facilities and services are adequate to accommodate the proposed use.*
5. *The site's physical characteristics, in terms of topography, soils and other pertinent considerations, are appropriate for the use.*
6. *The site has an adequate area to accommodate the proposed use. The site layout has been designed to provide for appropriate access points, on-site drives, public areas, loading areas, storage facilities, setbacks and buffers, utilities or other facilities which are required by City ordinances or desired by the applicant.*

As previously stated, the LNG terminal use is allowed outright in the A-1 and I-2 zones; therefore, the CUP criteria do not apply generally to the terminal. Only two aspects of the proposal trigger the need for a CUP: (1) ~3.2 acres of temporary wetland impact mitigation in the I-2 zone associated with the terminal construction (illustrated on Terminal Application fig 4-40)³² and (2) two 190-foot tall LNG storage tanks that will

³¹ The structure of WDC 16.220 is somewhat confusing. The CUP “review criteria” are set forth in WDC 16.220.030 (Review Criteria), and the Officer regards these as the primary mandatory approval standards for CUPs. However, WDC 16.220.020 (Authorization to Grant or Deny Conditional Uses) provides another and slightly different set of standards, about which the code ambiguously says “A new, enlarged or otherwise altered development listed in this Code as a conditional use shall be approved or denied by the Planning Commission under the procedure in this chapter. The Planning Commission shall base its decision on whether the use complies with: ...” The applicant generally addresses the WDC 16.220.020 in a perfunctory sort of way (Application, p 5-163 to 5-165), and RiverKeeper makes a similarly half-hearted argument based on WDC 16.220.020 (Ex. 44, p 56). Clearly the focus of the applicant’s efforts and RiverKeeper’s attack on the CUPs is under WDC 16.220.030 (Application, p 5-165 to 5-168; Ex. 44 p 56-59). In this Opinion, the Officer likewise focuses on WDC 16.220.030, in part because of the absence of any developed argument by the parties under WDC 16.220.020 and also because the Review Criteria in WDC 16.220.030 subsume all of the substantive criteria one could infer from WDC 16.220.020.

³² The objective of the temporary wetland impact mitigation is to restore and replant with native wetland vegetation ~3.2 acres area around the terminal that will be disturbed by the terminal construction activities. See Application at p 5-83.

project above and into the airport imaginary surface associated with the Astoria Airport, situated on a horizontal plane 150 feet above the airport's primary runway surface and extending outward from the airport 10,000 feet.³³ No other element or aspect of the terminal is subject to the CUP criteria. The applicant objects to RiverKeeper's attempt to boot-strap in the entire terminal project and make it subject to the CUP criteria (Ex. 193, p 70). The Officer agrees. The only two aspects of the project that implicate the CUP criteria are addressed in a combined fashion as follows:

- a) **Does the proposed use conform with the comprehensive plan?** General compliance with all applicable Comprehensive Plan provisions is required under this section. While many provisions are arguably applicable to the terminal generally, very few appear to be particularly relevant to the temporary wetland impact mitigation or the tall LNG storage tanks. RiverKeeper cites 11 specific plan provisions as applicable to the terminal generally (Ex. 44, p 62-69), but doesn't indicate any as being specifically applicable to the two conditional uses. Absent any reference by the applicant, opponents or staff to any specific comprehensive plan provisions relevant to the temporary wetland impact mitigation or the two over-height LNG storage tanks, the Officer concludes that both conditional uses are consistent with the comprehensive plan, to the extent any of its provisions are applicable.
- b) **Are the location, size, design and operating characteristics of the use such that the development will the use be compatible with and have minimal impact on surrounding properties?** As a starting point, the ESP is surrounded on three sides by water. Because no party to this proceeding disputes that the temporary wetland impact mitigation is compatible with, and will have no impact on, surrounding properties, the Officer concludes that this criterion is met with regard to the temporary wetland impact mitigation.

The over-height LNG storage tanks, however, have the potential of impacting aviation operations at the Astoria Airport. Several people testified to this possibility at the September hearing and argued that these two large LNG storage tanks did not meet this standard with regard to the airport property. As logical as that might seem, the Officer is more inclined to rely upon comments from the affected agencies, *i.e.*, the Port of Astoria, Oregon Division of Aeronautics (ODA) and the Federal Aviation Administration (FAA) as to whether the over-height tanks impact their airport operations. The applicant provided documentation of FAA's and ODA's positions (Terminal Application, App C). Absent any comparably credible evidence on this issue than statements from the affected aviation authorities, the Officer concludes that the applicant has met its burden with regard to this criterion and the two over-height LNG tanks.

³³ Although the applicant did not raise the issue, there is some question as to whether imposition of an imaginary surface 150 above the runway of the Astoria Airport (an aviation easement) and extending out 10,000 to affect this property is lawful, or whether it affects an uncompensated taking in violation of the state and federal Constitutions. See *Barnes v. City of Hillsboro*, 61 Or LUBA 375, 392, *aff'd* 239 Or App 73, 243 P3d 139 (2010) (reversing the city and striking as an unconstitutional taking the imposition of a similar aviation easement around the Hillsboro Airport).

- c) **Will the use generate excessive traffic?** The record of this matter doesn't ascribe any particular number of vehicle trips to the temporary wetland impact mitigation project, nor to the two LNG storage tanks. Absent any such evidence or argument that either aspect of the project will generate any vehicle trips, the Officer concludes that this criterion is not relevant to either conditional use, and its requirements are met.³⁴
- d) **Are public facilities and services adequate to serve the use?** Similar to the trip generation/traffic issue discussed in the preceding section, this one does not appear to be relevant to the temporary wetland impact mitigation aspect of the project. The wetland mitigation should not have any particular demand for public services and facilities.

RiverKeeper and many other opponents, however, argued throughout the local process that the applicant needed to provide a credible emergency response plan for the whole terminal project and asserted that local emergency responders (fire & life safety) and local medical facilities would be significantly deficient if they had to respond to a major explosion, fire or chemical/LNG leak from the facility. These opponents fashion this argument in the context of this CUP criterion, asserting that the over-height LNG storage tanks pose a public safety risk from explosion, fire or chemical/LNG leak for which the City of Warrenton is not prepared (Ex. 44, p 57-58 & attachment 70, p 107-109). These witnesses argue that the lack of an emergency response plan, especially one sufficient to handle such a catastrophic event, warrants denial of the project as a whole, or at least the conditional use permit for the over-height LNG storage tanks. Implicit in these arguments is the notion that emergency services (fire & life safety) and medical facilities are essential public services and facilities that are required for the LNG tanks, given the explosion, fire hazard and chemical leak hazards they present. Otherwise, neither the WDC nor the WCP appear to have a comparable requirement applicable to any other aspect of this project. Put differently, given the specific land use permits this project must obtain from the City of Warrenton, the applicable land use approval criteria do not require any level of emergency planning or preparedness for this project other than this one CUP criterion applicable to the over-height LNG storage tanks. Additionally, the opponents' arguments implicate earthquake and tsunami safety concerns for the LNG storage tanks.

The application addresses in general terms how the terminal will impact public services and facilities (Terminal Application p 5-166; Terminal Application App I). The applicant has maintained all along that nothing in the WDC or WCP require an emergency response plan or demonstration that local emergency response services would be adequate in the event of a fire, explosion or LNG/chemical leak at the facility (Ex. 187, p 17; Ex. 193, p 20). Nonetheless, the applicant addressed the issue by submitting a relatively lengthy Resource Report on Reliability and Safety (Terminal Application, Resource Rpt 11) and responded specifically to these arguments in its post-hearing submissions (Ex. 187, p 17-19; Ex. 193, p 20-22). The thrust of the applicant's response is three-fold:

³⁴ Trip generation and adequacy of the affected transportation system is addressed generally under WDC ch. 16.256 *infra*.

- (1) The facility will be engineered, designed and constructed to ensure a high degree of safety that will minimize to the maximum degree possible the possibility of any fire, explosion or chemical/LNG leak (Ex. 138, p 32-37). Thus according to the applicant, the chance of any mishap is small.
- (2) The applicant has or will submit to FERC an Emergency Response Plan that will be fully vetted, reviewed and possibly revised by FERC pursuant to its authority as the lead federal agency on the project under the Natural Gas Act. In partial fulfillment of this on-going emergency preparedness planning, the applicant provided a copy of the current Emergency Response Manual (Ex. 140, dated April 10, 2013) that includes a series of Emergency Response Procedures for a host of possible mishaps and serves to illustrate how emergencies would be handled at the plant; and
- (3) The issue is addressed in the DEIS issued by FERC in August 2015 (DEIS §4.1.13.9 - Emergency Response and Evacuation), which requires as a mitigation measure (Mitigation Measure 52) that the applicant compile and submit an Emergency Response Plan that includes coordination with the Coast Guard, state, county and local emergency responders and emergency planning groups. In partial fulfillment of this on-going emergency planning coordination, the applicant provided a copy of Memorandum of Understanding with Oregon Department of Energy (Ex. 140, dated June 2009) that is designed to address the emergencies and procedures.

As a starting point on this issue, the Officer is reluctant to read into this CUP criterion a requirement for an emergency preparedness plan for the entire LNG terminal facility, for all operations, and for all possible emergencies, when no such requirement appears to exist in the WDC or WCP. That said, these 190-foot tall LNG storage tanks require a CUP, and to put it bluntly, if they were to blow-up for some reason, that event would trigger the need for emergency fire and life safety services and facilities. Thus, some planning for emergency preparedness arguably is required for this particular use under this CUP criterion. The Officer is also not willing to interpret this CUP criterion to duplicate WDC 16.88.040(G)(2)(b)'s prohibition against critical facilities in the Special Flood Hazard Area discussed *supra.*, and require a full assessment of tsunami and earthquake risks and the appropriateness of the site.³⁵ In response to the possibility that the LNG storage tanks could be inundated by a tsunami or other flood event, the applicant cited the tsunami flood modeling and related information in the record and emphasized the 22-27 foot tall earthen berm that will enclose the terminal facility and, essentially, make it flood proof (Terminal Application p 5-166 to 5-167). Thus, the applicant has provided a substantial amount of information on the subject of emergency preparedness generally. None of it, however, appears to relate to the capacity of local agencies to respond to the worst-case scenario catastrophic event.

³⁵ In response to WDC 16.88.040 (Standards for Flood Hazard Reduction), the Officer was persuaded by the credible geotechnical information about the site (Application, App F; Ex. 138, p 22-29), the applicant's engineering steps and foundation design to prevent earthquake damage (Ex. 138, p 32-34; Ex. 187, p 9-13) and the risk of inundation from a major tsunami (Ex. 138, p 30-31, 35-36). There was no countervailing or comparably credible evidence that detracted from the applicant's evidence.

The Officer concludes that this local land use criterion is not intended to trigger a comprehensive emergency services and facilities evaluation for the worst case scenario, especially for the entire terminal operation.³⁶ The adequacy of emergency services and facilities is implicated only by the over-height LNG storage tanks intruding into the airport imaginary surface. The affected aeronautic agencies indicated their acceptance of this intrusion so long as there are warning lights on top of the tanks. The emergency preparedness and response that could be required if these tanks explode, burn or leak, in this context, is not specified by the local land use criteria, but is addressed by the Natural Gas Act, which is administered by FERC and other federal agencies. Therefore, to the extent that the City's CUP criterion applicable to the over-height LNG tanks requires some level of emergency service planning or response in the event of a catastrophe, the Officer does not conclude that it requires proof of emergency service and facility capacity to handle the worst-case catastrophic scenario engulfing the plant as whole. The Officer concludes that the record contains a substantial amount of credible evidence that this applicant has taken measures to address a reasonably significant event, has demonstrated that there would be adequate facilities and services, within limits, to respond to such an event, and that further planning and review and refinement of those plans will occur under FERC oversight. See 49 CFR 193 & 33 CFR 127. Also, the applicant asserts that the plant's design and construction have benefitted from past LNG terminal disasters which makes prior/other LNG plant disasters not particularly relevant or predictive of what might happen here. The Officer agrees, and in that relatively narrow light, concludes that this CUP criterion is met.

- e) **Are the site's physical characteristics appropriate for the use?** Again, the Officer has little difficulty concluding that the site is appropriate for the applicant's proposed wetland impact mitigation. The object of the proposal is to restore, replant and recover ~3.2 acres of the site's wetlands that will be impacted by terminal construction activities. The impact will be temporary and the mitigation is on-site.

With regard to the over-height LNG storage tanks, the applicant provides basically the same information as previously mentioned, in which the applicant describes aspects of the site that are or will be suited to the LNG tanks (Terminal Application p 5-166 to 5-167; App I & Resource Rpt 11). Unlike the preceding CUP standard, the applicant's response to this one is more focused on the physical attributes of the site and how well-suited it is for the over-height LNG storage tanks. This necessarily is more oriented toward the opponents' claims that the site is inordinately subject to earthquake damage due to its location near the Cascadia Subduction Zone and the Columbia River Fault (Ex. 44, p 56-57 & attachment 70, p 107-109). As discussed *supra*, under WDC 16.88.040 (Standards for Flood Hazard Reduction) and WDC ch. 16.96 (Soils Hazard Overlay), the applicant provided credible geotechnical information about the site (Terminal Application, App F; Ex. 138, p 22-29), described engineering steps and

³⁶ For example, the Officer is not willing to interpret a CUP criterion applicable to the over-height LNG storage tanks as requiring the applicant to demonstrate emergency services and facilities sufficient to deal with an explosion or fire caused by LNG vessel loading or unloading, or some pressurization or refrigeration process unrelated to the storage tanks.

foundation designs that, according to the applicant, would withstand earthquake damage (Ex. 138, p 32-34; Ex. 187, p 9-13; Ex. 191, p 9-15; Ex. 193, p 16-18), and finally described the 22-27 foot tall earthen berm that would reduce the risk of inundation from a major tsunami (Ex. 138, p 30-31, 35-36), that, plus the site is 11+ river miles inland, up the Columbia River and thus much less susceptible to tsunami flooding. The applicant also addressed the arguments of Tom Horning (Ex. 175) that the site's situation right on the Columbia River Fault made it especially susceptible to, and likely to suffer, earthquake damage. According to the applicant, the Columbia River Fault, while located basically under this site, was too old and movement too remote a possibility (no more recent than 1.6 million years ago) for it to be considered relevant today (Ex. 187, p 10-13). There was no countervailing or comparably credible evidence that detracted from the applicant's geotechnical evidence, its engineering and foundation design, nor its response to these arguments about tsunami and earthquake risk. For that reason, the Officer concluded that the site was suitable for the proposed use, and for the same reasons does so again in the context of this CUP criterion.

