

To Whom It May Concern:

Applicants Port of St. Helens, together with the Thompson family (Guy R. Thompson, Elizabeth Boswell, Robert Thompson, David Thompson, Rodger Thompson) (referred to collectively as the "Applicant"), hereby formally request that Columbia County initiate remand proceedings for File No. PA 13-02/ZC13-01.

As you know, the Oregon Land Use Board of Appeals ("LUBA") remanded, in part, the Board of Commissioners' approval (Ordinance No. 2014-1) of a Major Plan Map Amendment changing the designation of the subject 837-acre property from Agricultural Resource to Resource Industrial, and a zone change from Primary Agriculture-80 (PA-80) to Resource Industrial-Planned Development (RIPD). The remanded decision also approved a request for an exception to Goal 3 for the subject property.

On remand, the Applicant has modified its application consistent with direction provided by LUBA in its decision, *Columbia Riverkeeper v. Columbia County*, 70 Or LUBA 171 (2014). As modified, the application now relies solely on OAR 660-004-0020(3)(a) as the reason for taking an exception to Goal 3, which allows for the exception when "[t]he use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports." Specifically, the Port has identified the deepwater port and existing dock facilities at Port Westward as the unique resource justifying an exception to Goal 3.

In addition, on remand the number of proposed uses has been reduced to the following five in the exception area:

- Forestry and Wood Products processing, production, storage, and transportation
- Dry Bulk Commodities transfer, storage, production, and processing
- Liquid Bulk Commodities processing, storage, and transportation
- Natural Gas and derivative products, processing, storage, and transportation
- Breakbulk storage, transportation, and processing



The modified application no longer includes those areas excluded from the Board of Commissioners' original approval.

The Port of St. Helens has retained Beery, Elsner & Hammond, LLP ("BEH") for representation through the remand process. To that end, BEH is submitting the accompanying materials in support of the application on remand, as modified above. The materials include an analysis from BEH addressing the substantive issues raised by LUBA in its remand, as well as technical report prepared by Mackenzie that provides comprehensive support for a Goal 3 exception under OAR 660-004-0022(3)(a), establishes that the Port's narrowed list of five proposed uses listed above are in fact rural industrial uses, and provides an in-depth alternative sites analysis in light of the single OAR 660-004-0022(3)(a) justification for the Goal 3 exception discussed above.

With these materials, the issues raised by LUBA in its remand decision have been addressed. The Applicant hereby requests that Columbia County initiate its process for review of the application, as modified.

Please do not hesitate to contact me if questions arise while reviewing the materials, or if you need any additional information in the course of reviewing the application on remand, as modified.

Sincerely,

Spencer Q. Parsons

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A. Applicable Criteria on Remand

CCZO Section 680	Resource Industrial – Planned Development
CCZO Section 1502	Zone Changes (Map Amendments) – Major
CCZO Section 1502.1(A)(1)	Consistency with the Comprehensive Plan
CCZO Section 1502.1(A)(2)	Consistency with Statewide Planning Goals
CCZO Section 1502.1(A)(3)	Adequacy of Public Facilities
Statewide Planning Goal 2	Reasons Exception
ORS 197.732(2)	Reasons Exception
OAR 660-004-0020(2)	Reasons Exception
OAR 660-004-0022(3)	Reasons Exception – Rural Industrial Development

B. Introduction

In 2013 the Port of St. Helens (the Port), on behalf of itself and the Thompson family (Guy R. Thompson, Elizabeth Boswell, Robert Thompson, David Thompson and Rodger Thompson), submitted an application to Columbia County (the County) seeking a Major Comprehensive Plan Map Amendment to reclassify land adjacent to the existing Port Westward Industrial Park (Port Westward) from Agricultural Resource to Resource Industrial. The application also sought to rezone that land from Primary Agriculture-80 Acres (PA-80) to Resource Industrial-Planned Development (RIPD) for inclusion in the Port's industrial park at Port Westward. The subject 837-acre tract is directly adjacent to the existing Port Westward Industrial Park, which is already zoned RIPD. Because of its current agricultural zoning, the County was required to take an exception to Statewide Planning Goal 3 (Agricultural Lands) as part of the rezone and accompanying comprehensive plan amendment. The application was approved by Columbia County in 2014, granting an exception to Goal 3, rezoning the subject area to RIPD and authorizing those uses permitted in the RIPD zone under the County's regulations.

That decision was appealed to the Oregon Land Use Board of Appeals (LUBA). LUBA remanded the decision, in part, identifying areas in which the record and findings provided insufficient justification for taking a Goal 3 exception and rezoning the exception area to RIPD. In response to the remand, the Port has modified its land use application consistent with the direction provided by LUBA. As modified, the application now relies solely on OAR 660-004-0020(3)(a) as justification for taking an exception to Goal 3, which allows for the exception if "[t]he use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include . . . river or ocean ports."

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Similarly, as suggested by LUBA, on remand the Port has also narrowed down its list of proposed uses in the exception area from all those authorized under Columbia County Zoning Ordinance ("CCZO") Section 680 to the following five:

- Forestry and Wood Products processing, production, storage, and transportation
- Dry Bulk Commodities transfer, storage, production, and processing
- Liquid Bulk Commodities processing, storage, and transportation
- Natural Gas and derivative products, processing, storage, and transportation
- Breakbulk storage, transportation, and processing

The Port retained Beery, Elsner & Hammond, LLP (BEH) to provide legal support through the remand process. In turn, BEH retained Mackenzie to provide professional land use planning and economic consulting services to address the issues remanded by LUBA. To that end, Mackenzie has generated a technical report (the Mackenzie Report) that: 1) provides a comprehensive analysis supporting a Goal 3 exception under OAR 660-004-0022(3)(a); 2) supports the conclusion that the Port's narrowed list of five proposed uses listed above are in fact rural industrial uses; and 3) provides an in-depth alternative sites analysis in light of the single OAR 660-004-0022(3)(a) justification for the Goal 3 exception being put forward by the Port in its modified application, namely the deepwater port and existing dock facilities at Port Westward.

C. Background

The Port of St. Helens owns the Port Westward Industrial Park (Port Westward), a 905-acre rural industrial exception area with 4,000 feet of deepwater frontage along the Columbia River. In the 1970s, the county adopted an exception to Statewide Planning Goal 3 (Agricultural Lands) for Port Westward, and planned and zoned it for rural industrial uses. Port Westward is zoned Rural Industrial Planned Development (RIPD). Current uses at Port Westward include a 1,500 foot long dock, three electrical generating facilities owned and operated by Portland General Electric (PGE), a 1.3 million-barrel tank farm, a biomass refinery facility, and an electrical substation.

Port Westward includes necessary infrastructure facilities within its boundaries for the Port's rural industrial tenants. The site is served by private water systems that utilize wells and draw from the river. The rural property has a small private sewage system, and tenants also manage their own sanitary wastes via private onsite septic systems. The Port also operates and maintains a discharge system for tenants' process water. Taken together, these facilities provide sufficient service for rural industrial users, but preclude urban industrial uses that have a higher demand for

public utilities. Electric power, natural gas, and high-speed telecommunications are readily available on site.

Port Westward is served by county road connections to nearby state and interstate highways, a rail line and, most importantly, it adjoins a self-scouring deepwater port with access to a 43-foot navigation channel in the Columbia River, part of the M-84 Marine Highway corridor. Development and improvement of the Port of St. Helens' deepwater port has been declared to be an economic goal of high priority by the State of Oregon (see, e.g., ORS 777.065).

The Port has three existing tenants at Port Westward. Clatskanie Public Utility District leases 3 acres for an electrical substation, the Columbia Pacific Bio-Refinery ethanol facility holds 43 acres, and the remainder is leased by Portland General Electric (PGE) with agreements that run through 2066 and 2096¹. PGE currently operates three power plants on 147 acres of its 862-acre leasehold. The remainder of its leasehold includes dedicated wetland mitigation areas, areas held for future expansion (including future wetland mitigation needs), and necessary buffering of its operations.

PGE and the Port previously had a Joint Marketing Agreement to coordinate facilitating additional future development within the PGE leasehold. However, it did not lead to any additional development and the Joint Marketing Agreement was allowed to lapse. It was formally terminated by PGE in 2007. *See* September 11, 2007 PGE Letter the Port of St. Helens (Mackenzie Report, Appendix 3). The Port and PGE have entertained potential suitors to sublease portions of its leasehold in the past, but such commitments have been precluded by potential conflicts with PGE's own use of the leasehold, restrictions imposed by PGE to protect its interests at Port Westward, and by existing encumbrances and physical site constraints including wetlands and the cost related to development of those wetlands. Because of the inability to site additional rural industrial users with the PGE leasehold, and because of a lack of additional available land at Port Westward, the Port determined that it was necessary to expand the industrial park at Port Westward and undertook this process with Columbia County.

D. Procedural History

1. Columbia County's Approval

In 2014, the Port received approval from the Columbia County Board of Commissioners (the Board) for a comprehensive plan amendment, zone change and Statewide Planning Goal 2 "Reasons" exception to Goal 3 for 837 acres of land zoned Primary Agriculture-80 (PA-80) directly adjacent to the Port Westward site to the south and west (the Expansion Area). The

¹ PGE holds 116 acres in fee title, but the Port has a reversionary interest in that acreage which is effective upon completion of PGE's lease.



Board's approval excluded two riverfront lots originally proposed to be included in the Expansion Area, based on concerns of potential impacts on riparian habitat. The approval rezoned the exception area to RIPD as an expansion of the Port Westward site (also zoned RIPD). The RIPD zone only allows farm and forest use and forest product processing uses as outright permitted uses, but it allows as conditional uses those industrial uses that fall within the areas of "[p]roduction, processing, assembling, packaging, or treatment of materials; research and development laboratories; and storage and distribution of services and facilities". *See* CCZO Section 682.