- f) **Does the site have an adequate area to accommodate the use?** Again, the Officer has no difficulty concluding that the site is appropriate for the applicant's proposed in-kind and on-site wetland impact mitigation. The opponents do not claim otherwise or challenge this aspect of the project.

With regard to the over-height LNG storage tanks, the opponents offer little argument that the site's size is the problem. The two over-height LNG storage tanks take up little room and are not expansive, so long as they are not involved in a fire, explosion or chemical/LNG leak. The opponents' principal arguments are related to the explosion, fire and leak risk that the tanks and the terminal facility as a whole pose to the community and the lack of emergency services and facilities to handle a catastrophic disaster should the terminal catch fire, explode or leak. The Officer addressed those arguments in the preceding sections in response to the second, fourth and fifth criteria in WDC 16.220.030(A). Because the opponents offer no particular arguments based on this, the sixth, CUP standard, the Officer concludes that the applicant meets it with regard to the over-height LNG storage tanks intruding into the airport's imaginary horizontal surface 150 feet above the airport runway. With this, the Officer concludes that the applicant has demonstrated through a preponderance of credible evidence in the record that it meets all of the CUP criteria for both conditional use requests: the on-site temporary wetland impact mitigation in the I-2 Zone and the over-height LNG storage tanks intruding into the airport's imaginary horizontal surface.

11. WDC Ch. 16.256: Traffic Impact Study.

This chapter, designed to implement the Transportation Planning Rule (TPR) in OAR Div. 660-012, requires the compilation of a Traffic Impact Study (TIS) for developments that either involve a zone change/plan amendment or meet certain trip generation thresholds. The chapter provides no particular performance standards or approval criteria, only that, if a TIS is required, it must be prepared by a professional engineer in compliance with OAR 734-051-180 and WDC 16.232.060 (the city's implementation of

the TPR).³⁷ The applicant addressed the criterion (Terminal Application p 5-174 to 5-177) and submitted a TIA for the terminal (Terminal Application, App E).³⁸ There is no dispute that the chapter applies to this development and requires production of a TIS, but the dispute involves scope and level of detail that is required of the TIS.

RiverKeeper and other opponents argue that the traffic and trip generation of the pipeline component of the project are significant and understated by the applicant's TIS (Ex. 44, p 59-61). In particular, RiverKeeper points to the recently released DEIS and argues that it describes significant traffic impacts with greater trip generation and impacts than revealed in the terminal application TIS, especially when pipeline construction overlaps with terminal construction. Thus, RiverKeeper faults the applicant's terminal TIS for failing to take into account pipeline construction traffic, which according to RiverKeeper will have an acute impact on the Cities of Astoria and Warrenton and the surrounding transportation infrastructure such as the Youngs Bay Bridge and Highway 101.

The applicant responds by also pointing to the DEIS and explaining that the DEIS assumes the peak day in the peak month of the expected construction traffic for the first segment (Spread 1) of the pipeline (Ex. 187, p 6). The applicant states that it did not prepare a TIS for the pipeline construction because none was required by WDC ch. 16.156 and the majority of pipeline construction would occur outside the Warrenton city limits, but that it subsequently submitted a TIS Addendum (dated May 20, 2015) that addressed the traffic expected from the 3-mile portion of Spread 1 construction within the City of Warrenton and how those trips would be coordinated and not overlap with terminal construction. Thus, according to the applicant, "the peak of Pipeline construction will be different than the peak of Terminal construction within Warrenton ... the peak Pipeline construction of the 3-mile segment within Warrenton will occur after the peak Terminal construction, [and] the total Pipeline and Terminal traffic impacts during the peak Pipeline construction period will be less than the peak Terminal construction period." (Ex. 187, p 7). Based on all of this, the applicant asserts that its TIS complies with the requirements of WDC ch. 16.256 and, with the May 2015 TIS Addendum, it demonstrates that traffic impacts of the terminal will not overlap or conflict with the construction of the 3-mile pipeline segment inside the city limits (Ex. 193, p 71-72).

RiverKeeper responds (Ex. 83, p 18-22) that the applicant should have provided a TIS Addendum that covered more than the 3-mile segment situated within Warrenton. RiverKeeper also asserts that ODOT has not concurred with the applicant's TIS or its traffic mitigation measures, citing an August 2015 letter (Ex. 5).

From all of this, the Officer finds that only traffic impacts from land use activities within the City of Warrenton are cognizable under WDC ch. 16.256, which includes traffic attributable to the terminal operations and construction and the traffic generated by construction of the 3-mile pipeline segment located within the city. ODOT does not appear to have any regulatory role in the terminal or pipeline, as it admits in its August 25, 2015 letter to the City (Ex. 5), but the Officer views ODOT's comments as credible

³⁷ The reference to OAR 734-051-180 appears to be an outdated citation. The applicant's explanation appears to be plausible (Ex. 193, p 71, n. 11), *i.e.*, the rule and thus the code simply require a traffic impact study consistent with ODOT's requirements.

³⁸ The applicant did not submit a separate TIA for the pipeline component of this application.

expert testimony on the project's impacts that are cognizable under WDC ch. 16.256. Finally, the Officer finds that the applicant shored-up a lot of the 2014 TIS's deficiencies by submitting the May 20, 2015 TIS Addendum, such that ODOT's comments help focus the remaining issue as how to mitigate for construction-related traffic (Ex. 5, p 2-3). The Officer does not read ODOT's comments as RiverKeeper appears to, as being negative, but rather that ODOT's concerns can be addressed through mitigation. In fact, staff accepted ODOT's recommended conditions of approval and attached them as Conditions 6, 7, 8 & 9 (Terminal Staff Report, p 361-362).

From all of this, the Officer concludes that the applicant has met the requirements of WDC ch. 16.256, such as they are, by submitting the 2014 TIS (Terminal Application, App E), the May 20, 2015 TIS Addendum, and then explaining how the traffic impact concerns raised by the opponents would be addressed (Ex. 187, p 6-8; Ex. 193, p 71-72). Notwithstanding the logic of the concerns voiced by the opponents and ODOT, the WDC does not require more. This conclusion is based on the relative lack of any objective approval standards or substantive requirements for addressing traffic/transportation impacts in WDC ch. 16.256.³⁹

12. Warrenton Comprehensive Plan (WCP) Consistency.

A potentially large number of comprehensive plan provisions have some applicability to some aspect of this project, but, in reality, very few are implicated in any meaningful way. The applicant addressed a significant number of Plan provisions that it believed were applicable, and RiverKeeper challenged the project based on a subset of those provisions as not being met by this proposal (Ex. 44, p 62-69). The Officer addresses each of the comprehensive plan provisions cited by RiverKeeper in the following findings. For those that neither RiverKeeper nor any other party asserts is applicable and not met, the Officer relies upon and incorporates by this reference the Terminal Staff Report.

As a general matter, the Officer takes the view that generally worded comprehensive plan policies have little relevance in quasi-judicial permit proceedings as approval criteria, but rather, comprehensive plan provisions are usually intended to guide the planning commission and governing body in fashioning land use regulations. This view is consistent with the following statement from the WCP's introduction: "The Plan functions as a legal framework that City officials will use to make decisions. It is a statement of how the City Commission and Planning Commission, through the zoning ordinances, subdivision regulations, public facility policies and other means, will direct and control growth and change for the benefit of the people of this community." (WCP Art 1). Certainly comprehensive plan provisions are not directly applicable as approval criteria to limited land use decisions, such as the site plan design review component of the terminal proposal, unless they are also incorporated into the zoning ordinance.⁴⁰

³⁹ In the event the City Commission approves this project on appeal, the Officer recommends inclusion of ODOT's recommended conditions of approval, as set forth in the staff report at p 361-62 (Conditions 6, 7, 8 & 9).

⁴⁰ See ORS 197.015(12) & 197.195(1); *LO 138 LLC v. City of Lake Oswego*, ___ Or LUBA ___ (LUBA No. 2014-092, slip op. April 15, 2015) ("Comprehensive plan standards may only be applied to limited land use decisions as approval standards if they have been incorporated into the city's land use regulations. ORS 197.195(1).")

The degree to which any particular WPC provision is applicable to this project as an approval standard, therefore, depends upon its precise wording and whether comprehensive plan compliance is required by the development code. At a minimum, WPC provisions appear to be approval criteria for the conditional use permits and variance components of this project. See WDC 16.220.030(A)(1) and 16.272.020(D), respectively. It is less clear that the WCP is a source of applicable approval criteria for any other aspect of this project. For example, the WCP does not appear to be implicated by wetland permitting under WDC ch. 16.156, or estuary and shoreland development under WDC chs. 16.160 and 16.164. Compliance with applicable comprehensive plan policies is required for uses allowed outright in the A-1 Zone, but not the I-2 Zone. See WDC 16.72.040(C) versus WDC 16.64.040.

a) **WCP 4.310 – Natural Features, soils.** This plan provision provides in pertinent part:

“(1) Hazards resulting from poor soils shall be minimized by using sound soils data and engineering principles to determine public and private development techniques and by requiring those developing property, when appropriate, to assume responsibility for certain hazard-related costs.”

RiverKeeper asserts that the project is inconsistent with this policy (Ex. 44, p 62) and incorporates by reference its arguments under the Soil Hazard Overlay from WDC ch. 16.96 (Ex. 44, p 26-29). The applicant provides a basic response to the WCP argument (Terminal Application, p 5-185 to 5-187), a geotechnical investigation and analysis (Terminal Application, App F) and a more detailed response to the opponents’ assertions that the site’s soils and geology make it unsuitable for this use. The application described engineering steps and foundation designs that, according to the applicant, would withstand earthquake damage (Ex. 138, p 32-34; Ex. 187, p 9-13; Ex. 191, p 9-15; Ex. 193, p 16-18). The applicant analyzed the seismic and tsunami risk factors and provided design details of the 22-27 foot tall earthen berm around the plant that would reduce the risk of inundation from a major tsunami (Ex. 138, p 30-31, 35-36). In these post-hearing submissions, the applicant provided an analysis of the geotechnical and tsunami risk, including the Cascadia Subduction Zone hazards, and specifically addressed the implications of the site being underlain by the Columbia River Fault and a response to Tom Horning’s report (Ex. 175).

Given the generally worded “requirements” of WCP 4.310 that “hazards resulting from poor soils shall be minimized by using sound soils data and engineering principles...,” and the lack of any focused and comparably credible expert evidence to rebut the applicant’s investigation, analysis and engineering design measures, the Officer concludes that the applicant has satisfied the requirements of this policy. In support of this conclusion, the Officer incorporates herein by this reference his findings adopted in response to WDC chs. 16.88 and 16.96, WDC 16.192.030, 16.220.030(A) related to soils and geotechnical issues. Because these code chapters and sections related to soils and geological suitability are more specific and focused, the Officer concludes that they implement the generally worded WCP 4.310.

- b) **WCP 4.320 – Natural Features, flood hazards.** This plan provision provides in pertinent part:

“(2) A flood hazard permit will be required for all types of development, including dredging and filling, in areas of special flood hazards identified by Federal Emergency Management Agency’s (FEMA) Federal Insurance Rate Maps (FIRM). The FIRM maps were originally dated May 15, 1978 (as amended) and have been updated in March 2010 by FEMA.”

RiverKeeper argues that this plan provision requires the applicant to obtain a Flood Hazard Permit now, as part of the present consolidated proceeding (Ex. 44, p 62). The applicant responds that it will obtain a Floodplain Development Permit subsequent to this land use proceeding in conjunction with grading and site preparation applications, all of which are subject to a Type I process, not land use procedures (Terminal Application p 5-187 to 5-188; Ex. 193, p 73). Staff reports that it is typical to consolidate such Type I permits after the land use process is complete (Terminal staff report p 283-284). RiverKeeper asserts that the present consolidated proceeding must be denied unless and until the applicant applies for and obtains its Flood Hazard Permit.

The code, especially WDC ch. 16.88, is somewhat ambiguous about what a Flood Hazard Permit is or when it must be obtained in the overall development process. The Officer concludes from these ambiguities that a Floodplain Development Permit under WDC ch. 16.88 for development in a designated Area of Special Flood Hazard is the “Flood Hazard Permit” mentioned in WCP 4.320. WDC ch. 16.88 does not contain any special approval criteria for a Flood Hazard Permit, except for the informational submission requirements in WDC 16.88.030 (Administration) A-E and the design standards for development in the Area of Special Flood Hazard in WDC 16.88.040. These are discussed *supra*, and the Officer incorporates those findings here by this reference. While RiverKeeper raises substantive arguments in response to WDC 16.88 (Ex. 44, p 23-26), its argument under WCP 4.320 appears to be procedural, not substantive. In that light, the code provides a Type I process for Floodplain Development Permits (WDC Table 16.208.020) and does not require that they be obtained prior to or in conjunction with land use permits. For that reason, the Officer rejects this argument and imposes a requirement that the applicant obtain a Floodplain Development Permit before beginning any site preparation work. See Terminal Condition 23.

- c) **WCP 4.360 – Natural Features, air quality and noise.** This plan provision provides in pertinent part:

(1) It is the City’s policy to preserve air quality and minimize noise through compliance with applicable state and federal regulations, use of additional local requirements and other means.

(2) Before building permits will be issued for large-scale, non-residential developments, suitable information shall be submitted which shows that the development will not violate state or federal air quality and noise regulations. When appropriate, such evidence may also be required

before issuing building permits for uses which generate high levels of noise or substantial amounts of air pollution.

RiverKeeper argues that these plan provisions apply at this stage in the development process and the applicant has not yet met them (Ex. 44, p 63). The applicant responds that these plan provisions do not constitute mandatory approval criteria, and in any event, the developer will obtain all necessary state and federal air quality permits and will demonstrate compliance with applicable noise standards before building permits are issued, but cannot do so now (Terminal Application, p 5-191).

As a starting point, the Officer addressed similar arguments (lack of DEQ air quality permits and gas flare heat and glare) *supra* under the base zone requirements, and incorporates those findings here by this reference. Second, WCP 4.360 (Natural Features, air quality and noise) is not worded as a mandatory approval standard, but anticipates code criteria (WDC) and permitting procedures to implement its general requirements. As previously stated, the Officer concludes that RiverKeeper has not established that the applicant is legally precluded from obtaining these discretionary state and federal permits. For that reason, the record shows that it is feasible for this applicant to meet those state and federal standards and obtain those permits subsequent to the local land use process. It is sufficient, therefore, to impose a condition requiring those permits before construction (site preparation work) begins. See Terminal Condition 21. If the applicant fails to obtain any required state or federal permit, it cannot begin construction of the facility.

d) WCP 5.305 – Columbia River Estuary, dredging. This plan provision provides in pertinent part:

These policies are applicable to all estuarine dredging and dredged material disposal in the Columbia River Estuary, shall be allowed only: (1) If, allowed by the applicable zone and required for one or more of the following uses and activities:

(a) Navigation, navigational access, or an approved water- dependent use of aquatic areas or adjacent shorelands requiring an estuarine location; and

(b) A need (i.e., a substantial public benefit) is demonstrated and the use or alteration does not unreasonably interfere with public trust rights; and

(c) No feasible alternative upland locations exist; and

(d) Adverse impacts are minimized, avoided, and mitigated; and

(e) An approved restoration project; and

(f) Excavation necessary for approved bridge crossing support structures, pipeline, cable, or utility crossing; and

(g) Maintenance of existing tidegates and tidegate drainage channels where a Goal 16 exception has been approved; and

(h) Aquaculture facilities.

The plan policy then goes on to state numerous requirements for dredge and fill operations in the City's Goal 16 and 17 estuary and shoreland areas. RiverKeeper argues (Ex. 44, p 63) that this WCP section's requirements parallel the substantive requirements of WDC 16.160.020, and RiverKeeper incorporates by reference its arguments from that section (Ex. 44, p 35-47).

In response to this challenge, the applicant also takes the position that WCP 5.305 parallels the substantive requirements in WDC 16.160.020 and proceeds with a discussion of how the proposal meets those criteria (Terminal Application, p 5-198 to 5-203), relying primarily on its impact assessment (Terminal Application, App G) the DEIS and related supporting documents and the future biological opinion that NMFS will provide FERC as part of its Section 7 consultation under the Endangered Species Act.

As a starting point, the Officer agrees with the position of the parties that the requirements of WCP 5.305 are largely implemented through the specific substantive provisions and approval criteria of WDC 16.160.020 and 16.160.040. However, the plan policy provisions are worded as mandatory approval criteria, not as generally worded policy, and therefore appear to be approval criteria applicable to permits such as this, albeit identical to WDC 16.160.020 and 16.160.040. In that light, the Officer incorporates herein by this reference all of his findings *supra* related to WDC ch. 16.160 compliance. On this basis, the Officer concludes that, because the requirements of WDC ch. 16.160 are not met by the terminal proposal, so too the requirements of WCP 5.305 are not met.

e) WCP 5.307 – Columbia River Estuary, estuarine construction. This plan provision provides in pertinent part:

These policies apply to over-water and in-water structures such as docks, bulkheads, moorages, boat ramps, boat houses, jetties, pile dikes, breakwaters and other structures involving installation of piling or placement of riprap in Columbia River Estuary aquatic areas, and to excavation of shorelands for creation of new water surface area. This section does not apply to structures located entirely on shorelands or uplands, but does apply to structures, such as boat ramps, that are in both aquatic and shoreland designations. ...

(4) Piling or dolphin installation, structural shoreline stabilization, and other structures not involving dredge or fill, but which could alter the estuary may be allowed only if all of the following criteria are met:

(a) A substantial public benefit is demonstrated; and

(b) The proposed use does not unreasonably interfere with public trust rights; and

(c) *Feasible alternative upland locations do not exist; and*

(d) *Potential adverse impacts, as identified in the impact assessment, are minimized.*

RiverKeeper again asserts that this plan provision parallels and has the same substantive requirements as WDC 16.160.020(B) and (C), but with regard to over and in-water structures such as the docks, piers and pilings proposed here (Ex. 44, p 63). The applicant responds that the plan provision's requirements are met with regard to the in-water and over-water structures it proposes (Terminal Application p 5-203 to 5-205).

As a starting point, this plan provision is worded in mandatory terms as a permit approval standard, albeit identical to WDC 16.160.020(B) and (C). The Officer addressed previously the WDC ch. 16.160 criteria in the context of the in-water and over-water construction elements, which consist of piers, pilings and docks. See findings *supra* addressing WDC 16.160.020(C). This comprehensive plan provision applies just to "pilings or dolphin installation, structural shoreline stabilization, and other structures not involving dredge or fill, but which could alter the estuary." The Officer infers two important differences between the analysis required for WCP 5.307 and the prior analysis under WDC 16.160.020(B) related to estuary dredging, which employed basically the same criteria: (1) the docks, pilings and piers are relatively small and their installation, construction and operation will have a commensurately smaller impact on estuary resources as compared to the 109-acre dredge of 1.2 million cy of benthic substrate; and (2) the docks, piers and pilings are locationally dependent on the near-shore area adjacent to this A-1 and I-2 Zoned aquatic industrial parcel.

Regarding WCP 5.307(4)(a), the applicant claims a substantial public benefit in terms of economic benefits to the community and region and the global demand for natural gas that is driving this project. As previously discussed, the Officer does not interpret the need (substantial public benefit) criterion as calling for a global LNG market and demand analysis. Instead, the locational question under WCP 5.307(4)(a) is whether there a public need for these pilings, piers and dock facilities to be located in the shoreline area? The Officer concludes that such a need exists because this particular proposed use requires close and immediate access to a deep water marine port. This is a use that must be sited in an estuary or near-shore area and cannot be sited in upland areas away from an estuary. It is also dependent upon the aquatic industrial A-1 and I-2 zoning, which are on and adjacent to the estuary.

Along the same lines, under WCP 5.307(4)(c), the Officer concludes that the pier, dock and pilings that are needed to moor LNG transfer ships necessarily must be located in estuary areas such as this one. This is the same analysis but a different conclusion than the Officer reached regarding the same criterion and the LNG terminal facility as a whole because of the narrow focus of WCP 5.307(4) on the in-water and over-water pier and piling elements.

Regarding the public trust element in WCP 5.307(4)(b), the in-water and over-water elements of this facility certainly impact public trust rights, and present two primary impacts: (1) the construction and installation of the pilings, docks and

piers and (2) operation of the dock and piers for LNG tanker moorage. When viewed in isolation, the Officer concludes that the impact of construction and installation may not be significant – certainly nothing compared to the impact of the 109-acre dredge. The operation of the docks and piers, however, involve berthing LNG tankers, which will impose a 500-yard exclusion zone from LNG vessels while in transit, a 200-yard exclusion zone for LNG vessels moored at dock, and a 50-yard permanent exclusion zone from the dock facilities with no vessels present. As with the same standard in WDC 16.160.020(B), the Officer concludes this is a significant and unreasonable interference with public trust rights. In reaching this conclusion, the Officer is persuaded by ODFW comments on this project from January 2015 to late September 2015 (Exs. 21 & 186; Ex. 44, attachment 63), which raised strong concerns about the project's impacts on fish, fishing, fish habitat, on-going fish recovery efforts, and thus public trust rights. The testimony of affected fishing organizations and individual fishers is also compelling and credible evidence that these impacts are real and significantly (unreasonably) impact public trust rights (Exs. 4, 7, 9, 25, 43, 48, 51, 80, 96, 103, 108, 118, 119 & 123). ODFW's final comment letter (Ex. 186), submitted just before the record closed, is most telling. Because the impact of the on-water and over-water elements of this proposal include these significant vessel exclusion zones, the Officer concludes that the applicant has failed to demonstrate compliance with WCP 5.307(4)(b).

Finally, with the requirement in WCP 5.307(4)(d) to minimize adverse impacts, the Officer concludes that, arguably, the applicant has provided sufficient evidence that potential adverse impacts are minimized because the exclusion zones associated with LNG vessels and the dock are imposed by the Coast Guard. It appears that the only way to make these exclusion zones smaller is to eliminate the docks, piers and pilings altogether. In that light, the impact of the in-water and over-water elements of the docks and piers are not self-imposed, but directly imposed by another agency. Consequently, there does not appear to be anything the applicant can do to reduce these exclusion zones short of abandoning the project altogether.

- f) **WCP 5.309 – Columbia River Estuary, fill.** This plan provision provides in pertinent part:

These policies apply to the placement of fill material in the tidal wetlands and waters of the Columbia River Estuary. These policies also apply to fill in non-tidal wetlands in shoreland designations that are identified as "significant" non-tidal wetlands.

* * *

(5) Fill in estuarine m1ualic [sic] areas may be permitted only if all of the following criteria are met:

- (a) If required for navigation or for other water-dependent uses requiring an estuarine location, or if specifically allowed under the applicable aquatic zone; and*
- (b) A substantial public benefit is demonstrated; and*
- (c) The proposed fill does not unreasonably interfere with public trust rights; and*

- (d) *Feasible upland alternative locations do not exist; and*
- (e) *Adverse impacts, as identified in the impact assessment, are minimized.*

RiverKeeper claims this plan provision imposes the same requirements as WDC 16.160.020(B) and (C) and that the applicant has not demonstrated compliance with either one (Ex. 44, p 63). The applicant appears to agree that the provision is implemented through WDC 16.160.020 and provides similar responses to what it provided for these code requirements (Terminal Application, p 5-205 to 5-208). No one asserts that the comprehensive plan provision imposes any different requirements than what WDC 16.160.020 requires.

WCP 5.309(5), by its terms, is limited to impacts associated with construction, installation and operation of the in-water and over-water elements. This means the pilings, piers and docks. The specific required elements in this plan provision match those of WDC 16.160.020(C), which applies to “new piling or dolphin installation, construction of pile-supported structures,” and the like. The Officer addressed these criteria in the context of the project’s pilings, piers and docks in the discussion *supra* of WDC 16.160.020(C), and he incorporates by reference those findings here. In a nutshell, the Officer concluded that the pier, piling and dock elements (construction, installation and operation) meet the first criterion (need), third (feasible upland locations do not exist) and fourth (potential adverse impacts are minimized), but not the second (no unreasonable interference with public trust rights). The Officer reaches the same conclusions here with regard to WCP 5.309.

- g) WCP 5.311 – Columbia River Estuary, fish & wildlife habitat.** This plan provision provides in pertinent part:

These policies apply to uses and activities with potential adverse impacts on fish or wildlife habitat, both in Columbia River estuarine aquatic areas and in estuarine shorelands. (1) Endangered or threatened species habitat shall be protected from incompatible development.

RiverKeeper focuses on the mandatory language of this policy (“habitat shall be protected”) and argues that the project fails to protect the critical habitat of ESA-listed salmonids (Ex. 44, p 63). RiverKeeper relies on the Williams Report (Ex. 44, attachment 1) and its §404 comments (Ex. 44, attachment 70). The applicant responds to the issue by pointing to many years’ worth of meetings with the affected state and federal agencies with jurisdiction over ESA-listed fish, how the project design has changed in response to those discussions and how NMFS and USFWS service will ensure final compliance with the federal Endangered Species Act when they issue their respective biological opinions (Terminal Application, p 5-208 to 5-209).

As a starting point, the Officer does not read this comprehensive plan provision to be a separate stand-alone approval criterion, but instead is implemented through the WDC, *viz.*, WDC ch. 16.160 and especially WDC ch. 16.164. However, while impacts to ESA-listed salmonids dominated the discussion from all sides, those chapters do not expressly mention endangered fish species. Nonetheless, RiverKeeper and the Officer (and arguably the applicant) have

interpreted WDC chs. 16.160 and 16.164 to be the primary local mechanisms by which impacts to endangered fish species are addressed. For that reason, the Officer incorporates herein by this reference his findings *supra* that address ESA-listed salmonids under WDC chs. 16.160 and 16.164.

An additional point bears mentioning. The applicant has throughout this application and the local process emphasized how it must coordinate with a plethora of state and federal agencies with jurisdiction over many aspects of aquatic habitat, endangered species and water quality, with the implication that Warrenton should defer, to some degree, to those agencies on those subjects. To a certain extent, the applicant is right, in that these agencies have the technical, biological and ecological expertise to evaluate this project and its impacts and to fashion appropriate conditions to protect these resources. On that basis, the Officer has relied on comments on the project from ODFW⁴¹ and NMFS.⁴² However, this is not simply a situation where the local code requires the applicant to obtain discretionary state and federal permits and the local government is injecting itself into those state and federal permit proceedings and attempting to determine whether the applicant will be able to obtain those permits. Here, the local code has numerous substantive criteria that, while similar to the issues addressed by the state and federal agencies, are purely local land use approval criteria that implement the CZMA through state programs and the WCP and are reflected in land use criteria in the WDC. In that light, these criteria cannot be ignored, nor can the Officer simply defer to state and federal environmental agencies and trust that they will address these issues.