The stated purpose of the 837-acre expansion area was not to accommodate the use(s) of one or more identified future Port tenants, but rather to address the industrial land deficit at Port Westward in anticipation of as-yet unidentified potential future Port tenants and their need for industrially-zoned large lots near the deepwater port and existing 1,500 foot dock, as well as the other facilities available at Port Westward.

The Board's approval included several conditions, including a requirement for site design review for any new use in the exception area, a trip cap of 332 p.m. peak hour trips, other requirements intended to ensure compatibility with adjoining agricultural uses (including the submission of a rail plan for any new use that includes rail transportation) and, finally, a prohibition on the storage, loading or unloading of coal. *See* Columbia County Ordinance No. 2014-1.

The findings supporting the original decision justified the Goal 3 exception based on all three of the reasons provided under OAR 660-004-0022(3). Specifically, the Board found that the industrial uses allowed in the RIPD zone would be maritime-related uses significantly dependent on the river port and docks to import or export materials or goods (consistent with OAR 660-004-0022(3)(a)); that the uses cannot be located within an urban growth boundary due to impacts that are hazardous or incompatible with dense populations (consistent with OAR 660-004-0022(3)(b)); and that the uses allowed in the RIPD zone would have a significant comparative advantage due to the location of the site and its proximity to the deepwater access, rail and highway connections, energy facilities and other amenities existing at the Port Westward site (consistent with OAR 660-004-0022(3)(c)). *See* Columbia County Ordinance No. 2014-1 and findings in support of same.

2. LUBA Appeal

The County's approval was appealed to LUBA and on August 27, 2014, LUBA issued a Final Opinion and Order affirming the County's approval, in part, and remanding it, in part. LUBA's opinion addressed the petitioners' Assignments of Error as follows:

Proposed Uses

LUBA rejected the petitioners' argument that, as a matter of law, the County was required to restrict its Goal 3 Exception to particular uses under OAR 660-004-0022(1), 660-004-0022(3) and 660-004-0020(2). Similarly, LUBA rejected the claim that the County did not effectively limit the authorized uses to those justified by the approval under OAR 660-004-0018(4)(a). Regarding this argument, LUBA held:

"[W]e agree with the Port that the county has sufficient measures in place to ensure that **ANY** industrial uses approved in the exception area will be limited to those justified by one or more of the three reasons advanced. . . . [W]e agree with the Port that Condition E.5, CCZO 683.1(A) and CCCP Part XII, Policy 12, together act to effectively require future conditional use applicants to demonstrate that a particular proposed industrial use was justified in the exception decision. Further, via CCZO 683.1(A), future conditional use applicants will be required to demonstrate that the proposed use conforms to either CCCP Resource Development Policies 3(A) through (F) or with Policy 3(G), the language of which echoes the themes of OAR 660-004-0022(3)(a), (b) and (c)." (emphasis/all caps added). 70 Or LUBA 171, 185 (2014).

"Significantly Dependent on a Unique Resource" including "River or Ocean Ports"

LUBA also rejected the petitioners' assertion that a Goal 3 Exception was not justified for uses "significantly dependent" on access to the deepwater port at Port Westward under OAR 660-004-0020(3)(a), because some uses may not be port-dependent; the County did not limit uses to port-dependent ones; some record evidence indicated that the existing dock is underutilized; and petitioners' claim that the single riverfront lot approved as part of the County's decision would not be adequate to establish the non-riverfront lots are "significantly dependent" on river access.

LUBA explained: "[T]he county advanced three reasons to justify the exception area, and the fact that not all uses allowed in the exception area will be port-dependent uses for OAR 660-004-0022(3)(a) is not erroneous, as long as all uses fall within one or more of the three reasons." 70 Or LUBA 171, 187 (2014).

However, as explained above, on remand the Port is no longer seeking approval for the Goal 3 exception based on OAR 660-004-0022(3)(b) or (3)(c) and, as discussed below and in depth in the Mackenzie Report, each of the five proposed uses narrowed from the scope of possible uses originally approved are inexorably tied to the deepwater port and existing dock facilities at Port Westward for viability.

"Impacts that are Hazardous or Incompatible in Densely Populated Areas"

LUBA sustained the petitioners' claim that the County's findings were inadequate to justify any uses under OAR 660-004-0022(3)(b), "use[s] that cannot be located inside an urban growth boundary due to impacts that are hazardous or incompatible in densely populated areas." As the Port's application has been modified, however, none of the proposed uses require an exception under OAR 660-004-0022(3)(b).

"Significant Comparative Advantage"

LUBA rejected the petitioners' assertion that a Goal 3 Exception could not be justified for any uses under the "significant comparative advantage" reason provided at OAR 660-004-0022(3)(c) until a specific use was identified by the Port, noting the presence of "deep-water access, existing dock facilities, access to railroad, highways and interstates, and the presence of utilities and power generating facilities" and concluding, "[W]e disagree with petitioners that the county must identify a specific industrial use in order to invoke OAR 660-004-0022(3)(c)." 70 Or LUBA 171, 190 (2014). Additionally, LUBA rejected arguments that the "significant comparative advantage" needed to come from the expansion site itself (and not from the existing Port Westward site), as well as petitioners' challenge to the County's findings that locating rural industrial uses in the expansion site would "benefit the county economy" and "cause only minimal loss of productive resources." 70 Or LUBA 171, 190-192 (2014).

Nevertheless, as explained above, on remand the Port's modified application solely relies on OAR 660-004-0022(3)(a), and so OAR 660-004-0022(3)(c) no longer applies to the application.

Reasonable Accommodation Standard (Alternative Sites Analysis)

Vacant Port Westward Lands

LUBA sustained the petitioners' challenge to the sufficiency of the County's findings that "areas that do not require an exception cannot reasonably accommodate the use" under OAR 660-004-0020(2)(b), in particular as to the ability of acreage within the existing Port Westward site to accommodate the proposed uses. LUBA first held that the County's finding that the unused acreage within the PGE leasehold is unavailable for rural industrial development was not supported by the record evidence. LUBA concluded that, to make such a finding, the record would need evidence either that PGE is "categorically unwilling" to sublease part of its leasehold, or that those unused acres "cannot otherwise be reasonably made available for development through acquisition or termination of the leasehold interest." 70 Or LUBA 171, 195 (2014).

Regarding wetlands within the PGE leasehold and elsewhere on Port Westward, LUBA held that the mere presence of wetlands does not make it unbuildable if development can occur with the appropriate permits and mitigation. 70 Or LUBA 171, 196 (2014). LUBA did note that OAR 660-004-0020(2)(b)(B) provides that "economic factors may be considered along with other relevant factors in determining that the use cannot reasonably be accommodated in other areas" and, explaining further, noted that the cost of obtaining such permits and undertaking the work may be "so prohibitive that the cost alone or in combination with other factors could allow the county to conclude that the vacant lands within [the] Port Westward site cannot reasonably accommodate any industrial use." 70 Or LUBA 171, 196 (2014). However, since the County had not made such findings, LUBA remanded on this point.

The Mackenzie Report addresses this issue at length and, to the extent any wetland areas within the PGE leasehold are in fact otherwise available (which the report shows is not the case), it makes clear that the cost of developing such an area would be economically infeasible. More significantly, however, the Mackenzie Report established that the PGE leasehold is so encumbered that it is in fact unavailable for siting the Port's proposed uses and, perhaps more significantly, includes a letter from PGE stating that the remainder of its leasehold is unavailable for development.

Other Alternative Sites

LUBA sustained the petitioners' challenge to the sufficiency of the County's findings regarding other alternative sites not requiring an exception under OAR 660-004-0020(2)(b)(B). LUBA held that the Port was required to do a separate reasonable accommodation analysis for each non-overlapping reason used to justify the exception under OAR 660-004-0022(3). According to LUBA's decision, an alternative site rejected because it cannot reasonably accommodate one particular use that falls under one "reason" may still be a viable alternative site if it is able to accommodate another use that falls under another reason. 70 Or LUBA 171, 197-98 (2014).

As discussed previously, this concern has been addressed by narrowing the proposed uses to the five rural industrial uses listed above, in combination with the reliance on Port Westward's deepwater port and existing dock facilities as the single reason advanced for taking a Goal 3 exception under OAR 660-004-0022(3)(a).

LUBA also rejected the County's finding that alternative sites cannot reasonably accommodate the proposed uses because no individual site is large enough to accommodate in the same place all of the large-lot industrial uses that could be accommodated in the 837 acre exception area, and further held that the analysis rejecting the 450 acres at the Rainier site needed more analysis and/or record evidence. 70 Or LUBA 171, 198-99 (2014).

However, as noted above and as discussed at length in the Mackenzie Report, consistent with OAR 660-004-0022(3)(a), the Port has modified its application to five specific uses significantly dependent upon the deepwater port and existing dock facilities at Port Westward. Therefore, the Rainier site and any other sites without deepwater access and existing dock facilities are not viable alternatives.

LUBA also held that alternative sites considered could not be excluded from consideration solely on the basis of the presence of wetlands or other environmental issues on those sites, short of making findings that due to regulatory, cost or other relevant factors it is unreasonable to expect such sites to be developed for the proposed uses. 70 Or LUBA 171, 198 (2014).

As noted, the application as modified is tied solely to the deepwater port and existing dock facilities at Port Westward under OAR 660-004-0022(3)(a), and therefore sites without deepwater access are not viable alternatives, including those previously excluded solely because of the presence of wetlands.

ESEE Analysis

LUBA rejected petitioners' claim that the County did not make adequate findings that the long term environmental, social, economic, and energy consequences would not be significantly more adverse than if an exception were taken for different otherwise-available resource lands (the County's "ESEE" analysis). LUBA accepted the County's incorporation of its compatibility analysis findings under OAR 660-004-0020(2)(c) into its ESEE analysis findings, and concluded that the petitioners had not demonstrated other or different findings were required. LUBA noted that the petitioners had not specifically identified and described alternative sites with fewer ESEE impacts. 70 Or LUBA 171, 202 (2014).