The Officer has made clear, especially under WDC ch. 16.164 that he believes that the impacts of this project on ESA-listed salmonids and their estuary and shoreland habitat are unacceptably great and not sufficiently mitigated. Also, the Officer is skeptical that NMFS will simply approve the project in its Section 7 consultation with FERC by issuing a non-jeopardy opinion. Comments in the record from ODFS and NMFS on this project and relevant portions of NMFS's 2008 jeopardy BiOp (and the 2010 and 2014 supplemental BiOps) on the FCRPS project lead the Officer to conclude that a jeopardy BiOp on this project is a real possibility, which would undermine any suggestion that the Officer simply defer a determination of the project's impacts on endangered species to a subsequent conclusion by state and federal agencies.⁴³

⁴¹ See ODFW comments at Exs. 21 and 186 and Ex. 44, attachment 63.

⁴² See NMFS §404 comments at Ex. 44, attachment 5.

⁴³ Another reason to not wait or defer to NMFS on a determination of whether this project will jeopardize ESA-listed salmonids through direct take or habitat impacts is that FERC, in the Bradwood Landing LNG case, approved that project before NMFS issued its biological opinion. While the opponents' challenge to FERC's decision on Bradwood Landing was subsequently dismissed by the Ninth Circuit as moot for other reasons, the fact that FERC did not wait for NMFS to issue its biological opinion on that project before issuing a decision concerns the Officer. *Oregon v. FERC*, 636 F.3d 1203 (2011). The sequence of decision making in the Bradwood Landing case, were it to be repeated here would appear to violate federal law and would also nullify consideration of Warrenton's CZMA criteria. For that reason as well as those stated *supra*, the Officer addresses now the project's impacts to endangered fish in the context of the city's local CZMA land use criteria, and concludes that the preponderance of evidence weighs against approval.

- h) **WCP 5.323 – Columbia River Estuary, public access.** This plan provision provides in pertinent part:

These policies are applicable to uses and activities in Columbia River Estuary shoreland and aquatic areas which directly or indirectly affect public access. "Public access" is used broadly here to include direct physical access to estuary aquatic areas (boat ramps, for example), aesthetic access (viewing opportunities, for example), and other facilities that provide some degree of public access to Columbia River Estuary shorelands and aquatic areas.

(1) Existing public ownerships, right-of-ways, and similar public easements in estuary shorelands which provide access to or along the estuary shall be retained or replaced if sold, exchanged or transferred. Right-of-ways may be vacated to permit redevelopment of shoreland areas provided public access across the affected site is retained.

(3) Proposed major shoreline developments shall not, individually or cumulatively, exclude the public from shoreline access to areas traditionally used for fishing, hunting or other shoreline activities.

RiverKeeper asserts that several aspects of the project violate this requirement (Ex. 44, p 64-68), which it summarizes as follows:

1. Public access to the terminal site will not be maintained because the shoreline will be fenced to exclude the public along the shore. Additionally the project anticipates that King Avenue will be vacated to the applicant, thus terminating public access via that public right-of-way.
2. The area covered by the Coast Guard's safety/security zone is significantly greater than the area covered by the aquatic land lease, and evidence demonstrates that the security zone will restrict public access.
3. Oregon LNG ignores the moving safety/security zones around LNG vessels (500-yards) as well as the fixed safety/security zone (200-yards) when LNG vessels are moored at the dock. The vessel-based security zones are also inconsistent with WCP 5.323(3).
4. The LNG berth, standing alone, excludes public access to an area traditionally used for fishing, hunting, and boating.
5. The size and duration of dredging excludes public access to areas traditionally used for fishing and water recreation. ODFW states: "OLNG's proposal to dredge the turning basin and berth in one 4-month in-water work window beginning in June 1, 2015, through September 30, 2016 is well outside the recommended in-water work window for the Area (November 1 to February 28) and has the potential to substantially interfere with recreational angling in the lower Columbia River (Buoy 10) salmon fishery."

The applicant addresses the public access issue in general terms (Terminal Application, p 5-217 to 5-218) and responds to RiverKeeper’s WCP 5.323 challenge in its closing argument (Ex. 193, p 74-77).

As a starting point, there is a difference between public access over submerged and submersible lands where the public trust doctrine applies and where there is a tradition in Oregon for public access⁴⁴ versus private property that is not otherwise encumbered with any private or public access easements or common law traditions. A third issue is whether and how public right-of-way is vacated, which is a matter controlled by state statute.⁴⁵

Regarding the first issue, the Officer has already concluded that the 50-yard permanent exclusion zone imposed on the docks and the 200-yard exclusion zone imposed on docked LNG vessels, appears to be an unreasonable infringement of public trust rights under WDC 16.160.020(B) and (C). At least, the applicant has not sufficiently analyzed (quantified) the precise nature and extent of those impacts on commercial and recreational fishing. For those reasons, too, the applicant has not demonstrated that there will not be acceptable losses, irreversible changes or unacceptable degradation or reduction of estuary resources under WDC 16.164.040.

RiverKeeper appears to assume that the exclusion zones extend onto land and don’t encumber just water. The applicant, however, confirmed with the Coast Guard that the exclusion zones do not extend onto onshore areas (Ex. 191, p 4-5). The applicant explains that public access on the ESP will be blocked for only a small portion of the site right around the plant building (Ex. 193, p 74, citing Terminal Application figs. 1-3, 2-1, 2-2, 4-44 & 4-49). The applicant also points out that title to the properties making up the ESP do not reveal a public right-of-way dedication over much of the site. The “King Avenue right-of-way only extends onto a small portion of the far southern end of the Terminal site and does not currently provide access to or along the estuary...” (Ex. 193, p 75). From this, the Officer concludes that the balance of the ESP (everything outside of the fence) will be accessible by the public, something that warrants a condition. See Terminal Condition 24. The applicant then argues that any more public access than that would conflict with the underlying A-1 and I-2 zoning and the city’s comprehensive plan policies encouraging and protecting industrially zoned lands for those purposes.

So far as the Officer can tell, the public currently has little legal right to access the onshore parts of the ESP, and this project will not have much of an impact on that access. Basically, the public will still have access to the ESP outside of the plant building perimeter fence, unless federal law dictates otherwise for such energy infrastructure facilities. The submerged and submersible portions of the site are still encumbered with public trust rights, which the Officer has already determined will be unreasonably infringed upon by this project. The King Avenue

⁴⁴ See *State ex rel Thornton v. Hay*, 254 Or 584, 462 P2d 671 (1969), but see also *McDonald v. Halvorson*, 308 Or 340, 780 P2d 714 (1989).

⁴⁵ See ORS 271.080 to 271.230 – state law controlling the vacation of public rights-of-way. While this project proposal anticipates the vacation of King Avenue, the application does not include a vacation petition, nor is vacation approval sought in this proceeding.

public right-of-way exists where it exists according recorded dedication deeds. Thus, the Officer concludes that the project, even if approved, would not “exclude the public from shoreline access to areas traditionally used for fishing, hunting or other shoreline activities.” Even if approved, this proceeding does not currently include a vacation request under ORS 271.080, et seq. The language of WCP 5.323(1) appears to apply to vacation requests and related proceedings, which this is not. Therefore, based on a preponderance of the evidence in the record, and as explained by the applicant (Ex. 193, p 74-77), the Officer concludes that the project meets (or at least does not violate) the requirements of WCP 5.323.

i) WCP 5.327 – Columbia River Estuary, residential, commercial and industrial development. This plan provision provides in pertinent part:

These policies apply to construction or expansion of residential, commercial or industrial facilities in Columbia River Estuary shoreland and aquatic areas. ... Industrial uses and activities include facilities for fabrication, assembly, storage, and processing, whether water-dependent, water-related or non-dependent non.- related.

* * *

(2) Residential, commercial or industrial development requiring new dredging or filling of aquatic areas may be permitted only if all of the following criteria are met:

- (a) The proposed use is required for navigation or other water-dependent use requiring an estuarine location, or if specifically allowed in the applicable aquatic zone; and*
- (b) A substantial public benefit is demonstrated; and*
- (c) The proposed use does not unreasonably interfere with public trust rights; and*
- (d) Feasible alternative upland locations do not exist; and (e) Potential adverse impacts are minimized.*

RiverKeeper argues that the project violates this language for the same reasons that it violates WDC 16.160.020(B) and (C) (Ex. 44, p 68). The applicant provides a similar explanation to what it provided in response to WDC 16.160.020(B) and (C) (Terminal Application, p 5-218 to 5-222).

The Officer finds that this plan provision language applies to shoreland industrial development that involves dredging and filling. In that light, it is implemented by WDC 16.160.020(B) and (C), and the Officer incorporates herein by this reference his findings adopted *supra* in response to those code sections. On this basis, the Officer concludes that the terminal project violates this WCP provision.

j) WCP 5.331 – Columbia River Estuary, significant areas. This plan provision provides in pertinent part:

These policies are intended to protect certain shoreland and aquatic resources with estuary-wide significance. Significant shoreland resources are identified as such in the area and subarea description. Significant aquatic resources are found in Natural Aquatic areas. This subsection

applies only to activities and uses that potentially affect significant shoreland or aquatic resources. Other resources without estuary-wide significance are not covered by this subsection. Only those resources identified as significant under Statewide Planning Goal 17 are covered by these policies and standards.

(1) Significant estuarine aquatic and shoreland resources shall be protected from degradation or destruction by conflicting uses and activities.

RiverKeeper argues that the project violates this provision for the same reasons it violates WDC 16.160.020(B) and (C) (Ex. 44, p 68). The applicant provides a similar explanation to what it provided in response to WDC 16.160.020(B) and (C) (Terminal Application, p 5-222 to 5-223).

The Officer notes that the language of this plan policy tracks more precisely (but not exactly) the requirements of the estuary impact assessment conclusion in WDC 16.164.040, and not so much WDC 16.160.020(B) and (C). From a comparison of the plan policy with the code requirements, the Officer concludes that WCP 5.331 is implemented by WDC ch. 16.164. For that reason, the Officer incorporates herein by this reference his findings adopted *supra* in response to WDC ch. 16.164 to conclude that the application does not achieve the requirements of this plan policy.

k) WCP 5.347 – Columbia River Estuary, mouth of the Skipanon River Subarea. This plan provision provides in pertinent part:

(3) The approximately 40 acre Holbrook Slough DMD / Mitigation site is reserved for mitigation of development impacts on the East Skipanon peninsula. Offsite mitigation may be considered as part of the required mitigation or in addition to this onsite mitigation. Acreage not used for mitigation would then become available for DMD or development, but not until the site is fully developed.

RiverKeeper faults the applicant for failing to implement this plan policy by using the Holbrook Slough for dredge material disposal (DMD) and mitigation for the ~35-acre permanent wetland impact proposed here (Ex. 44, p 69). The application explains that the applicant chose to not use the Holbrook Slough site for wetland impact mitigation because it is too small (Terminal Application, p 5-225 to 5-226). In closing arguments, the applicant further responds to RiverKeeper's argument (Ex. 193, p 77-78).

The Officer reads WCP 5.347 to provide Holbrook Slough as one of several possible mitigation sites for wetland impacts on the ESP, but not the sole or exclusive mitigation site for such impacts. The Officer agrees with the applicant's view and concludes that WCP 5.347 does not impose a mandatory or exclusive requirement on this project.

C. LNG Bidirectional Pipeline Applications:

Approximately three miles of the of the 86.8-mile LNG bidirectional pipeline will be located in Warrenton (Pipeline Application figs 4-1, 4-2 & 4-3). The pipeline will consist of a 36-inch (outside diameter) welded steel pipe within a 50-foot permanent easement. An additional 50-foot temporary construction easement will be used for upland areas and a 25-foot temporary construction easement in wetland areas. In Warrenton, the pipeline will pass through the following five base zones and three overlay zones:

Zone/Overlay Designation	Abbreviation	Distance	WDC Ch.
General Commercial	C-1	0.1 miles	16.40
General Industrial	I-1	1.6 miles	16.60
Water-Dependent Industrial Shorelands	I-2	0.4 miles	16.64
Aquatic Natural District	A-3	0.5 miles	16.80
Coastal Lake & Freshwater Wetlands	A-5	0.1 miles	16.84
Floodplain Hazard Overlay	FHO	2.0 miles	16.88
Soils Hazard Overlay	SHO	1.5 miles	16.96
Airport Hazard Overlay	AHO	underground	16.92

Specific land use approvals required for the pipeline and addressed in this decision are

- Conditional Use Permit for 0.5-mile segment in the A-3 Zone – WDC ch. 16.220
- Conditional Use Permit for wetland restoration in the I-2 Zone – WDC ch. 16.220
- Hardship variance for impacts to locally significant wetlands – WDC ch. 16.156
- Large-Scale Development Permit for the pipeline generally – WDC ch. 16.192

Approximately 2 miles of the pipeline’s route in Warrenton is designated floodplain. There will be one stream crossing and several wetland and waterbody crossings, for which the applicant proposes specific crossing methods (Pipeline Application p 4-19 to 4-23).

Wetland crossing method 1 Standard trenching	This method will be used in dry wetlands where soils are stable enough to support equipment without sinking (for example, mineral hydric soils), or in wetlands that have already been disturbed. A reduced construction easement of 75 feet will be maintained and overland construction techniques will be used, unless exceptions are required by site conditions. Topsoil disturbed by trenching will be segregated, and no matting will be used if conditions are dry
Wetland crossing method 2 Standard trenching, heavy equipment on timber mats	This method will be used in wetlands where the soils are too wet to support Pipeline construction equipment. Timber mats will be used as necessary to support the construction equipment. A reduced construction easement of 75 feet will be maintained and overland construction techniques will be used, unless a variance has been granted. Topsoil disturbed by trenching will not be segregated
Wetland crossing method 4 Horizontal directional drilling	Horizontal Directional Drilling methods will be used for specialized Pipeline crossings of large wetland areas including Adairs Slough. Directional drilling is limited in

	<p>application and dependent on critical wetland characteristics, including subsurface lithology, crossing length, burial depth, sediment composition, bank conditions, and access. Adverse environmental impacts that may result from drilling operations on waterway crossings would be related to discharge and transportation of drilling fluid; however, aside from turbidity effects, drilling fluid is a relatively environmentally benign substance. Mitigation of any adverse impact from drilling fluid would be by collection and cleanup of spilled material.</p>
<p>Waterbody crossing method 1 Dry crossing 0 to 30 feet</p>	<p>This method is applicable to perennial (with flow) or intermittent and ephemeral streams between 0-30 feet wide that are cold water fisheries and to perennial streams that may not be fish-bearing but are tributary to fish-bearing streams. Stream flow may be channeled into one or multiple flume pipes to convey water across the trench and maintain downstream flow. The trench will be excavated from under the flume pipe, the pipeline will be threaded under the flume, the trench will be backfilled, and the flume pipe will be removed to restore natural downstream flow. If no fish are present in the stream, the crossing method may be modified with a dam and pump arrangement to convey stream water around the construction area. If the stream is dry at the time of construction, Crossing Method 3, will be the crossing method</p>
<p>Waterbody crossing method 2 Horizontal directional drilling</p>	<p>In general, this method is applicable to major waterbodies (Application Table 4-5), and it minimizes impacts to these streams over traditional trenching methods. Preliminary site- specific HDD pipeline crossing plans are included in Appendix 1I to Resource Report 1. An HDD is planned across the Skipanon River for the water supply pipelines.</p>
<p>Waterbody crossing method 3 Open-cut trench</p>	<p>One intermittent stream crossing will occur at a small tributary to the Lewis and Clark River near MP 2.6. This crossing will be made using the open-cut trenched method. This method is applicable to intermittent and ephemeral streams that are not fish-bearing, and to fish-bearing intermittent or ephemeral streams if dry at the time of construction. Perennial streams that are minor, non-fish-bearing and not directly tributary to a fish-bearing stream may also use this crossing method. This method is allowable for the crossing of minor or intermediate waterbodies. The restrictions on in-stream work time (24 to 48 hours), restoration of preconstruction contours, limitations on equipment operating in the waterbody, or required bridging identified in the FERC process.</p>

The applicant provided a single binder by way of application materials for the pipeline segment within the City of Warrenton, which includes a narrative and the following technical appendices that are uniquely tailored to the pipeline proposal:

- App A – Figures referenced in the narrative
- App B – Stormwater Management Plan
- App C – Columbia River Estuary Impact Assessment
- App D – Oregon DSL Wetland Delineation Concurrence Letter
- App E – Impact Study on Public Facilities and Services

During the local process the applicant provided a May 15, 2015 addendum to its Traffic Impact Study for the terminal (Terminal Application, App E) that specifically addressed the traffic attributable to the pipeline construction and operations.

The opponents, including RiverKeeper, provided abundant and detailed arguments and supporting documentation against the project, but very little of it focused on the pipeline, the specific permits and approvals required for the pipeline, or impacts uniquely attributable to the pipeline. The majority of the opposition arguments and documentation, arguably all of it, is focused on the terminal aspect of the project (Exs. 44, 83 & 188, and attachments to Ex. 44). The primary expert report provided by RiverKeeper that is focused on impacts of the pipeline is a report by Jonathan Rhodes (“Rhodes Report”), but this analysis addresses the entire 86-mile pipeline and its many impacts, only a small portion of which is relevant to the 3 miles within the boundaries of Warrenton.

1. Is the pipeline a use allowed in the C-1, I-1, I-2 and A-5 Zones:

Four of the five base zones through which the pipeline passes allow “pipelines” outright:

- C-1 Zone: WDC 16.40.020(A);
- I-1 Zone: WDC 16.60.020(M);
- I-2 Zone: WDC 16.64.020(J); and
- A-5 Zone: WDC 16.84.030(F)

Pipelines are conditionally allowed in the A-3 Zone. See WDC 16.80.030(E). No party disputes that the pipeline proposed here qualifies as a use allowed outright in the C-1, I-1, I-2 and A-5 Zones, and the Officer so concludes.

2. WDC Ch. 16.220 - Conditional use permit for pipeline in the A-3 Zone (0.5 miles) and for wetland restoration in the I-2 Zone (4.3 acres).

Two aspects of the pipeline segment within the city require conditional use permits (CUPs):

- 0.5 miles of the pipeline traverses the A-3 Zone, for which a CUP is required,
- 4.3 acres of wetland restoration is proposed for the I-2 Zone.

Approval of both CUPs requires a preponderance of evidence demonstrating compliance with the following criteria in WDC 16.220.030 (Review Criteria):

1. *The proposed use is in conformance with the Comprehensive Plan.*
2. *The location, size, design and operating characteristics of the proposed use are such that the development will be compatible with, and have a minimal impact on, surrounding properties.*

3. *The use will not generate excessive traffic, when compared to traffic generated by uses permitted outright, and adjacent streets have the capacity to accommodate the traffic generated.*
4. *Public facilities and services are adequate to accommodate the proposed use.*
5. *The site's physical characteristics, in terms of topography, soils and other pertinent considerations, are appropriate for the use.*
6. *The site has an adequate area to accommodate the proposed use. The site layout has been designed to provide for appropriate access points, on-site drives, public areas, loading areas, storage facilities, setbacks and buffers, utilities or other facilities which are required by City ordinances or desired by the applicant.*

The applicant addresses both pipeline CUPs in a consolidated fashion (Pipeline Application, p 5-74 to 5-78) as does staff in its report (Pipeline staff report at 111-117). The 0.5-mile segment of pipeline in the A-3 Zone will be buried. Construction of the 3 miles of pipeline in Warrenton will cause 25.7 acres of temporary wetland impacts,⁴⁶ mostly due to soil compaction and related construction damage, and 3.25 acres of permanent wetland impacts. Mitigation for the permanent wetland impacts will occur outside the city at the 120-acre restoration site and are discussed *supra* in the terminal section of this opinion. Mitigation for the temporary wetland impacts will occur on-site, in place and in-kind, as the applicant proposes to rehabilitate the construction areas after construction is complete, and 4.3 acres of that mitigation will occur in the I-2 Zone. The applicant describes the wetland impact restoration as consisting of the following actions:

“Rectification and restoration of temporary impacts will involve the following actions, as needed: general site cleanup, ripping soil to counter the effects of compaction, and restoring/replanting vegetation. Native plant material will be provided for vegetation restoration. The species composition will vary depending on hydrologic characteristics at each location.” (Pipeline application, p 5-74)

- a. **The use is in conformance with the Comprehensive Plan.** The applicant addresses comprehensive plan compliance as a separate section to the application (Pipeline Application, p 5-78 to 5-110), but lists the following as applicable:

Article 2 (Community Development), §2.310 Land and Water Use Classification
Article 3 (Land and Water Use), §3.320 Commercial Lands, §3.330 Industrial Lands, §3.340 Agriculture, Forestry, Wetlands and Open Space.

Article 4 (Natural Areas), §4.310 Soils, §4.320 Flood Hazards, §4.330 Drainage and Erosion, §4.340 Topography, §4.350 Water Quality, §4.360 Air Quality and Noise, §4.370 Fish and Wildlife, §4.380 Scenic and Historic Resources, §4.390 Energy Conservation.

⁴⁶ The applicant misquotes DSL's definition of “temporary impacts” (Pipeline application, p 5-74). According to OAR 141-085-0510(90), temporary wetland impacts are “adverse impacts to waters of this state that are rectified within 24 months from the date of the initiation of the impact.” Because of the applicant's apparent misunderstanding of the definition, a condition of approval is warranted to ensure that restoration occurs within 24 months from the date of the initiation of the impact so that they qualify as temporary. See Terminal Condition 25 & Pipeline Condition 10.

Article 5 (Columbia River Estuary and Estuary Shorelands), §5.150 Mouth of the Skipanon River Subarea Findings, §5.170 Airport and Vicinity Subarea Findings, §5.301 Deep-Water Navigation, Port and Industrial Development, §5.303 Diking, §5.305 Dredging and Dredged Material Disposal, §5.307 Estuarine Construction, §5.309 Fill, §5.311 Fish and Wildlife Habitat, §5.313 Fisheries and Aquaculture, §5.321 Mitigation and Restoration, §5.323 Public Access, §5.327 Residential, Commercial and Industrial Development, §5.331 Significant Areas, §5.333 Water Quality Maintenance, §5.335 Water-Dependent Development Areas, §5.339 Federal Consistency, §5.347 Mouth of the Skipanon River Subarea, §5.351 Airport and Vicinity Subarea.

Article 6 (Beach and Dune Shorelands)

Article 7 (Community Facilities and Services), §7.320 Water, Sewer and Storm Drainage/Flood Control, §7.330 Fire, Police, Recreation and Solid Waste Management.

Article 8 (Transportation), §8.320 Street Design, §8.330 Street Width, Access and Parking Design, §8.350 Multi-Mode Transportation.

Article 9 (Economy), §9.310 City Economy.

Like the applicant, the Officer will address these WCP policies *infra*.

- b. The location, size, design and operating characteristics of the use are such that it will be compatible with, and have a minimal impact on, surrounding properties.** The wetland restoration in the I-2 Zone is located entirely on the ESP where there is no current or proposed development, except for the terminal. The applicant's objective in the restoration is to return these wetland areas to their current status and condition. Accordingly, the Officer concludes that the 4.3-acre I-2 zoned wetland mitigation area meets this requirement. Similarly, the pipeline through the A-3 Zone will be completely buried, which, in the Officer's view, meets this criterion. The Officer adopts as his own and incorporates herein by this reference, the findings from the Pipeline Staff Report on this CUP criterion (Pipeline staff report, p 115).
- c. The use will not generate excessive traffic, when compared to traffic generated by uses permitted outright, and adjacent streets have the capacity to accommodate the traffic generated.** Neither of the two uses associated with the pipeline that require a CUP will generate traffic, except a modest amount associated with the actual installation of the buried pipeline in the A-3 Zoned segment and the wetland rehabilitation activities. The applicant provided a May 20, 2015 Traffic Study addendum addressing traffic attributable to pipeline construction and operations, but it did not differentiate the construction traffic attributable to this 0.5-mile segment from that of the other segments. In the absence of any arguments to the contrary from the opponents, the Officer concludes that construction traffic attributable to this 0.5-mile segment of the pipeline and the wetland restoration both are not excessive and therefore meet this criterion. The Officer adopts as his own and incorporates herein by this reference, the findings from the Pipeline Staff Report on this CUP criterion (Pipeline staff report, p 115).
- d. Public facilities and services are adequate to accommodate the use.** Similar to the preceding criterion, the Officer is hard pressed to identify what if any public facilities are specifically needed to construct or operate this 0.5-mile segment of

the pipeline in the A-3 Zone or the 4.3-acre wetland rehabilitation area in the I-2 Zone. The opponents have raised a number of arguments about the need for emergency services (fire, life and safety) in the event of a catastrophic explosion at the terminal facility, either by itself, or in conjunction with an earthquake and/or tsunami. Those issues are addressed *supra* in the terminal portion of this opinion. The Officer, however, does not find those arguments credible in the context of this 0.5-mile segment of the pipeline and finds no credible argument that public facilities or services are lacking for the 4.3-acre wetland enhancement area in the I-2 Zone. From this, the Officer concludes that this criterion is met with regard to these two specific CUP requests. The Officer adopts as his own and incorporates herein by this reference, the findings from the Pipeline Staff Report on this CUP criterion (Pipeline staff report, p 115).

- e. **The site's physical characteristics, in terms of topography, soils and other pertinent considerations, are appropriate for the use.** The 4.3-acre wetland restoration is proposed for the ESP precisely because its physical characteristics, topography, soils and other physical attributes are suitable for wetland restoration. With regard to this 0.5-mile segment of the pipeline in the A-3 Zone, the applicant asserts that "the topography is flat along the entire crossing of Warrenton, which greatly simplifies construction and installation of the Pipeline. The Pipeline is proposed through soils designated as part of the SHO zone; however, installation will be via trench or HDD, causing no significant increase in load to soil deposits. The Pipeline will not result in a significant increase in loading." (Pipeline application, p 5-77). The opponents do not contradict this statement or the evidence in the record that supports it. Therefore, the Officer concludes that both CUP requests meet this criterion. The Officer adopts as his own and incorporates herein by this reference, the findings from the Pipeline Staff Report on this CUP criterion (Pipeline staff report, p 116).
- f. **The site has an adequate area to accommodate the use. The site layout has been designed to provide for appropriate access points, on-site drives, public areas, loading areas, storage facilities, setbacks and buffers, utilities or other facilities which are required by City ordinances or desired by the applicant.** As a starting point, and consistent with the preceding CUP criterion, the applicant asserts that the 4.3-acre wetland mitigation area is proposed for the ESP, zoned I-2, precisely because it is so well suited for wetland rehabilitation. The site is flat, currently jurisdictional inventoried wetlands and presumptively well suited for this work. The applicant asserts that "this restoration work will only occur where preexisting wetlands were located. Therefore, the proposal is to return these areas to preexisting conditions." This statement and evidence upon which it is based are unchallenged by the opponents. With regard to the 0.5-mile pipeline segment in the A-3 Zone, the applicant claims that the "completed underground Pipeline will not require onsite drives, public areas, loading areas, storage facilities, utilities, or other facilities for its entirety across Warrenton. The Pipeline route, including easements within the A-3 zone has adequate area to accommodate the proposed construction work and operation." (Pipeline Application, p 5-77). In light of the evidence supporting these statements and lack of any contradictory argument from the opponents, the Officer concludes that this criterion is met for both CUP requests. The Officer adopts as his own and incorporates herein by this reference, the findings from the Pipeline Staff Report on this CUP criterion (Pipeline staff report, p 116).