Compatibility Analysis (ORS 197.732(2)(c)(D); Goal 2; Part II(c); OAR 660-004-0020(2)(d)

LUBA sustained petitioners' claim that the County's findings regarding Goal 2's compatibility standard, under ORS 197.732(2)(c)(D) and OAR 660-004-0020(2)(d) were inadequate. LUBA held that such findings could not be deferred to a subsequent permit proceeding when the specific use is identified (thus requiring the Port to identify specific proposed uses). 70 Or LUBA 171, 205-206 (2014).

Now that five rural industrial uses have been proposed, the County will be able to determine that those uses are compatible with other adjacent uses, or that they can be so rendered through measures designed to reduce adverse impacts, thus ensuring compliance with OAR 660-004-0020(2)(d).

Transportation Analysis

LUBA rejected petitioners' claim that the County failed to adequately consider whether the proposed zone change would "significantly affect" transportation facilities under OAR 660-012-0060 of the Transportation Planning Rule, concluding that the rule did not require the County to evaluate whether the zone change significantly affects the rail system itself. 70 Or LUBA 171, 208-209 (2014).

Applicability of Goal 14

LUBA remanded the County's decision regarding its treatment of Goal 14. LUBA held that Goal 14 could apply to some of the broad array of potential uses authorized in the RIPD zone, and that a valid Goal 3 exception allows only for "rural" industrial uses. 70 Or LUBA 171, 211 (2014). LUBA also ruled that a Goal 3 exception does not "exempt" industrial uses from Goal 14 and so Goal 14 would apply to any "urban" industrial uses. 70 Or LUBA 171, 208-212 (2014). LUBA also ruled that the County's findings regarding Goal 3 did not satisfy the requirement for specific findings necessary for a Goal 14 exception, and that as a matter of legal practicality the County erred by adopting a Goal 14 exception on a contingency basis. 70 Or LUBA 171, 213 (2014).

LUBA emphasized in its analysis of the applicability of Goal 14 that, in *Shaffer v. Jackson County*, 17 Or LUBA 922, 931 (1989), it had explicitly rejected an argument that industrial uses are inherently urban in nature, ruling instead that a case-by-case analysis of any proposed use was required to make such a determination. 70 Or LUBA 171, 211 (2014). However, because the zone change did not identify particular uses to which the *Shaffer* factors could be applied, LUBA remanded the decision, stating:

Remand is necessary for the county to address whether any of the proposed uses allowed in the exception area under the *Shaffer* factors or other applicable considerations constitute the urban use of rural land. If so, the county must either limit allowed uses to rural uses or take an exception to Goal 14, addressing the criteria at OAR 660-012-0040. 70 Or LUBA 171, 211 (2014).

As explained previously, on remand the Port has selected five specific uses to which the *Shaffer* factors can be applied. The Mackenzie Report provides a thorough *Shaffer* analysis for each of the five proposed uses, clearly establishing that each use is rural in nature and therefore appropriate for siting at Port Westward.

Applicability of Goal 11 (Public Facilities) and Need for a Goal 11 Exception

Finally, LUBA rejected petitioners' assertion that the County needed to but did not approve an exception to Goal 11, finding that the assertion was premature. LUBA explained that the argument would be ripe after addressing the Goal 14 issues identified above and, after that has happened review the County decision to make sure that the County has "either limit[ed] the exception to exclude such [urban] uses or adopt[ed] an exception to Goal 14." 70 Or LUBA 171, 211 (2014).

As discussed in the Mackenzie Report, no uses are proposed which require an urban level of facilities or services under the Port's modified application. Further, as no services provided at Port Westward rise to the level of urban services, and none are planned by the Port, the level of available services act to prevent urban industrial uses in the exception area.

E. Proceedings on Remand

Based on LUBA's conclusions outlined above, and in light of the modifications to its application, the Port needs to address four specific issues in order to support a conclusion that its application should be approved.

First, the Port needs to advance a single reason for taking an exception to Goal 3. Second, the Port needs to specify proposed uses in order to determine whether the proposed uses are rural in nature under the *Shaffer* factors, Third, the Port's proposed uses must be subjected to an adequate compatibility analysis under OAR 660-004-0020(2)(d). Finally, the Port needs to undertake a new alternative sites analysis that addresses the availability of viable alternative sites that do not require an exception, taking into consideration the reason advanced for taking an exception to Goal 3, namely access to a deepwater port and existing dock facilities similar to what is currently available at Port Westward.

Each of these is discussed at length in the Mackenzie Report, and is also addressed below.

1. <u>Reason Justifying a Goal 3 Exception</u>

OAR 660-004-0020(2)(a) states:

(2) The four standards in Goal 2 Part II(c) required to be addressed when taking an exception to a goal are described in subsections (a) through (d) of this section, including general requirements applicable to each of the factors:

(a) Reasons justify why the state policy embodied in the applicable goals should not apply." The exception shall set forth the facts and assumptions used as the basis for determining that a state policy embodied in a goal should not apply to specific properties or situations, including the amount of land for the use being planned and why the use requires a location on resource land.

Further, OAR 660-004-0022(3)(a) provides:

(3) Rural Industrial Development: For the siting of industrial development on resource land outside an urban growth boundary, appropriate reasons and facts may include, but are not limited to, the following:

(a) The use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports.

In its decision, LUBA explained (in discussing application of the Shaffer factors):

[I]n the present case whether a particular use is an urban or rural use under the *Shaffer* factors may depend in part on the reason under which it was justified. Because the "significantly dependent" on a unique resource language of OAR 660-004-0022(3)(a) closely parallels one of the relevant factors the county can apply to determine whether proposed uses are urban or rural, it may be somewhat easier for the county to conclude that none of the proposed uses allowed in the exception area are urban uses, if the proposed uses are narrowed to those that are justified solely under OAR 660-004-0022(3)(a) rather than the broader universe of uses justified under OAR 660-004-0022(3)(b) and (c). 70 Or LUBA 171, 214 (2014).

Taking up that suggestion from LUBA, on remand the Port has limited its proposed uses to five uses justified by a single reason under OAR 660-004-0022(3)(a). That administrative provision authorizes an exception to Goal 3 for rural industrial uses that are "significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include . . . river or ocean ports." The unique resource the Port is advancing to justify a Goal 3 exception is the deepwater port and existing dock facilities at Port Westward.

The Mackenzie Report provides analysis as to the uniqueness of the deepwater port and existing dock facilities at Port Westward. As the report establishes, the Port's proposed uses are highly dependent upon immediate proximity to a deepwater port with existing dock facilities. As the report states, the deepwater port and its dock at Port Westward are "necessary for transferring materials from one mode to another, for both domestic and foreign transport (e.g., rail to marine),

and for accommodating low-margin industrial operations which rely upon deepwater access to maintain an economically viable business in current market conditions."

Table 2 of the Mackenzie Report illustrates that each of the Port's five proposed uses are dependent upon deepwater access with dock facilities. The report explains:

Uses with foreign trade markets and marine-served domestic markets for products that are shipped by marine vessel are, by definition, reliant on deepwater port facilities. Table 2 demonstrates that each of the five proposed uses for PWW involve foreign import/export operations and are thus dependent upon a deepwater port. The proposed uses will achieve a significant operational advantage due to deepwater port access with nearby storage yards. As the proposed uses are low-margin businesses, port proximity is necessary to minimize operational costs for both import/export and domestic shipping operations. An external benefit of these firms' locations near port facilities is that locating their yards close to the port minimizes impacts on offsite transportation infrastructure.

Regarding the reliance on the deepwater port and dock facilities at Port Westward, the report concludes:

[T]he uses identified in the Port's modified land use application are highly driven by foreign trade and the associated ocean marine transport, and Oregon's largest trading partners are along the Pacific Rim. Table 5 lists the state's top export partners in 2016. This list accounts for 90% of Oregon's export value. Among the top 20 export partners, 14 are Pacific Rim countries, including Canada and Mexico. These 14 markets account for 82% of all of Oregon's export value.

As evidenced by these passages from the Mackenzie Report, the Port's identified reason for taking a Goal 3 exception for its five proposed uses is firmly established. The deepwater port and existing dock facilities at Port Westward constitute a unique resource, and river ports are explicitly identified as a sufficiently unique resource to justify an exception to Goal 3 under OAR 660-004-0022(3)(a). However, as noted, Port Westward's port is in fact much more of a "unique resource" than the standard river port example provided in the language of OAR 660-004-0022(3)(a) – it is a self-scouring deepwater port (meaning it does not require dredging) with existing dock facilities, the development of which is a declared priority for the State of Oregon under ORS 777.065. Therefore, the OAR 660-004-0022(3)(a) "unique resource" requirement is satisfied.

2. Narrowed List of Proposed Uses

LUBA's decision requires that the range of potential uses in the expansion area be narrowed beyond the scope of all uses authorized in the RIPD zone, to facilitate application of the *Shaffer* factors in determining whether the proposed uses are rural or urban industrial uses, and also to allow for an adequate compatibility analysis under OAR 660-004-0020(2)(d).

On remand, the Port is proposing a narrowed list of the five identified uses listed above (Forestry and Wood Products processing, production, storage, and transportation; Dry Bulk Commodities transfer, storage, production, and processing; Liquid Bulk Commodities processing, storage, and transportation; Natural Gas and derivative products, processing, storage, and transportation; and Breakbulk storage, transportation, and processing to be authorized for siting in the exception area) subject to the County's applicable conditional use permitting procedures.

Each of these uses is described in detail in the Mackenzie Report. To avoid siting any uses in the proposed exception area that are urban in character, and thereby implicating Goals 14 and 11, each of the *Shaffer* factors has been applied to each of the proposed uses in the Mackenzie report.

Application of the Shaffer Factors to the Narrowed List of Proposed Uses

In its decision, LUBA summarized the applicable *Shaffer* factors as follows:

The relevant factors discussed in *Shaffer* that point toward a rural rather than an urban industrial use include whether the industrial use (1) employs a small number of workers, (2) is significantly dependent on a site-specific resource and there is a practical necessity to site the use near the resource, (3) is a type of use typically located in rural areas, and (4) does not require public facilities or services. None of the *Shaffer* factors are conclusive in isolation, but must be considered together. Under the analysis described in *Shaffer*, if each of these factors is answered in the affirmative, then it is relatively straightforward to conclude, without more, that the proposed industrial use is rural in nature. However, if at least one factor is answered in the negative, then further analysis or steps are necessary. In that circumstance, the county will either have to (1) limit allowed uses to effectively prevent urban use of rural land, (2) take an exception to Goal 14, or (3) adequately explain why the proposed use, notwithstanding the presence of one or more factors pointing toward an urban nature, should be viewed as a rural use. 70 Or LUBA 171, 211 (2014) (citations omitted).

A significant portion of the Mackenzie Report is dedicated to applying the applicable *Shaffer* factors to the Port's five proposed uses. *Shaffer* established several factors to apply when

determining whether a particular industrial use is rural or urban in nature. For each of the five uses proposed by the Port in its modified application, the Mackenzie Report provides a thorough analysis establishing that those uses are categorically rural.

The report provides detailed information on typical number of employees per acre for the proposed uses, with an average of 1.5 employees for acre as compared to an average of 18.1 employees per acre for urban industrial uses and 5.9 employees per acre for warehousing uses.

Next, as discussed above, the five uses were selected by the Port specifically because they are dependent on the deepwater port and existing dock facilities, and from a practical standpoint need to be sited near the port and its existing dock facilities. The Mackenzie Report comprehensively examines this *Shaffer* factor as to the five proposed uses and makes it unambiguously clear that each of the five proposed uses would be directly tied to the deepwater port and existing dock facilities that Port Westward has to offer. This *Shaffer* factor is very analogous to the "unique resource" reason put forward by the Port under OAR 660-004-0022(3)(a), discussed above. As LUBA explained in its decision:

Because the "significantly dependent" on a unique resource language of OAR 660-004-0022(3)(a) closely parallels one of the relevant factors the county can apply to determine whether proposed uses urban or rural, it may be somewhat easier for the county to conclude that none of the proposed uses allowed in the exception area are urban uses, if the proposed uses are narrowed to those that are justified solely under OAR 660-004-0022(3)(a)...70 Or LUBA 171, 214 (2014).

The Mackenzie Report also undertakes an exhaustive analysis establishing that each of the proposed uses is a type of uses that is typically sited in rural areas. The report notes that the proposed uses are land-intensive and require larger sites and buffering, and require ready access to raw materials originating in rural areas. Table 3 of the Mackenzie Report, titled "Use Reliance on Rural Locations," breaks down each of the proposed uses by those requirements and shows that each of the five uses is rural in character. As the report elaborates:

Multiple examples of the Port's proposed uses are found in Columbia County and other counties along the M-84/Columbia River corridor. The most obvious examples are those already at PWW, such as the Columbia Pacific Bio-Refinery's ethanol processing facility, and PGE's power generation facilities utilizing natural gas supplies. Other rural examples include mills; bark processors; wood product manufacturers; sand and gravel mines and associated bulk shipping operations; fertilizer plants; grain shippers; fruit and vegetable wholesalers/exporters; and recyclable material wholesalers.

Noting that similar examples located in urban areas represent rural uses sited in areas that have urbanized over time, or that were sited in urban areas out of necessity due to lack of proximity to port access in rural areas, the Mackenzie Report concludes that the proposed uses are rural in nature.

Finally, as the report explains, none of the proposed uses requires public facilities or service, and notes that the lack of such facilities and services at Port Westward acts as a natural bar to uses that are urban in nature, stating:

This *Shaffer* factor, applied prospectively to the Port's proposed uses, functions as a bar to siting urban uses at PWW, in addition to functioning as a guide for determining whether a proposed use is rural in character and appropriate for future siting at PWW. Because the provision of public facilities or services is not proposed by the Port or anticipated in the future, it will not be feasible for users needing access to an urban level of such facilities or services to locate at PWW.

After going through this detailed analysis, the Mackenzie Report concludes that the proposed uses are rural in nature.

3. <u>Alternative Sites Analysis</u>

OAR 660-004-0020(2)(a) states:

(2) The four standards in Goal 2 Part II(c) required to be addressed when taking an exception to a goal are described in subsections (a) through (d) of this section, including general requirements applicable to each of the factors:

(a) "Reasons justify why the state policy embodied in the applicable goals should not apply." The exception shall set forth the facts and assumptions used as the basis for determining that a state policy embodied in a goal should not apply to specific properties or situations, including the amount of land for the use being planned and why the use requires a location on resource land;

As discussed above, the Port has identified the deepwater port and existing dock facilities at Port Westward as the applicable reason for taking an exception to Goal 3, consistent with OAR 660-004-0022(3)(a).

(b) "Areas that do not require a new exception cannot reasonably accommodate the use". The exception must meet the following requirements:

(A) The exception shall indicate on a map or otherwise describe the location of possible alternative areas considered for the use that do not require a new exception. The area for which the exception is taken shall be identified;

(B) To show why the particular site is justified, it is necessary to discuss why other areas that do not require a new exception cannot reasonably accommodate the proposed use. Economic factors may be considered along with other relevant factors in determining that the use cannot reasonably be accommodated in other areas. Under this test the following questions shall be addressed:

(i) Can the proposed use be reasonably accommodated on nonresource land that would not require an exception, including increasing the density of uses on nonresource land? If not, why not?

(ii) Can the proposed use be reasonably accommodated on resource land that is already irrevocably committed to nonresource uses not allowed by the applicable Goal, including resource land in existing unincorporated communities, or by increasing the density of uses on committed lands? If not, why not?

(iii) Can the proposed use be reasonably accommodated inside an urban growth boundary? If not, why not?

(iv) Can the proposed use be reasonably accommodated without the provision of a proposed public facility or service? If not, why not?

OAR 660-004-0020(2)(b) requires consideration of potential alternative sites that would not require a new exception. This requirement, together with the single reason selected by the Port under OAR 660-004-0022(3)(a), above, mean that the potential alternative sites to be considered must: 1) not require a new exception; and 2) provide deepwater port access with existing dock facilities. The alternatives analysis provided in the Mackenzie Report is therefore divided into two parts, the first being an analysis of industrial land availability at Port Westward, and the second being an analysis of industrial land availability at other locations not requiring an exception where the Port's five proposed uses could potentially be sited with deepwater port access and existing dock facilities.

Vacant Port Westward Acreage

The Mackenzie Report includes several maps of Port Westward, including the PGE leasehold area LUBA ruled the Port had not clearly established could not accommodate rural industrial uses. As LUBA noted in its opinion, within PGE's 862 acre leasehold, 80 acres are dedicated mitigation areas, 60 acres are within the floodplain, 30 acres are developed with a security station and other infrastructure, and 100 acres are dedicated to utility easements and roads. 40 Or LUBA 171, 176 (2014). After deducting those 270 acres, and the 147 acres actively in use by PGE, from the 862 total acres, LUBA concluded that there are, approximately 445 acres remaining in PGE's leasehold available for potential rural industrial development. 40 Or LUBA 171, 176 (2014). Based on that conclusion, LUBA held that, under OAR 660-004-0020(2)(b), the County erred in finding that the remaining 445 acres could not reasonably accommodate rural industrial uses "absent evidence that PGE is categorically unwilling to sublease part or all of its leasehold to other industrial users, or that the leased acreage cannot otherwise be reasonably made available for development through acquisition or termination of the leasehold interest. . . . " 40 Or LUBA 171, 195 (2014).

Building on that information Mackenzie undertook a comprehensive investigation of the availability of acreage within the PGE leasehold.

The site is also encumbered by a number of easements for roadways, utilities, drainage facilities, levees, pipelines, and 46 acres of conservation areas, which serve to divide developable areas into smaller sections less conducive to large-scale rural industrial development. See Appendix 1. Together with the security fencing, gates, and other infrastructure, these encumbrances serve as barriers to development.

Mackenzie noted that PGE now operates three power generation facilities, not two, and that the remainder of Port Westward is heavily encumbered by wetlands, conservation easements, transmission lines, necessary buffering and other restrictions to developing sites for the uses proposed by the Port. The third power generation facility has become operational since the Port's original application was submitted to the County, indicating that growth is not hypothetical and that PGE in fact intends to utilize its leasehold area.

This conclusion is evidenced by the June 16, 2016 letter from PGE to the Port, in which PGE states that it is in fact unwilling to sublease any more of its leasehold. As the letter states:

Maintaining and protecting PGE's assets at Port Westward is imperative to the company's current and future operations. Protecting the long-term interests of the electric generation capabilities at the site requires PGE to maintain adequate land buffers around the facilities for security and reliability purposes, <u>thus restricting</u>

third-party use on the 854-acre leasehold. In addition, it is important to our future operations there is adequate space in our leasehold for building future generating plants. This limits the physical space, location and other related dynamics that might otherwise make the area available to third-parties. Given the company's investment at Port Westward and the critical nature of the site to support reliable electric service, third-party compatibility is a high bar which some proposed industrial facilities in the past could not meet. Due to this high bar, PGE supports the Port's effort to bring additional industrial land outside the buffer into Port Westward (emphases added).