3. WDC 16.156: Hardship variance for impacts to locally significant wetlands.

Several segments of the pipeline within Warrenton will cause impacts to locally significant (Goal 5) wetlands. These wetlands appear to be outside the City's Goal 16 and 17 boundaries, and presumably for that reason, the applicant addressed these impacts under Goal 5 instead of Goals 16 and 17 as it did for the terminal's wetland impacts. As such, impacts to wetlands designated as locally significant under Goal 5 require a hardship variance pursuant to the criteria in WDC ch. 16.156.080, which requires affirmative findings based on a preponderance of evidence in the whole record that the following criteria are met:

1. *The proposed development represents a reasonable and legal use of the lot or parcel, considering the zoning.*
2. *Strict adherence to this chapter and other applicable standards would effectively preclude a use of the parcel that could be reasonably expected to occur in similarly zoned parcels.*
3. *The property owner would be precluded a substantial property right enjoyed by the majority of landowners in the vicinity.*
4. *The variance is the minimum necessary to retain use of the property.*
5. *Granting of the variance will not be materially detrimental to the public welfare or be injurious to property or improvements in the neighborhood of the premises.*
6. *The variance will be in general harmony with the intent and purpose of this chapter, and will not adversely affect any officially adopted Comprehensive Plan policy.*

- a. The proposed development represents a reasonable and legal use of the lot or parcel, considering the zoning.** The applicant asserts that the pipeline use is both legal and reasonable in each of the zones through which it passes because it is either allowed outright (C-1, I-1, I-2 & A-5 zones) or conditionally (A-3 zone) (Pipeline Application, p 5-39). Staff agreed with the applicant's argument and conclusion (Pipeline staff report, p 59-60). RiverKeeper focuses its argument under this criterion on the terminal and says nothing about whether the pipeline is a reasonable or legal use in the zones through which it passes (Ex. 44, p 32-33).

In contrast to the terminal which has impermissibly significant impacts on the estuary and shoreland resources, the pipeline appears to be just a pipeline, with no unusual, extraordinary or significant impacts. While not dispositive, the fact that the pipeline is allowed outright or conditionally in all of the city zones it crosses, and it conforms to the relatively standard notions of what a buried pipeline is and what it takes to install it, the Officer concludes that the pipeline is both a legal and a reasonable use. That would not be the case if its impacts were impermissibly great or significant on protected estuary or shoreland resources. Because the pipeline is mostly buried, frequently installed with HDD, and with no continuous above ground impacts, the Officer concludes it satisfies

this criterion, and in support adopts and incorporates herein by this reference, the findings from the Pipeline Staff Report on this variance criterion (Pipeline staff report, p 59-60).

- b. Strict adherence to this chapter and other applicable standards would effectively preclude a use of the parcel that could be reasonably expected to occur in similarly zoned parcels.** The subject of this permit is the pipeline proposed to run through locally significant wetlands, for which a variance is required. The gist of this criterion is that the use would be allowable in the same zone elsewhere without the limitation that requires the variance. In other words, would the pipeline be reasonably expected to occur in these same zones were they located on other parcels not encumbered by wetlands? The applicant appears to take the same view and notes that pipelines are allowed outright in four of the zones and conditionally in the fifth zone. The only reason for a variance is the fact that the pipeline alignment is encumbered by wetlands for most of its path in Warrenton (Pipeline Application, p 5-39), and the staff seems to agree (Pipeline staff report, p 60). Again, the opponents don't seem to object to the pipeline under this criterion, only that the terminal does not meet it (Ex. 44, p 33). The Officer concludes that this criterion is met and in support adopts and incorporates herein by this reference, the findings from the Pipeline Staff Report on this variance criterion (Pipeline staff report, p 60).
- c. The property owner would be precluded a substantial property right enjoyed by the majority of landowners in the vicinity.** Similar to its response to the previous variance criterion, the applicant responds to this one by noting that a pipeline is a use allowed outright in all of the city base zones it crosses except the A-3 Zone, in which it is conditionally allowed. The applicant also points to the marine industrial zoning and the Especially Suited for Water Dependent Shorelands designation applied by the City Commission to the ESP in 2005 and the Commission's 2006 interpretation that an LNG terminal is a use allowed outright in that zone. From this the applicant concludes that, if the wetland protections of "WDC 16.156.030 were strictly enforced, ... Oregon LNG would be unable to site the Pipeline, a use that is allowed in the base zone and satisfies all of the applicable criteria." (Pipeline Application, p 5-39). Again, RiverKeeper does not really dispute any of these statements or conclusions about the pipeline (Ex. 44, p 33). As with the previous criterion, the Officer concludes that this criterion is met and in support adopts and incorporates herein by this reference, the findings from the Pipeline Staff Report (Pipeline Staff Report, p 60-61) on this variance criterion.
- d. The variance is the minimum necessary to retain use of the property.** The applicant asserts that it considered several other pipeline alignments, each with varying degrees of wetland impacts, and selected its preferred alignment because it minimized the impacts on wetlands, especially high value wetlands (Pipeline Application, p 5-39 to 5-40). According to the applicant, it employed the following measures to minimize wetland impacts:
- Horizontal directional drilling method will be used to install the Pipeline well below the surface of wetlands and streams in the vicinity of Adairs Slough.
 - The Pipeline was aligned parallel to or within existing road right-of-way, utility corridors, or previously disturbed areas.

- The Pipeline route was aligned so that wetlands will be crossed at their narrowest point when possible.
- The Pipeline was aligned so that streams will be crossed at a right angle to their banks to minimize negative impacts to riparian areas and streambed.
- The width of the Pipeline right-of-way will be reduced to 75 feet when crossing nonagricultural wetlands to minimize the area of disturbance.
- Temporary workspace will be located in areas outside of wetlands to minimize the number of acres of disturbance.

The applicant concludes by saying that “[e]ven if the Pipeline could be microsited to avoid every wetland, this would increase the overall length of the Pipeline and period of active construction, which could result in more permanent impacts to the landscape and longer periods of temporary disturbance and active construction along the Pipeline route.” (Pipeline Application, p. 5-40). Based on these measures and the applicant’s arguments, staff agreed and concluded that “Given the limited site to locate a terminal and the proliferation of wetland areas within the city, the relief requested through the hardship variance application is the least amount necessary.” (Pipeline staff report, p 62). RiverKeeper’s arguments against this variance criterion are again, aimed primarily at the terminal (Ex. 44, p 34). RiverKeeper asserts that all of the applicant’s alternatives assumed this terminal on the ESP and none considered a terminal somewhere else or a smaller terminal. Those arguments do not address the pipeline and the applicant’s efforts to minimize wetland impacts through a different pipeline alignment or different construction techniques. As such, RiverKeeper does not really dispute any of the applicant’s statements or conclusions about the pipeline. As with the previous criterion, the Officer concludes that this criterion is met because of the applicant’s efforts to minimize or avoid wetland impacts. In support of this conclusion, the Officer adopts and incorporates herein by this reference, the findings from the Pipeline Staff Report (Pipeline Staff Report, p 62) on this variance criterion.

- e. **Granting of the variance will not be materially detrimental to the public welfare or be injurious to property or improvements in the neighborhood of the premises.** The applicant estimates ~25.7 acres of temporary wetland impacts due to construction activities and 3.25 acres of permanent wetland impacts for above-ground facilities that will remain in place. The temporary wetland impacts will be mitigated by in-place and in-kind restoration, repair and enhancement, and the permanent impacts will be mitigated at the 120-acre mitigation site (Pipeline application, p 5-40 to 5-41). Staff agreed and concluded that:

“permanent impacts to 3.25 acres of wetland and temporary impacts to 25.7 acres will not be harmful to the public welfare or injurious to nearby property or improvements. Most of the proposed corridor is sparsely developed and does not offer improvements that may be at risk. Temporary impacts will be mitigated with restoration of the site occurring immediately following construction and permanent impacts will be mitigated elsewhere in the watershed. Filling wetlands under these circumstances will not have direct adverse impacts to either property,

improvements or the general welfare of the community.” (Pipeline staff report, p 63)

RiverKeeper’s arguments are focused on the permanent wetland impacts of the terminal and do not specifically address anything particular to the pipeline (Ex. 44, p 34). From all of this, the Officer concludes there will certainly be detrimental impacts to the public welfare through temporary and permanent wetland impacts. However, the standard is material detriment, and the Officer concludes that the applicant has minimized the wetland impacts of the pipeline to the point of immateriality. There is no allegation of damage to property or improvements in the vicinity of the pipeline. In this light, the Officer concludes that this variance criterion is met (Pipeline staff report, p 62-63).

- f. **The variance will be in general harmony with the intent and purpose of this chapter, and will not adversely affect any officially adopted Comprehensive Plan policy.** The applicant addresses this variance criterion in the same way it has responded to the rest, by pointing out the many ways in which it has endeavored to avoid and minimize the pipeline’s wetland impacts (Pipeline Application, p 5-41). Staff reviewed and generally has agreed with the applicant’s assertions and conclusions about the project’s success in that regard (Pipeline staff report, p 63-64). Again, the opponents focus on the terminal’s compliance with this variance standard (or lack thereof) and do not address whether the pipeline complies with it (Ex. 44, p 34-35).

As a starting point, the WDC ch. 16.156 purpose statement does not provide any useful objectives or aspirational goals for the City’s wetland protection program. The Officer is left to assume that the intent and purpose of the chapter is to implement Goal 5’s wetland preservation objectives. Moreover, the general harmony requirement for variances is an ambiguous one, but is not that difficult to apply to this pipeline proposal crossing Goal 5 wetlands. The applicant points out that it has considered several different alignments and construction methods to find a route that is least destructive to wetlands and has employed construction methods that minimize those impacts. Because the pipeline will be buried, there should be little if any impact to wetlands on the surface, and in that light the Officer concludes it is in general harmony with the presumed wetland preservation objectives of WDC ch. 16.156. The construction phase of the project will have the most significant impact to wetlands, but there the impacts are for the most part temporary. Because the overwhelming impact on wetlands from this project will be temporary and can, at least in theory, be restored, the Officer concludes that this pipeline project meets the final variance criterion (Pipeline staff report, p 63-64).

4. WDC Ch. 16.192: Large-scale development permit for the pipeline generally.

The pipeline segment within Warrenton qualifies as a “large-scale development,” for which site plan review and approval is required under WDC Ch. 16.192. Despite the potentially broad scope of such a site plan review, only two aspects of the pipeline project arguably have been challenged by the opponents, viz., soil suitability and adequacy of utilities under WDC 16.192.030 and 050, respectively.

a. **Soil Suitability under WDC 16.192.030.** Approximately 1.5 miles of the 3-mile pipeline alignment will be underlain by Coquille-Clatsop complex soils, which is highly compressible and also subjects those segments to the City's Soil Hazard Overlay regulations in WDC ch. 16.96. WDC 16.192.030 requires that all Large-Scale Developments provide a soil survey, additional geotechnical information and demonstrate that one of following is met:

1. *The detailed soil survey indicates that there is not a significant amount of hazardous soils on the portion of the site proposed for development; or*
2. *A method of eliminating hazards which could result from soils on the site prepared by a licensed geotechnical engineer and submitted to the City of Warrenton Planning and Building Department for review by a City-appointed engineer who will be paid by the developer and/or property owner.*

The primary implication with regard to these highly compressible soils is that the pipeline may float because it is either lighter than or only slightly more heavy than the soil that it replaces (Pipeline Application, p 5-69 to 5-70). To prevent the pipeline from floating during inundation, the applicant will place counterweights on and around those pipe segments. For portions that will be buried in trenches, the overburden to be removed will be back-filled on top of the pipe. While the applicant has provided a general soil survey for the area, particularly on the ESP, it argues that a detailed soil survey for the pipeline route is not necessary because of the construction, installation and pipeline design methods employed will eliminate any hazards that could result from the Coquille-Clatsop complex soils. In response to the suggestion that an LNG pipeline buried in these soils would be particularly hazardous if there were a significant seismic event, the applicant provided the following supplemental information:

“Oregon LNG has committed to FERC to perform additional geotechnical explorations along the Pipeline and in the vicinity of HDDs and to perform additional geotechnical analyses as part of more detailed engineering design. It is anticipated that concrete coated pip will be installed in some areas to counteract the potential for floatation of the pipeline due to flooding or seismically induced liquefaction. A 3-inch thick coating of concrete will result in a pipeline with a weight that is approximately equal to the volume of saturated soil that is being displaced by the Pipeline. By compensating for the weight of displaced soil, the pipeline will not be subject to significant static settlement and will not undergo significant floatation during flooding or seismically induced liquefaction. The Pipeline design is consistent with applicable FERC regulations related to seismic liquefaction. However, if FERC requires additional seismic liquefaction mitigation for the portion of the Pipeline within the City of Warrenton, Oregon LNG will address this requirement in the detailed design phase of the Project.” (Pipeline staff report, p 105)

The applicant's original design and additional explanation of seismic stressing of the LNG pipeline if a major event were to occur was reviewed by the City's

geotechnical consultant, who found it to be acceptable (Pipeline staff report, Ex. 2). On this basis, staff concurred with the applicant's position (Pipeline staff report, p 105). In their arguments about the geotechnical risks involved in this project, the opponents did not differentiate the risk associated with the pipeline versus the rest of the terminal project (Ex. 44, p 54).

With regard to soil suitability, the Officer is left with the relatively modest requirements of WDC 16.192.030, the applicant's geotechnical information and pipeline design engineering and the review comments of the city's geotechnical consultant. From all of this, the Officer concludes that the applicant has made a sufficient demonstration that it will employ methods that will eliminate hazards that could result from the Coquille-Clatsop complex soils.

- b. Utilities under WDC 16.192.050.** WDC 16.192.050 requires a developer to provide complete information about what public utilities and facilities (water, sanitary sewer and transportation) are needed to serve a Large-scale Development, at what levels and whether there is adequate existing capacity to serve the anticipated need. Pertinent to this project, this section requires:

The development will only be allowed if sufficient capacity exists or suitable evidence indicates it will exist prior to completion of the development construction. In deciding the sufficiency of capacity, consideration will be given to possible increases in flows resulting from activities of existing system users and from facilities which are likely to be built due to the proposed use, but are not part of the development.