LUBA found that the existence of a Joint Marketing Agreement between the Port and PGE for additional development at Port Westward implies that areas within the PGE leasehold were available for development. 70 Or LUBA 171 (2014). However, as Mackenzie notes in its report, that marketing agreement did not lead to the siting of any additional businesses at Port Westward. In 2007, PGE sent a letter to the Port formally terminating the joint marketing agreement, which by its terms had previously lapsed, and it has not entered into another one with the Port. That letter from PGE is included in Appendix 2 to the Mackenzie Report. Taken together, the two PGE letters make it clear that, as far as PGE is concerned, future development within its leasehold area by any other user is not feasible.

Outside of the leasehold area, after accounting for all encumbrances and existing uses, Mackenzie identified one small area in the southeast corner of Port Westward. However, Mackenzie determined that that area was insufficient in size to accommodate the uses proposed by the Port.

As evident in Figure 4, there are few developable portions of PWW that are not encumbered by wetlands, conservation easements, power generation facilities, transmissions lines, the ethanol plant, and long-term leases. The southeast corner of the Port's existing PWW property could perhaps provide one last small development site outside PGE's lease area, though, as described below, this would be insufficient to satisfy the overall demand for rural industrial sites and is too small to effectively site one of the five uses proposed by the Port.

LUBA also held that the mere presence of wetlands was not a sufficient basis for determining that the PGE leasehold is unavailable for rural industrial development under OAR 660-004-0020(2)(b), without first making the requisite findings under OAR 660-004-0020(2)(b)(B) that economic factors made the leasehold unable to reasonably accommodate the rural industrial uses. That regulation provides as follows, in part:

Economic factors may be considered along with other relevant factors in determining that the use cannot reasonably be accommodated in other areas.

Mackenzie reviewed the impediment to future development at Port Westward, in light of the allowance for considering economic factors in determining whether existing acreage at the Port could accommodate the uses proposed by the Port. Even assuming that sufficient acreage would be available, Mackenzie concluded that such economic factors would not allow for development at Port Westward without taking an exception to Goal 3 for additional acreage unencumbered by wetlands concluding:

After deducting the approximately 40 acres of wetlands that lie within conservation easements, filling the remaining 439 acres of wetlands to create developable area would require at least 658 acres of land, which is not feasible within the boundaries of the existing PWW exception area. Significantly, wetland mitigation costs serve as a nearly-insurmountable hurdle to utilization of the remaining acreage at PWW, as wetland creation costs run on the order of \$77,000-\$82,000 per acre. Filling the wetland acreage noted above, and acquiring the requisite mitigation acreage, would cost on the order of \$50 million above and beyond the acquisition costs—assuming that the Corps and DSL granted authorization to fill the wetlands (citation omitted).

Therefore, presuming that those areas encumbered by wetlands could somehow be made available (contrary to Mackenzie's conclusion that those areas are in fact not available), Mackenzie nevertheless determined that the economic barriers to developing those wetlands would be insurmountable.

Accordingly, the Mackenzie Report concludes that development is not currently available at Port Westward, other than the last small area remaining, which could not reasonably accommodate the Port's proposed uses.

Other Alternative Sites

LUBA remanded the County's decision regarding its analysis of alternative sites other than the PGE leasehold under OAR 660-004-0020(2)(b). As explained above, the rule requires findings that the areas that do not require a new exception cannot reasonably accommodate the [proposed] use[s]." LUBA concluded that doing such an analysis authorizing all uses allowed in the RIPD zone, combined with justification of three separate reasons for taking the exception to Goal 3 for all of those uses, made undertaking an alternative sites analysis for those sites impossibly complicated. 40 Or LUBA 171, 197-98 (2014). As LUBA explained, "[I]f the county had limited the proposed uses to port-dependent uses that require deep-water access, then the county could

easily reject alternative sites that do not provide deep-water access." 40 Or LUBA 171, 198 (2014).

In response and as explained in detail above, as well as in the Mackenzie Report, the Port has narrowed its scope of proposed uses down to five specific uses that are each port-dependent, and has also limited its justification for taking an exception to Goal 3 to one reason under OAR 660-004-0022(3)(a), advancing the deepwater port and existing dock facilities at Port Westward as the unique resource justifying an exception to Goal 3.

In addition, LUBA found that the County's decision did not adequately establish that other alternative sites cannot accommodate the entire scope of rural industrial uses (as conditionally allowed in the RIPD zone and as justified by all three OAR 660-004-0022(3) "reasons" originally put forward), on the basis that no alternative site is large enough to accommodate in one place the multiple large-lot industrial uses that proposed exception area could accommodate. LUBA reasoned that "if one or more alternative sites can reasonably accommodate one or more of the proposed large lot industrial uses, then the county cannot reject such sites solely on the basis that they cannot provide 837 acres for multiple large lot uses at a single location." 40 Or LUBA 171, 198 (2014).

However, as previously noted, the Port has since reduced the number of proposed rural industrial uses to five uses that are, as explained above and detailed in the Mackenzie Report, highly dependent on the deepwater port and existing dock facilities under the justification provided under OAR 660-004-0020(3)(a). Therefore, the Port's proposal, so modified, obviates the need to look at scattered large lot sites that are not located in close proximity deepwater ports with existing dock facilities.

The Mackenzie Report undertakes an assessment of alternative sites that potentially meet those criteria. It first undertakes an assessment of other Port of St. Helens properties ostensibly available for the kinds of uses proposed by the Port. However, because none have deepwater access or related dock facilities, Mackenzie concludes that none of the Port's other sites provide viable alternatives.

Next, in the report Mackenzie examines the state's other public deepwater ports, with a particular focus on those deepwater ports along the M-84 Marine Highway/Columbia River corridor with deepwater access (the Port of Astoria and the Port of Portland).

Port of Astoria

As detailed in the Mackenzie Report, the Port of Astoria has deepwater facilities, but lacks sufficient available land for the kinds of uses proposed by the Port. The Port of Astoria is divided

into two areas, the Central Waterfront and Tongue Point. The Central Waterfront is fully occupied and has no vacant land. Tongue Point itself is divided into two distinct areas, North Tongue Point and South Tongue Point.

North Tongue Point is 34 acres in its entirety. The northern 19 acre portion is partially occupied by tenants, and has some developed smaller warehouse space available for lease. However, none of the Port's proposed uses could be sited at those available spaces because of their small sizes. The southern portion is a vacant parcel, but is only 15 acres in size and thus is insufficient to site the kinds of uses proposed by the Port. In addition, a landfill was discovered on the site containing heavy metals and PCBs exceeding acceptable levels. Together with the insufficient acreage, the environmental contamination presents an economic obstacle that makes development infeasible, as detailed in the Mackenzie Report.

South Tongue Point consists of four parcels totaling approximately 137 acres, three owned by the Oregon Department of State Lands (DSL), and one owned by the U.S. Army Corps of Engineers. However, according to the Mackenzie Report, Clatsop Community College has a purchase-and-sale agreement in place and is in the process of acquiring the three DSL parcels for its own use, and the U.S. Army's Joint Base Lewis-McChord is actively pursuing repurposing the Army Corps of Engineers' property for an Army training facility.

Therefore, in light of the insufficient acreage, and in context of the other factors, the Mackenzie Report concludes that there is no acreage at the Port of Astoria considered available for siting any of the Port's proposed uses.

Port of Portland

The Mackenzie Report next examines the availability at the Port of Portland for the Port's proposed uses. The report notes that the Port of Portland recently (2013) pursued the development of additional port facilities at West Hayden Island, but that that pursuit was halted after the Port of Portland determined that the obstacles to development were insurmountable and withdrew its annexation proposal from the City of Portland. A letter from the Port of Portland to the City of Portland explaining that decision is appended to the Mackenzie Report. *See* Appendix 5 to the Mackenzie Report. In detailing the letter, the Mackenzie Report provides the following:

In the letter, the Executive Director states that "[T]he [Portland] Planning and Sustainability Commission (PSC) has recommended annexation, but on terms that render the development of the 300 acre marine terminal parcel impossible." The letter also states, "From our conversation, I understand that you believe the Council is unwilling to take action on a modified proposal. Based upon your assessment that the Council's policy choice is to not bring forward a package that is viable in the market, the Port will not continue with the annexation process at this time and withdraws its consent to annexation" and "[t]he city, unfortunately, will now have to deal with the consequences of a severe shortfall in industrial land."

The letter elsewhere explains that, given the regulatory burdens West Hayden Island faces, development will be economically infeasible. As the Executive Director explains, "The Port is enterprise funded: only 4 percent of our revenues come from taxes. Any development at WHI must meet basic, sustainable market requirements. The PSC recommendations put the development cost of the property at about double its value in the market."

Further, as the Executive Director makes clear, it is not only the local regulations that make development of West Hayden Island infeasible:

Furthermore, the PSC recommendations exceed what is required by Goal 5 by obligating us to go back at the time of development for further review for any docks or other in water development that would be integral to the development of a water dependent use (on top of the lengthy and contentious, federal and state permitting processes). This type of approach does not give us any assurance that we'll have the opportunity to actually develop the property once annexation occurs.

Mackenzie notes that West Hayden Island is completely undeveloped and lacks any infrastructure, including deepwater access or the related dock facilities. As highlighted in the Port of Portland's letter, dredging for deepwater access and the installation of dock facilities would require "lengthy and contentious, federal and state permitting processes." The 2014 Regional Industrial Site Readiness Inventory Update (the Inventory Update), prepared by Mackenzie on behalf of Business Oregon, Metro, NAIOP – Commercial Real Estate Development Association Oregon Chapter, the Oregon Department of Land Conservation and Development, and the Port of Portland, estimates that West Hayden Island is at least seven years away from site readiness for the kinds of uses proposed from the Port, and states that that clock would not start running until after the Port of Portland and the City of Portland re-engaged and successfully navigated the legislative process for developing the area. As stated in the Inventory Update:

... West Hayden Island ... is inside the UGB but subject to a lengthy planning and annexation process that is likely to include significant mitigation requirements. If approved for development, the West Hayden Island site is at least seven years away from readiness due to permits, mitigation, and infrastructure requirements.

Thus West Hayden Island does not present a viable alternative to Port Westward, because it lacks the deepwater access and existing dock facilities, the very reason the Port advances under OAR 660-004-0022(3)(a) for taking an exception to Goal 3. Accordingly, the Mackenzie Report

concludes that West Hayden Island is not economically or practically feasible as an alternative for siting the uses proposed by the Port. Because the remainder of the Port of Portland's facilities are built out and occupied, the Mackenzie Report concludes that the Port of Portland is not a viable alternative.

Non-Columbia River Ports

Regarding the non-Columbia River/M-84 corridor ports, the Mackenzie Report first addresses the Oregon International Port of Coos Bay. It notes that it is 200 nautical miles from the mouth of the Columbia River, does not serve M-84/Columbia River corridor commerce and is 230 miles from the Portland metropolitan area. Based on its location, the Mackenzie Report concludes that Coos Bay is not a viable alternative.

The Mackenzie Report also addresses the Port of Newport and the Port of Tillamook, noting that neither serve M-84/Columbia River corridor commerce, and the latter lacks marine access entirely.

Other Sites Considered

Finally, the Mackenzie Report addresses other potential alternative sites that were previously raised, both public and non-public, noting that the viability of each site is impacted by the Port's modification of its application to limit the reason put forward to justify the exception to the deepwater port and existing dock facilities at Port Westward as a "unique resource" under OAR 660-004-0022(3)(a). The Mackenzie Report addresses those raised alternatives, noting that none provide deepwater access or existing dock facilities, and the report therefore concludes that none are viable alternatives.

4. <u>Compatibility Analysis for the Narrowed Field of Proposed Uses</u>

Under ORS 197.732(2)(c)(D), Goal 2, Part II(c) and OAR 660-004-0020(2)(d), the County is required to make a determination that the proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts.

OAR 660-004-0020(2)(d) states:

The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts.

The rule explains that "compatible' is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses."

LUBA concluded that, absent the proposal of specific rural industrial uses, it is impossible to make adequate compatibility findings, which is a prerequisite for taking an Exception to Goal 3, stating, "The time to discover whether the proposed use is compatible or can be made compatible with adjacent uses, and therefore qualifies for a goal exception under OAR 660-004-0020(2)(d), is before the local government adopts the comprehensive plan text, map and zoning changes that authorize the proposed use." 40 Or LUBA 171, 206 (2014).

In response to LUBA's conclusion, the Port has narrowed the scope of its proposed rural industrial uses to the five discussed above, so as to allow for an adequate compatibility analysis for the proposed uses consistent with the requirements of OAR 660-004-0020(2)(d) and LUBA's holding.

In its original ordinance approving the Port's application, Columbia County imposed several conditions aimed toward the OAR 660-004-0020(2)(d) compatibility standard. First and foremost, Condition 1 required the submission of a Site Design Review and RIPD Use Permitted under Prescribed Conditions as required by the County's Zoning Ordinance. Additionally, the County imposed a trip cap on the entire exception area of 332 PM peak-hour trips.

Condition 4 specifically addressed compatibility concerns with adjoining agricultural uses, requiring an evaluation of threatened and endangered species as required by law, the maintenance of "natural resource features, buffers and screening for any development adjacent to land zoned PA-80 and maintenance of undeveloped areas in their natural state if not developed. Additionally, Condition 4 required dust suppression and water run-off control. Condition 4 also required agricultural impact assessment reports for adjacent agricultural uses demonstrating impacts and implementing a mitigation plan. The Conditions also limited uses in the exception area to those uses authorized by the exception, and prohibited the loading and unloading of coal outright.

Although LUBA concluded that these measures taken by the County to mitigate any potential compatibility issues lacked context because there was no practical limitation to the uses allowed, the modified application and its five proposed uses lend context to those conditions of approval aimed at compatibility issues. With the five uses identified, and similar conditions imposed by the County to mitigate any potential adverse impacts, the uses can be rendered compatible with neighboring uses.

F. Conclusion

Based on the evidence contained in the technical report produced by Mackenzie, as well as the analysis provided above, the Port of St. Helens has demonstrated compliance with all applicable

laws and regulations for taking an exception to Goal 3 and rezoning the proposed exception area from PA-80 to RIPD. The uses proposed are rural in nature, are significantly dependent on close proximity to a deepwater port with dock facilities, and can be made compatible with neighboring uses. As evidenced by the Mackenzie Report, there are no viable alternative sites available for the Port's proposed uses, and therefore an exception to Goal 3 is justified for the expansion of Port Westward.

Exhibits

- A. Port Westward Title Report, dated February 13, 2017
- B. 2014 Regional Industrial Site Readiness Inventory Update
- C. 2012 Regional Industrial Site Readiness Report



2534 Sykes Road, Ste C St Helens, OR 97051 Phone: (503)397-3537 / Fax: (503)397-4851

TITLE PLANT RECORDS REPORT Report of Requested Information from Title Plant Records

Port Of St. Helens P.O. Box 598 St. Helens, OR 97051

Customer Ref.: Order No.: 473817000137 Effective Date: February 13, 2017 at 08:00 AM Fee(s):

The information contained in this report is furnished by Ticor Title Company of Oregon (the "Company") as an information service based on the records and indices maintained by the Company for the county identified below. THIS IS NOT TITLE INSURANCE NOR IS IT A PRELIMINARY TITLE REPORT OR A COMMITMENT FOR TITLE INSURANCE. No examination has been made of the Company's records, other than as specifically set forth herein. Liability for any loss arising from errors and/or omissions is limited to the lesser of the fee paid or the actual loss to the customer, and the Company will have no greater liability by reason of this report. THIS REPORT ("THE REPORT") IS SUBJECT TO THE LIMITATIONS OF LIABILITY STATED BELOW, WHICH LIMITATIONS OF LIABILITY ARE A PART OF THIS REPORT

County and Time Period

This report is based on a search of the Company's title plant records for County of Columbia, State of Oregon, for the time period from February 13, 1997 through February 13, 2017 (with the through date being "the Effective Date").

Ownership and Property Description

The Company reports the following, as of the Effective date and with respect to the following described property ("the Property"):

Owner. The apparent vested owner of the Property is:

Port of Saint Helens, a Municipal Corporation

Premises. The Property is:

(a) Street Address:

80997, 81200 and 81566 Kallunki Road, Saint Helens, OR 97051

(b) Legal Description:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Encumbrances

THE FOLLOWING LIST OF ENCUMBRANCES (CHECK THE APPLICABLE BOX):

☑ INCLUDES NON-MONETARY AND MONETARY ENCUMBRANCES.

☐ INCLUDES ONLY MONETARY ENCUMBRANCES.

<u>Encumbrances.</u> For the above stated time period, the Company reports that, as of the Effective Date, the Property appears to be subject to the following encumbrances, not necessarily shown in order of priority:

EXCEPTIONS

- 1. Regulations, including levies, liens, assessments, rights of way and easements of Beaver Drainage Improvement.
- Any adverse claim based upon the assertion that:

a) Said Land or any part thereof is now or at any time has been below the highest of the high watermarks of Columbia River and Bradbury Slough, in the event the boundary of said Columbia River and Bradbury Slough has been artificially raised or is now or at any time has been below the high watermark, if said Columbia River and Bradbury Slough is in its natural state.

b) Some portion of said Land has been created by artificial means or has accreted to such portion so created.

c) Some portion of said Land has been brought within the boundaries thereof by an avulsive movement of Columbia River and Bradbury Slough, or has been formed by accretion to any such portion.

3. The rights of the public and governmental bodies for fishing, navigation and commerce in and to any portion of the Land herein described, lying below the high water line of the Bradbury Slough and Columbia River.

The right, title and interest of the State of Oregon in and to any portion lying below the high water line of Bradbury Slough and Columbia River.

4. The rights of the public and governmental bodies for fishing, navigation and commerce in and to any portion of the Land herein described, lying below the high water line of the Columbia River and Bradbury Slough.

The right, title and interest of the State of Oregon in and to any portion lying below the high water line of Columbia River and Bradbury Slough.

5. Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: John Drainage District Purpose: 20 foot right of way for dike and levee Recording Date: April 5, 1915 Recording No: Book 21, page 520 Affects: Exact location not disclosed

6. Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: Columbia Agricultural Co. Purpose: levee and wagon road

> Recording Date: March 22, 1916 Recording No: Book 23, page 82 Affects: Exact location not disclosed

7. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document, including the terms and provisions thereof;

Reserved by: Columbia Agricultural Co. Purpose: right of way Recording Date: August 16, 1920 Recording No: Book 29, page 609 Affects: Exact location not disclosed

 Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document, including the terms and provisions thereof;

Reserved by: William Johnson and Jennie Johnson Purpose: right of way Recording Date: January 21, 1922 Recording No: Book 32, page 384 Affects: Exact location not disclosed

9. Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: Beaver Drainage District Purpose: right of way to build, construct, reconstruct and repair levees, embankments, revetments, canals, ditches and other incidental works appurtenant to the said Beaver Drainage District Recording Date: November 9, 1937 Recording No: Book 61, page 394 Affects: Exact location not disclosed

10. Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: United States of America Purpose: right of way and levees Recording Date: December 16, 1937 Recording No: Book 61, page 571 Affects: Exact location not disclosed

11 Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: Beaver Drainage District Purpose: right of way to build, construct, reconstruct and repair levees, embankments, revetments, canals, ditches and other incidental works appurtenant to the said Beaver Drainage District Recording Date: January 5, 1938 Recording No: Book 61, page 623 Affects: Exact location not disclosed

12 Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

> Granted to: United States of America Purpose: right of way and levees Recording Date: August 13, 1939 Recording No: Book 64, page 471 Affects: Exact location not disclosed

13.

A lease with certain terms, covenants, conditions and provisions set forth therein.