Unlike the terminal, the applicant asserts that operation of the pipeline "will not require the use of any public utilities or services such as streets, water, sanitary sewer, or storm sewer" (Pipeline Application, p 5-71). The opponents again mount several arguments under this criterion (Ex. 44, p 55), but aimed exclusively at the terminal portion of the proposal. Staff tends to agree with the applicant's claims that no public services and facilities will be needed for the pipeline (Pipeline staff report, p 108 & 115). While the construction phase of the pipeline may have a different demand for public services and facilities than will the operational phase, there is no serious challenge to the applicant's position that few or no services/facilities are needed for either. Absent any such argument or evidence, the Officer takes at face value the applicant's arguments and concludes that this criterion is met (Pipeline staff report, p 63-64).

5. WDC Ch. 16.160: Columbia River Estuary Shoreland and Aquatic Area Development Standards.

A relatively short segment of the pipeline within Warrenton passes through zones that implement Goals 16 and/or 17. Of the five zones through which the pipeline passes, only the I-2 and A-3 Zones are within the City's estuary (Goal 16) or coastal and shoreland (Goal 17) protection areas. Consequently, the pipeline segments in the I-2 Zone (0.4 miles) and A-3 Zone (0.5 miles) are subject to review under WDC 16.160.020. In particular, Goal 16 is implicated where the pipeline crosses the mouth of the Holbrook Slough at Youngs Bay, Adairs Slough, and Vera Creek. Goal 17 is implicated where the pipeline crosses the first 50 feet adjacent to the sloughs and creek within these zones.

Because limited segments of the pipeline implicate Goals 16 and 17, the applicant must demonstrate compliance with all of the substantive subsections of WDC ch. 16.160, which includes the following:

- WDC 16.160.030, Diking
- WDC 16.160.040, Dredging and Dredge Material Disposal
- WDC 16.160.070, Filling of Aquatic Areas and Non Tidal Wetlands
- WDC 16.160.080, Fish and Wildlife Habitat
- WDC 16.160.090, Land Transportation Systems
- WDC 16.160.120, Mitigation and Restoration
- WDC 16.160.130, Public Access to the Estuary and its Shoreline
- WDC 16.160.150, Residential, Commercial and Industrial Development
- WDC 16.160.170, Significant Areas
- WDC 16.160.180, Water Quality Maintenance
- WDC 16.160.190, Water-Dependent and Water-Related Criteria

The applicant devoted an extensive amount of its narrative to addressing these Goal 16 and Goal 17 local land use criteria (Pipeline Application, p 5-42 to 5-61), and the staff report largely accepted and concurred with the applicant's proposed findings and supplemental findings (Pipeline Staff Report, p 65-92). As with the other aspects of the pipeline, the opponents did not provide any focused arguments that the pipeline application (as opposed to the terminal application) failed to meet these mandatory approval criteria (Ex. 44, p 35-49).

For several reasons the Officer concludes that all of the WDC ch. 16.160 criteria, which implement Goals 16 and 17, are met with regard to the pipeline aspect of this project in the I-2 and A-3 Zones. First and most importantly, the impacts to Goal 16 and 17 resources from the pipeline are far smaller, far less significant and of much shorter duration than were the terminal's impacts to Goal 16 and 17 resources under these same criteria. Only 0.4 acres are in the I-2 Zone, and only 0.5 acres are in the A-3 Zone. Thus, the net impact to Goal 16 and 17 areas is less than one acre. Moreover, the vast majority of wetland impacts (~25.7 acres) are temporary, and only 3.25 acres of wetland impact is permanent. All of the impact to areas subject to Goal 16 and 17 are supposedly temporary. This is significantly different than was the case for the terminal impacts to Goal 16 and 17 protected areas (109-acre dredge footprint and an ~35-acre permanent wetland fill).

Second, the applicant is able to and has taken many measures to avoid impacts to Goal 16 and 17 resources and to reduce those impacts that are unavoidable. This is largely due to the preferred route designed by the applicant, the fact that the pipeline is buried, and for several significant Goal 16 and 17 segments, it is installed using HDD.

Third, the opponents focus their arguments primarily against the terminal aspect of the project and far less so with regard to the pipeline component. While the opponents mount some significant arguments as to why the pipeline generally is not designed and will not be installed so as to avoid or reduce impacts to wetland, stream and riparian resources (Ex. 44, attachment 3), those arguments have little relevance to the 3-mile segment in the City of Warrenton. Still, the opponents' correctly point out that construction along the pipeline route in wetland areas will cause significant damage to the wetland soil substrate through compaction. The Officer agrees, but concludes that

those impacts are relatively minor compared to other actual and potential wetland impacts, and they are the minimum required to install the pipeline. It is also theoretically possible to rehabilitate those impact areas and restore those damaged wetlands as the applicant proposes, so long as the restoration work is correctly executed.⁴⁷ See Terminal Condition 25 and Pipeline Condition 10.

In this way, the Officer reaches a different conclusion about the impact of the pipeline to Goal 16 and 17 resources under these local criteria than he did with the terminal impact to the same resources. In support of this conclusion that the pipeline complies with the WDC ch. 16.160 requirements, the Officer adopts as his own the findings from the Pipeline Staff Report (Pipeline Staff Report, p 65-92). In particular, the Officer adopts the staff report findings addressing the criteria in WDC 16.160.070, Filling of Aquatic Areas and Non-tidal Wetlands (Pipeline Staff Report, p 66-72), WDC 16.160.080, Fish and Wildlife Habitat (Pipeline Staff Report, p 72-76) and WDC 16.160.120, Mitigation and Restoration (Pipeline Staff Report, p 76-87).

6. WDC Ch. 16.164: Impact Assessment and Resource Capability Determination.

The other principal set of local land use regulations implementing Goal 16 are in WDC ch. 16.164. The pipeline passes through only two Goal 16 zones: the A-3 Zone for 0.5 miles and the A-5 Zone for 0.1 miles. As explained in findings addressing the same chapter for the terminal project, *supra*, WDC 16.164.030 (Information Needed for an Impact Assessment), appears to provide a list of information required for a complete application and are not approval standards. The Officer reiterates that interpretation and conclusion here. WDC 16.164.040 (Impact Assessment Conclusion) sets forth the important decisional requirement for the chapter:

Based on the information and analysis in Section 16.164.030, one of the following four conclusions shall be reached:

- A. The proposed uses and activities do not represent a potential degradation or reduction of estuarine resource.*
- B. The proposed uses and activities represent a potential degradation or reduction of estuarine resources. The impact assessment identifies reasonable alterations or conditions that will eliminate or minimize to an acceptable level expected adverse impacts.*
- C. The proposed uses and activities will result in unacceptable losses. The proposed development represents irreversible changes and actions and unacceptable degradation or reduction of estuarine resource properties will result.*

⁴⁷ Rehabilitation and restoration of wetland areas is theoretical in the sense that the mitigation measures must be implemented properly to limit damage and the restoration efforts must be executed properly. Absent the entire project complying fully with these measures, wetland restoration frequently does not work or does not work well. Failure is a common outcome in these projects.

D. Available information is insufficient for predicting and evaluating potential impacts. More information is needed before the project can be approved.

The applicant submitted an environmental assessment for the pipeline aspect of the project, at least the segment lying wholly within Warrenton (Pipeline Application, App. C) and addressed the submission requirements in WDC 16.164.030 (Pipeline Application, p 5-61 to 5-66). The applicant then addressed WDC 16.164.040 claiming that the "Pipeline proposed by Oregon LNG represents a potential degradation or reduction of estuarine resources. The impact assessment identifies reasonable alterations or conditions that will eliminate or minimize expected adverse impacts to an acceptable level." (Pipeline Application, p 5-66). Staff agreed with this conclusion (Pipeline Staff Report, p 99-100).

Based on the conclusions *supra* about impacts to protected Goal 16 and 17 resources from the portions of the pipeline that are zoned I-2 and A-3 (0.4 miles and 0.5 miles, respectively) and including the A-5 Zoned section (0.1 miles), the Officer agrees with staff and the applicant and concludes that the A-3 and A-5 Zoned segments of the pipeline qualify under WDC 16.164.040(B). While the pipeline represents a potential degradation or reduction of estuarine resources in the A-3 and A-5 Zones, the impact assessment identifies reasonable alterations or conditions that will eliminate or minimize expected adverse impacts to an acceptable level. In support of this conclusion that the pipeline complies with WDC 16.164.030(B), the Officer adopts as his own the findings from the Pipeline Staff Report (Pipeline Staff Report, p 92-100).

On the same basis, the Officer concludes that the sections of the pipeline zoned A-3 and A-5 comply with the requirements of WDC 16.164.050 (Resource Compatibility Determination)⁴⁸ which requires in pertinent part:

C. A determination of whether the use or activity is consistent with the resource capabilities of the affected zone. A use or activity is consistent with the resource capabilities of the area when either:

- 1. Impacts on estuarine resources are not significant; or*
- 2. Resources of the area will be able to assimilate the use and activity and their effects and continue to function in a manner which:*
 - a. In natural aquatic zones, protects significant wildlife habitats, natural biological productivity, and values for scientific research and education; or*
 - b. In conservation aquatic zones, conserves long-term use of renewable resources, natural biological productivity, recreation and aesthetic values and aquaculture.*

⁴⁸ WDC 16.164.050 applies generally to the City's aquatic zones; it expressly states that it applies to the A-1, A-2 and A-3 Zones, but does not list the A-5 Zone. The applicant noted that the pipeline in the A-3 zone requires a resource compatibility determination because it is a conditional use; whereas, it is allowed outright in the A-5 Zone (Pipeline Application, p 5-66). Due to the apparent ambiguity and the likely impacts to A-5 estuary resources, the applicant addressed WDC 16.164.050 for the A-5 Zoned segment.

3. *For temporary alterations, the resource capability determination must also include:*
 - a. *Determination that potential short-term damage to estuary and shoreland resources is consistent with the resource capabilities of the area; and*
 - b. *Determination that the area and affected resources can be restored to their original condition.*

D. Determining Consistency with the Purpose of the Zone. Certain uses in the Aquatic Development (A-1), Aquatic Conservation (A-2), and Aquatic Natural (A-3) Zones may be permitted only if they are consistent with the purpose of the aquatic zone in which they occur. This determination is made as follows:

1. *Identification of the affected zone, and its purpose.*
2. *Description of the proposal's potential impact on the purposes of the affected zone.*
3. *Determination that the proposal is either:*
 - a. *Consistent with the purpose of the affected zone; or*
 - b. *Conditionally consistent with the purpose of the affected zone; or*
 - c. *Inconsistent with the purpose of the affected zone.*

The applicant addressed these requirements in the application (Pipeline Application, p 5-66 to 5-69), and staff agreed with the applicant's proposed findings and conclusions (Pipeline Staff Report, p 100-103). As staff notes, the compatibility determination is contingent upon proper and complete restoration of the pipeline construction areas:

"Rectification and restoration of temporary impacts will involve the following actions, as needed: general site cleanup, ripping soil to counter the effects of compaction, and restoring/replanting vegetation. Native plant material will be provided for vegetation restoration. The species composition will vary depending on hydrologic characteristics at each location." (Pipeline Staff Report, p 101).

See Pipeline Condition 10. A relatively short segment of the pipeline within Warrenton passes through the A-3 and A-5 Zones (total of 0.6 miles). The impacts associated with construction of the pipeline, and thus the pipeline use generally, can be made compatible with the A-3 and A-5 Zone purposes and thus the resources they are intended to protect so long as the restoration is properly and completely completed. In support of this conclusion that the pipeline complies with WDC 16.164.050, the Officer adopts as his own the findings from the Pipeline Staff Report (Pipeline Staff Report, p 100-103).

7. Warrenton Comprehensive Plan (WCP) Consistency.

The following comprehensive plan provisions appear to be applicable to the pipeline component of the project:

Article 2 (Community Development), §2.310 Land and Water Use Classification

Article 3 (Land and Water Use), §3.320 Commercial Lands, §3.330 Industrial Lands, §3.340 Agriculture, Forestry, Wetlands and Open Space.

Article 4 (Natural Areas), §4.310 Soils, §4.320 Flood Hazards, §4.330 Drainage and Erosion, §4.340 Topography, §4.350 Water Quality, §4.360 Air Quality and Noise, §4.370 Fish and Wildlife, §4.380 Scenic and Historic Resources, §4.390 Energy Conservation.

Article 5 (Columbia River Estuary and Estuary Shorelands), §5.150 Mouth of the Skipanon River Subarea Findings, §5.170 Airport and Vicinity Subarea Findings, §5.301 Deep-Water Navigation, Port and Industrial Development, §5.303 Diking, §5.305 Dredging and Dredged Material Disposal, §5.307 Estuarine Construction, §5.309 Fill, §5.311 Fish and Wildlife Habitat, §5.313 Fisheries and Aquaculture, §5.321 Mitigation and Restoration, §5.323 Public Access, §5.327 Residential, Commercial and Industrial Development, §5.331 Significant Areas, §5.333 Water Quality Maintenance, §5.335 Water-Dependent Development Areas, §5.339 Federal Consistency, §5.347 Mouth of the Skipanon River Subarea, §5.351 Airport and Vicinity Subarea.

Article 6 (Beach and Dune Shorelands)

Article 7 (Community Facilities and Services), §7.320 Water, Sewer and Storm Drainage/Flood Control, §7.330 Fire, Police, Recreation and Solid Waste Management.

Article 8 (Transportation), §8.320 Street Design, §8.330 Street Width, Access and Parking Design, §8.350 Multi-Mode Transportation.

Article 9 (Economy), §9.310 City Economy.