Dated:August 10, 1967Lessor:The Port of St. Helens, a municipal corporationLessee:Westward Properties, Inc., a California corporationRecording Date:August 17, 1967Recording No:Book 166, page 154

Memorandum of Lease recorded May 9, 1974 in Book 196, page 117, Deed Records of Columbia County, Oregon.

Amendment to Lease, including the terms and provisions thereof

Recording Date: June 8, 2006 Recording No.: 2006-007492

Amendment of Master Lease, including the terms and provisions thereof

Recording Date: September 4, 2008 Recording No.: 2008-008607

Amendment to Master Lease, including the terms and provisions thereof

Recording Date: July 7, 2010 Recording No.: 2010-005597

14. Right of First Refusal, including the terms and provisions thereof, as contained in Memorandum Lease,

In favor of: Portland General Electric Company Recoded: May 9, 1974 Recording No.: Book 196, page 117

15. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document, including the terms and provisions thereof;

Reserved by: Port of St. Helens Purpose: right of re-entry Recording Date: May 9, 1974 Recording No: Book 196, page 122 Affects: Parcel 2 only - Exact location not disclosed

Amendment, including the terms and provisions thereof

Recording Date: June 8, 2006 Recording No.: 2006-007553

16. Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: The Port of St. Helens, Portland General Electric Company and KB Pipeline Company Purpose: right of way Recording Date: June 27, 2000 Recording No: 00-06319 Affects: see drawing attached to this easement for location

17. Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: Beaver Drainage Improvement Company, an Oregon District Improvement Non Profit Corporation Purpose: right of way Recording Date: February 16, 2005 Recording No: 2005-002243

18. Easement(s) for the purpose(s) shown below and rights incidental thereto, including the terms and provisions thereof, as granted in a document:

Granted to: Oregon Department of Energy Purpose: conservation easement Recording Date: February 22, 2005 Recording No: 2005-002419

19. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Between: Port of St. Helens, a municipal corporation of the State of Oregon and Columbia County, a political subdivision of the State of Oregon Recording Date: October 17, 2005 Recording No: 2005-013779

- 20. Subject to an Easement over, on and across the ammunition spur tract between Stations 10+30 and 13+83, also between Stations 8+10 and 8+25.
- 21. Roadway permit granted to Columbia County, including the terms and provisions thereof, as disclosed and described Deed from United States of America to Port of St. Helens, recorded March 31, 1966 in Book 161, page 122, Deed Records of Columbia County, Oregon.
- 22. An unrecorded lease with certain terms, covenants, conditions and provisions set forth therein as disclosed by the document

Entitled: Memorandum of Sublease Lessor: Portland General Electric Company, an Oregon corporation Lessee: Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006 Recording No: 2006-007491

Said Lessor's interest was subsequently assigned to the Port of St. Helens, a municipal corporation of the State of Oregon by the following:

Amended of Lease, including the terms and provisions thereof, Recording Dated: June 8, 2006 Recorded No.: 2006-007492 Records of Columbia County, Oregon

Assignment of the Lessee's interest under said lease,

Assigned to: Cascade Kelly Holdings LLC Recording Date: December 23, 2009 Recording No: 2009-011493

23. Memorandum of Rail Easement, including the terms and provisions thereof,

 Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006
Recording No.: 2006-007493
Records of Columbia County, Oregon.

Re-Recording Date: July 6, 2006 Re-Recording No: 2006-008865

First Amendment, including the terms and provisions thereof, Recorded: February 10, 2009 Recording No.: 2009-001518

24.

24. Memorandum of Natural Gas Easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006 Recording No.: 2006-007494 Records of Columbia County, Oregon

25. Memorandum of Electrical Easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006 Recording No.: 2006-007495 Records of Columbia County, Oregon

Memorandum of Road Easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006 Recording No.: 2006-007496 Records of Columbia County, Oregon

27. Memorandum of Telecommunications Easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006 Recording No.: 2006-007497 Records of Columbia County, Oregon

28. Memorandum of Pipe Line Easement, including the terms and provisions thereof,

 Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006
Recording No.: 2006-007498
Records of Columbia County, Oregon

29. Amendment of Deed, including the terms and provisions thereof

Between: Portland General Electric and Port of St. Helens Recording Date: June 8, 2006 Recording No.: 2006-007553

30. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Clatskanie People's Utility District Purpose: right of way Recording Date: June 26, 2006 Recording No: 2006-008436 Affects: see drawing attached to document

Memorandum of Grain Transfer Easement, including the terms and provisions thereof,

 Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006
Recording No.: 2006-008863
Records of Columbia County, Oregon

32. Memorandum of Storm Water Easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: June 8, 2006 Recording No.: 2006-008864 Records of Columbia County, Oregon

33. Memorandum of Prime Landlord's Consent and Agreement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company Recording Date: March 28, 2007 Recording No.: 2007-004298 Records of Columbia County, Oregon.

34. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Executed by: Port of St. Helens, a municipal corporation of the State of Oregon Recording Date: August 2, 2007 Recording No: 2007-010161

Memorandum of Fire Suppression Easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company For: fire suppression Recording Date: September 21, 2007 Recording No.: 2007-012217 Records of Columbia County, Oregon

36. Memorandum of Stormwater Pipe Easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company For: stormwater pipe Recording Date: September 21, 2007 Recording No.: 2007-012218 Records of Columbia County, Oregon

37. Memorandum of Pipeline easement, including the terms and provisions thereof,

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company For: pipeline Recording Date: September 21, 2007 Recording No.: 2007-012219 Records of Columbia County, Oregon

Memorandum of Vapor Recovery Easement, including the terms and provisions thereof.

Between: Port of St. Helens, an Oregon municipal corporation and Portland General Electric Company, an Oregon corporation and Cascade Grain Products, LLC, an Oregon limited liability company For: vapor recovery Recording Date: October 12, 2007 Recording No.: 2007-013014 Records of Columbia County, Oregon

39. A lease with certain terms, covenants, conditions and provisions set forth therein.

Dated:	July 11, 2007
Lessor:	The Port of St. Helens
Lessee:	Clatskanie Peoples' Utility District
Recording Date:	May 16, 2008
Recording No:	2008-004915
Affects: Parcel 3	S

40. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Clatskanie People's Utility District Purpose: right of way Recording Date: March 26, 2008 Recording No: 2008-002965 Affects: Parcel 1

41. Development and Maintenance Agreement, including the terms and provisions thereof,

Between: Columbia County, a political subdivision of the State of Oregon and Port of St. Helens, a municipal corporation of the State of Oregon and Portland General Electric Company, an Oregon corporation Recording Date: August 27, 2008 Recording No.: 2008-008403 Records of Columbia County, Oregon.

42. Construction Permit, including the terms and provisions thereof

Recording Date:	August 27, 2008
Recording No.:	2008-008405

43. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws,
Ticor Title Company of Oregon Order No. 473817000137

except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date:August 27, 2008Recording No:2008-008406

44. A financing statement as follows:

Debtor:	Port of St. Helens
Secured Party:	State of Oregon, acting by and through its Department of Transportation
Recording Date:	February 10, 2009
Recording No:	2009-001520

45. A deed of trust to secure an indebtedness in the amount shown below,

Amount:	\$1,865,000,000.00
Dated:	February 15, 2013
Trustor/Grantor:	Cascade Kelly Holdings, LLC, an Oregon limited liability company
Trustee:	Ticor Title Company
Beneficiary:	Bank of America, N.A.
Recording Date:	February 19, 2013
Recording No.:	2013-001229
Affects Parcel 2	and Includes Additional Property

The Deed of Trust set forth above is purported to be a "Credit Line" Deed of Trust. It is a requirement that the Trustor/Grantor of said Deed of Trust provide written authorization to close said credit line account to the Lender when the Deed of Trust is being paid off through the Company or other Settlement/Escrow Agent or provide a satisfactory subordination of this Deed of Trust to the proposed Deed of Trust to be recorded at closing.

First Amendment to Line of Credit, the terms and provisions of said deed of trust as therein provided

Executed by:	Cascade Kelly Holdings LLC, an Oregon limited liability company and Bank of
America, N.A.	
Recording Date:	March 14, 2014
Recording No:	2014-001320

46. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: March 28, 2013 Recording No: 2013-002514

47. Easement Agreement, including the terms and provisions thereof

Granted to:	Port of St. Helens
Purpose:	pipeline
Recording Date:	January 12, 2015
Recording No:	2015-000188

Ticor Title Company of Oregon Order No. 473817000137

48. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	Clatskanie Peoples' Utility District
Purpose:	right of way for utilities
Recording Date:	October 13, 2015
Recording No:	2015-008722
Affects:	Exact location not disclosed

49. Unrecorded easements for railroad tracks as disclosed by Survey issued by David Evans & Associates, Inc., dated February 7, 2013 as Project #GLPA0000-0001.

General Index Liens against Named Party

For the above stated county and time period, and as of the Effective Date, with respect to the following named party or parties:

Port of St. Helens, Portland General Electric Company, Cascade Grain Products, LLC, Cascade Kelly Holdings, LLC and Clatskanie Peoples' Utility District

the Company reports that the following matters in its general index (index of matters that are not property specific but may give rise to a lien on any real property of the debtor in the county) may be unsatisfied, including such matters as judgments, federal tax liens, state warrants or orders and county tax warrants:

None

Recorded Documents

[If no information appears in this section, the section is intentionally omitted.]