The applicant addressed these WCP provisions in the narrative (Pipeline Application, p 5-78 to 5-110), and staff concurred with this analysis and the applicant's conclusion that all of the requirements in these provisions were met (Pipeline Staff Report, p 118-168). RiverKeeper advances several arguments against the project based on the WCP (Ex. 44, p 62-69), but none relate to the pipeline, only to the terminal portion of the project. As a preliminary matter, the Officer takes the same position as he did under the terminal portion of the project that, generally speaking, the comprehensive plan is implemented through the city's land use regulations in the WDC and that the arguably applicable WCP do not apply directly to any quasi-judicial land use applications. The only WCP provisions that do apply directly are those expressed unambiguously in mandatory terms that, by their language, are directly applicable to quasi-judicial applications. In light of the absence of any focused argument that the pipeline component of the project fails to conform to or otherwise violates an express provision of the WCP, the Officer concludes that the pipeline meets and is consistent with the requirements of the WCP.

V. Decision and Conditions:

A. The Bidirectional LNG Terminal application is denied for failure to demonstrate compliance with the following:

WDC 16.160.020 (Columbia River Shoreland and Aquatic Area standards, Deep-Water Industrial Development)

WDC 16.160.040 (Columbia River Shoreland and Aquatic Area standards, Dredging standards and Mitigation/Restoration standards)

WDC Ch. 16.164 (Impact Assessment and Resource Capability Determination standards, Impact Assessment Conclusion and Resource Capability Determination)

WCP 5.305, 5.307, 5.309, 5.311, 5.327 and 5.331.

Although the Officer has determined that the conditional use permits for the temporary wetland impact mitigation in the I-2 Zone and over-height LNG storage tanks complied with the applicable approval criteria, as did the over-height fence variance, because those separate elements are dependent upon the terminal development site plan, which is denied, the Officer denies the entire bidirectional LNG terminal project, exclusive of the pipeline. Because this decision is without prejudice, all of the applications associated with the bidirectional LNG terminal may be refilled with new/additional supporting documentation and information. In the event this decision is appealed, and the City Commission decides to approve the terminal application, the Officer recommends the following conditions. Unless and until the City Commission so decides, the following conditions are merely advisory and do not imply project approval for the LNG terminal:

1. The applicant shall take weekly noise readings during construction and submit the results to the city to demonstrate that the construction noise is at or under the state and federal standards. Noise exceedances may require noise attenuation measures to be implemented.
2. Prior to commencing dredging, the applicant shall provide documentation to the city that it has obtained approval to use the DWS site or an alternative site with the capacity to receive the quantity of material specified in the application.
3. The applicant shall analyze the need for additional improvements to NE King Avenue to accommodate turning movements into the dental office at the intersection E Harbor Street and NE King Avenue, and implement improvements as appropriate, prior to commencing construction.
4. The applicant shall update the portion of the stormwater management plan for NE King Avenue to be consistent with the local road standard design.
5. NE King Avenue shall be designed and constructed to meet the requirements of a local road as described in WDC Table 16.136.010 City of Warrenton Street Design Standards.
6. Prior to issuance of a building permit and terminal construction, the applicant shall implement the mitigation measures described in Section 6 of the Updated February 2015 TIS, per ODOT approval. If the applicant has not obtained ODOT approval of the mitigation measures the applicant shall work with ODOT to finalize and approve the appropriate mitigation measures. ODOT, or the City of Warrenton may modify the means by which a mitigation measure will be implemented, as long as the alternative means ensure compliance with performance measures.
7. The applicant shall implement additional temporary mitigation measures as described in Section 7.1 of the TIS, and listed below, as needed and/or required by ODOT or the City at any time during construction of the facility. All mitigation measures listed below will require ODOT approval prior to implementation.

- a. Establish temporary increases in lane capacity (by widening existing shoulders for bypass traffic).
 - b. Institute time-of-day restrictions for large, oversized construction vehicles.
 - c. Use flaggers, as necessary, to direct traffic when large equipment is exiting or entering public roads to minimize risk of accidents.
 - d. Provide advance warning and proper roadway signage along US 101, US 101 Bus, and US 30 to warn motorists of potential vehicles entering and exiting the roadway. Signage would include "Equipment on Road," "Truck Access," or "Road Crossings."
 - e. Use pilot vehicles when slow or oversized wide loads are being hauled.
 - f. Place appropriate detour plans and warning signage in advance of any planned traffic disturbances.
 - g. Maintain one travel lane on all roadways at all times, if possible.
 - h. If lane closures must occur, post adequate signage for potential detours or possible delays.
8. The applicant shall pay all costs required to fully implement all the mitigation measures stated above to the standards and approval of ODOT.
 9. The applicant shall implement and pay all costs for any and all additional mitigation measures required by ODOT for impacts not fully identified or stated in the TIS, such as, but not limited to the following:
 - a. Park and ride facilities outside the analysis area with direct state highway access.
 10. Roadway improvements to be constructed by the applicant on East Harbor Street shall include curb, gutter & sidewalks along Harbor Street constructed adjacent to the limits of the Terminal Footprint/Outline as shown on Appendix A Figures 5-1, 5-3 & 5-5 (6/24/2014).
 11. The applicant shall construct and install approximately 4,600 feet of curb/gutter, drainage and sidewalk on the south side of E. Harbor Street From NE Harbor Place to SE Neptune Drive per the standards and approval of ODOT.
 12. Prior to the issuance of building permits, the applicant shall submit modeling of the water and sewer systems acceptable to the city engineer and construct such off-site improvements as determined to be necessary in the exercise of the city engineer's engineering judgment. Depending on the nature and location of such improvements, this may require a land use application or other permit application.
 13. The applicant shall extend the City's potable water system by constructing an appropriate sized and looped main by connecting to an existing 18-inch main near SE 7th Street & Marlin Avenue through the LNG property and connecting per the submitted concept drawing Figure 4-32 (12/16/2013) to the City's 18-inch main near the intersection of NW Warrenton Drive and NE 5th Street.
 14. The new water main to the SE 7th Street & Marlin main shall be 18 inches ID between a connection at the south end of the north-south waterline on NE King

Avenue and tie on to the existing 18-inch main on SE Marlin Avenue, in accordance with the City's current Water Master Plan.

15. The applicant shall ensure that all discharges to the City of Warrenton's shared outfall are in compliance with an approved National Discharge Elimination System (NPDES) Individual Industrial Permit issued by the Oregon Department of Environmental Quality (DEQ).
16. Non-industrial sewer discharges shall be transported to the City of Warrenton's Waste Water Treatment Plant (WWTP) via the existing sewer system with a point of connection to the 10-inch gravity sewer main on East Harbor Street, if discharges are within the existing capacity of the gravity system. Otherwise a larger gravity sewer main will need to be constructed to the nearest downstream sewer lift station, located at E Harbor Street & SE Heron Avenue.
17. Should construction activities impair well water production or quality, the applicant shall provide alternative sources of water or otherwise compensate the owner. Should permanent well damage from construction activities be substantiated, the applicant shall either compensate the well owner for damages or arrange for a new well to be installed.
18. The applicant shall not begin construction of facilities and/or use of staging, storage, or temporary work areas and new or to-be-improved access roads until it provides the city documentation of approval or compliance with all of the following:
 - a. Proof that the applicant has filed the following with the FERC Secretary:
 - (1) All remaining cultural resources survey reports and ethnographic studies;
 - (2) All site evaluation reports, and avoidance or treatment plans, as required; and
 - (3) All comments on the reports, studies and plans from the Oregon and Washington SHPOs and appropriate interested Indian tribes.
 - b. Notice to the Advisory Council on Historic Preservation affording it an opportunity to comment if historic properties would be adversely affected; and
 - c. FERC staff reviews and the FERC Director of Office of Energy Projects (OEP) approves the cultural resources reports, studies and plans, and notifies the applicant in writing that treatment measures (including archaeological data recover, if necessary) may be implemented and/or construction may proceed.
19. Prior to pipeline construction, the applicant shall file with the Secretary documentation that copies of the Discovery Plan were provided to the Washington Department of Archaeology and Historic Preservation and Oregon SHPO, together with their comments on the plan. If the state agencies do not find the plan acceptable, the applicant shall file a revised Discovery Plan that addresses the concerns, for review and written approval by the Director of OEP.

20. The applicant shall obtain clear title to the entire site and relinquishment by USACE of its dredge spoil disposal easement before commencement of any site preparation work or construction activities.
21. The applicant shall obtain all required state and federal permits before commencement of any site preparation work or construction activities. These include, but are not limited to permits from Oregon Department of Environmental Quality and Division of State Lands and Federal Energy Regulatory Commission, US Army Corps of Engineers.
22. The applicant shall enclose any gas flares and other heat producing operations entirely within a building or similar enclosed structure.
23. The applicant shall obtain a Floodplain Development Permit from the City of Warrenton before commencement of any site preparation work or construction activities.
24. All portions of the East Bank of the Skipanon River Peninsula (ESP) outside of the LNG terminal plant fence shall be accessible by and to the public.
25. The applicant shall complete all wetland mitigation, rehabilitation and restoration work in strict and full conformance with the mitigation plans provided to the City and to state and federal resource agencies and in compliance with the regulations of those agencies. The restoration work intended to be mitigation for the temporary wetland impacts shall occur within 24 months from the date of the initiation of the impact.

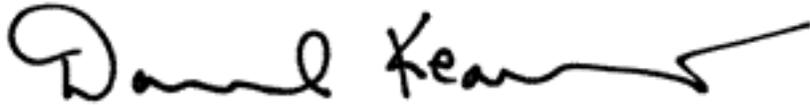
B. The Bidirectional LNG Pipeline applications, consisting of a wetland hardship variance for 25.7 acres of temporary wetland impacts and 3.25 acres of permanent wetland impacts as part of a large scale industrial development, and conditional use permits relating to wetland mitigation in the I-2 zoning district and a pipeline crossing under the A-3 zone, are approved in general conformance with the plans and application materials provided by the applicant. The pipeline component is approved as proposed, subject to the requirements that the pipeline applicant, owner or subsequent developer, including all contractors, consultants and subcontractors (collectively "Pipeline Developer") shall comply with all applicable code provisions, laws and standards and the following Conditions of Approval, which shall be interpreted and implemented consistently with the foregoing findings:

1. The Pipeline Developer shall conduct noise level testing at the beginning of each HDD construction activity and provide a report to the city within 1 day documenting that the construction noise complies with the state and federal standards. If the construction noise exceeds those standards, construction shall cease until the contractor can design and test a noise attention device or practice that lowers the noise levels at the receiving properties to meet those standards and provide written documentation to the city.
2. The Pipeline Developer shall fully restore to current city public works standards all streets, trails, drainage facilities and other public infrastructure disturbed by the installation of the pipeline.

3. All trenching construction areas shall have restoration begin immediately following the completion of construction of that segment of the trench. Revegetation planting shall occur at the first planting season following construction.
4. The Pipeline Developer shall submit authorizations/permits, including all mitigation plans, from all applicable state and federal agencies prior to the issuance of grading permits for the pipeline. These include but are not limited to ODSL, USACE and an NPDES 1200-C permit.
5. The Pipeline Developer shall consult with USFW concerning habitat categorization and mitigation for pipeline construction impacts, and provide the city the pertinent parts of the USFWS record of decision prior to the issuance of grading permits.
6. Prior to any site work, the Pipeline Developer shall submit the consent of all owners of record for the properties on which the pipeline will be located, easement agreements, court order granting possession or comparable documentation demonstrating legal authority to access each property for purposes of constructing the pipeline.
7. All monitoring reports from the ODSL required Environmental Inspectors shall be submitted to the City when submitted to ODSL.
8. The Pipeline Developer shall not begin construction of facilities and/or use of staging, storage, or temporary work areas and new or to-be-improved access roads until it provides documentation and approval of the following:
 - a. The Pipeline Developer shall file the following with the FERC Secretary:
 - (1) remaining cultural resources survey reports and ethnographic studies;
 - (2) site evaluation reports, and avoidance or treatment plans, as required; and
 - (3) comments on the reports, studies and plans from the Oregon and Washington SHPOs and appropriate interested Indian tribes;
 - b. the Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and
 - c. FERC staff reviews and the Director of OEP approves the cultural resources reports, studies and plans, and notifies the Pipeline Developer in writing that treatment measures (including archaeological data recover, if necessary) may be implemented and/or construction may proceed.
9. Prior to pipeline construction, the Pipeline Developer shall file with the Secretary documentation that copies of the Discovery Plan were provided to the Washington Department of Archaeology and Historic Preservation and Oregon SHPO, together with their comments on the plan. If the state agencies do not find the plan acceptable, the Pipeline Developer shall file a revised Discovery Plan that addresses the concerns, for review and written approval by the Director of OEP.

10. The Pipeline Developer shall complete all wetland mitigation, rehabilitation and restoration work in strict and full conformance with the mitigation plans provided to the City and to state and federal resource agencies and in compliance with the regulations of those agencies. The restoration work intended to be mitigation for the temporary wetland impacts shall occur within 24 months from the date of the initiation of the impact.

Date of Decision: March 4, 2016.



By: _____

Daniel Kearns,
Land Use Hearings Officer
City of Warrenton, Oregon

NOTE: Only the Decision and Conditions of Approval, if any, are binding on the applicant, owner or subsequent developer of the subject property as a result of this Order. Other parts of the final order are explanatory, illustrative or descriptive. There may be requirements of local, state or federal law or requirements which reflect the intent of the applicant, city staff, or the Hearings Officer, but they are not binding on the applicant as a result of this final order unless included as a condition of approval.

Notice of Appeal Rights

This is the Hearings Officer's final decision on these consolidated applications. Anyone with standing may appeal any aspect of the Hearings Officer's decision, to the Warrenton City Commission pursuant to WDC 16.208.050(H) by filing a notice of appeal with the Community Development Director within 14 days after the date the notice of this decision is mailed.