End of Reported Information

There will be additional charges for additional information or copies. For questions or additional requests, contact:

Denise Blanchard

FAX Denise.Blanchard@ticortitle.com

Ticor Title Company of Oregon 2534 Sykes Road, Ste C St Helens, OR 97051

PARCEL 1:

A parcel of land in Sections 15, 16, 21, 22 and 23, Township 8 North, Range 4 West, Willamette Meridian, Columbia County, Oregon, described as follows:

Beginning at the East guarter corner of said Section 21; thence South 89°37' West, 1780.20 feet to the centerline of a county road; thence North 16°36' West, 1188.39 feet along the said centerline; thence North 45°39' West, 1928.31 feet; thence North 5°23' West, 1472.77 feet; thence North 6°09' East, 385.00 feet; thence North 55°05' West, 128.00 feet; thence Northwesterly to the low water line of the Columbia River; thence Northeasterly and Southeasterly in the low water line, 11,300 feet, more or less, to the East line of said Section 22, which is 2,400 feet North of the East quarter corner of said Section 22; thence South along the said East line, 1109.60 feet to the Northeasterly right of way line of a railroad spur to the ammunition storage area; thence South 45°39' East, 2141.95 feet along said right of way; thence along a 5679.65 foot radius curve to the left, through a central angle of 5°00' for a distance of 495.64 feet; thence South 50°39' East 300.00 feet; thence along a 769.02 foot radius curve to the left, through a central angle of 66°42'10" for a distance of 895.28 feet; thence North 62°38'50" East 95.00 feet to the Northwesterly right of way of the Spokane Portland and Seattle Railway; thence Southwesterly 367.60 feet along said Northwesterly right of way; thence from a tangent of South 81°13'10" West along a 869.02 foot radius curve to the right, through a central angle of 48°07'50" for a distance of 730.00 feet; thence North 50°39' West 300.00 feet; thence along a 5779.65 foot radius curve to the right, through a central angle 5°00' for a distance of 504.37 feet; thence North 45°39' West 865.95 feet; thence West 86.95 feet to a point 300.00 feet North and 760.00 feet East of the West guarter corner of said Section 23; thence North 85.16 feet; thence North 45°39' West 1707.40 feet; thence South 89°37' West, 1795.60 feet; thence South 0°04' East 454.00 feet; thence South 89°37' West 960.00 feet; thence South 0°04' East, 1148.00 feet; thence South 89°37' West, 2113.80 feet to the point of beginning.

EXCEPTING THEREFROM the following described property, conveyed to Portland General Electric by instrument recorded November 9, 1974 in Book 196, page 122, Deed Records of Columbia County, Oregon, now known as Parcels 1 and 2 of Partition 2007-28, recorded September 25, 2007 as Fee Number 2007-012334, Records of Columbia County, Oregon.

ALSO EXCEPTING THEREFROM the following described property:

A parcel of land in the Southwest quarter of Section 15, Township 8 North, Range 4 West, Willamette Meridian, Columbia County, Oregon, being more particularly described as follows:

Commencing at a ½ inch, inside diameter iron pipe, 2 feet above ground level, which marks the most Easterly corner of an 120.47 acre, more or less, parcel of land recorded in Book 196, page 122, Deed Records of Columbia County, Oregon; thence South 64°01'20" East for a distance of 1139.29 feet to a 5/8 inch rebar monument and the point of beginning of the parcel to be described; thence North 43°47'31" West for a distance of 2703.11 feet to a 5/8 inch rebar monument; thence North 46°12'29" East for a distance of 794.99 feet to à 5/8 inch rebar monument; thence South 40°28'00" East for a distance of 404.17 feet to a 5/8 inch rebar monument; thence South 40°28'00" East for a distance of 404.17 feet to a 5/8 inch rebar monument; thence South 35°48'19" East for a distance of 1226.73 feet to a 5/8 inch rebar monument; thence South 44°57'31" East for a distance of 621.68 feet to a 5/8 inch rebar monument; thence South 50°17'46" East for a distance of 696.83 feet to a 5/8 inch rebar monument; thence South 64°30'35" West for a distance of 729.59 feet to a 5/8 inch rebar monument and the point of beginning.

EXHIBIT "A" Legal Description

ALSO EXCEPTING THEREFROM the following described parcel:

A parcel of land located in the Southeast and Southwest quarters of Section 15 and the Northeast and Northwest quarters of Section 22, Township 8 North, Range 4 West, Willamette Meridian, Columbia County, Oregon, described as follows:

Beginning at the West quarter corner of said Section 22; thence North 31°25'41" East, 3915.81 feet to ¼" iron pipe marking the most Easterly corner of that parcel of land described in Deed Book 196, page 122; thence South 60°01'20" East, 1139.29 feet to a 5/8" iron rod with yellow plastic cap inscribed "PLS 2180" marking the most Southerly corner of the "Cascade Grain Lease Boundary"; thence along the Southeasterly line of said "Cascade Grain Lease Boundary"; thence along the Southeasterly line of said "Cascade Grain Lease Boundary" North 64°30'35" East, 518.93 feet to the point of beginning; thence continuing along said Southeasterly line North 64°30'35" East, 210.66 feet to a 5/8" iron rod with yellow plastic cap inscribed "PLS 2180" marking the most Easterly corner of said "Cascade Grain Lease Boundary; thence leaving said Southeasterly line South 64°30'35" East, 210.66 feet to a 5/8" iron rod with yellow plastic cap inscribed "PLS 2180" marking the most Easterly corner of said "Cascade Grain Lease Boundary; thence leaving said Southeasterly line South 57°38'37", East, 514.97 feet; thence South 46°12'14" West, 323.25 feet; thence North 43°47'46" West, 566.17 feet to the point of beginning.

PARCEL 2:

A parcel of land in the Southwest quarter of Section 15, Township 8 North, Range 4 West, Willamette Meridian, Columbia County, Oregon, being more particularly described as follows:

Commencing at a ½ inch, inside diameter iron pipe, 2 feet above ground level, which marks the most Easterly corner of an 120.47 acre, more or less, parcel of land recorded in Book 196, page 122, Deed Records of Columbia County, Oregon; thence South 64°01'20" East for a distance of 1139.29 feet to a 5/8 inch rebar monument and the point of beginning of the parcel to be described; thence North 43°47'31" West for a distance of 2703.11 feet to a 5/8 inch rebar monument; thence North 46°12'29" East for a distance of 794.99 feet to a 5/8 inch rebar monument; thence South 40°28'00" East for a distance of 404.17 feet to a 5/8 inch rebar monument; thence South 40°28'00" East for a distance of 404.17 feet to a 5/8 inch rebar monument; thence South 35°48'19" East for a distance of 1226.73 feet to a 5/8 inch rebar monument; thence South 44°57'31" East for a distance of 621.68 feet to a 5/8 inch rebar monument; thence South 64°30'35" West for a distance of 729.59 feet to a 5/8 inch rebar monument; thence South 64°30'35" West for a distance of 729.59 feet to a 5/8 inch rebar monument and the point of beginning.

PARCEL 3:

A parcel of land located in the Southeast and Southwest quarters of Section 15 and the Northeast and Northwest quarters of Section 22, Township 8 North, Range 4 West, Willamette Meridian, Columbia County, Oregon, described as follows:

Beginning at the West quarter corner of said Section 22; thence North 31°25'41" East, 3915.81 feet to ½" iron pipe marking the most Easterly corner of that parcel of land described in Deed Book 196, page 122; thence South 60°01'20" East, 1139.29 feet to a 5/8" iron rod with yellow plastic cap inscribed "PLS 2180" marking the most Southerly corner of the "Cascade Grain Lease Boundary"; thence along the Southeasterly line of said "Cascade Grain Lease Boundary"; thence along the Southeasterly line of said "Cascade Grain Lease Boundary" North 64°30'35" East, 518.93 feet to the point of beginning; thence continuing along said Southeasterly line North 64°30'35" East, 210.66 feet to a 5/8" iron rod with yellow plastic cap inscribed "PLS 2180" marking the most Easterly corner of said "Cascade Grain Lease Boundary; thence leaving said Southeasterly line South 57°38'37", East, 514.97 feet; thence South 46°12'14" West, 323.25 feet; thence North 43°47'46" West, 566.17 feet to the point of beginning.

Ticor Title Company of Oregon Order No. 473817000137

LIMITATIONS OF LIABILITY

"CUSTOMER" REFERS TO THE RECIPIENT OF THIS REPORT.

CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES THAT IT IS EXTREMELY DIFFICULT, IF NOT IMPOSSIBLE, TO DETERMINE THE EXTENT OF LOSS WHICH COULD ARISE FROM ERRORS OR OMISSIONS IN, OR THE COMPANY'S NEGLIGENCE IN PRODUCING, THE REQUESTED REPORT, HEREIN "THE REPORT." CUSTOMER RECOGNIZES THAT THE FEE CHARGED IS NOMINAL IN RELATION TO THE POTENTIAL LIABILITY WHICH COULD ARISE FROM SUCH ERRORS OR OMISSIONS OR NEGLIGENCE. THEREFORE, CUSTOMER UNDERSTANDS THAT THE COMPANY IS NOT WILLING TO PROCEED IN THE PREPARATION AND ISSUANCE OF THE REPORT UNLESS THE COMPANY'S LIABILITY IS STRICTLY LIMITED. CUSTOMER AGREES WITH THE PROPRIETY OF SUCH LIMITATION AND AGREES TO BE BOUND BY ITS TERMS.

THE LIMITATIONS ARE AS FOLLOWS AND THE LIMITATIONS WILL SURVIVE THE CONTRACT:

ONLY MATTERS IDENTIFIED IN THIS REPORT AS THE SUBJECT OF THE REPORT ARE WITHIN ITS SCOPE. ALL OTHER MATTERS ARE OUTSIDE THE SCOPE OF THE REPORT.

CUSTOMER AGREES, AS PART OF THE CONSIDERATION FOR THE ISSUANCE OF THE REPORT AND TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE LIABILITY OF THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS AND ALL SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, OTHER EMPLOYEES. AND SUBCONTRACTORS FOR ANY AND ALL CLAIMS, LIABILITIES, CAUSES OF ACTION, LOSSES, COSTS, DAMAGES AND EXPENSES OF ANY NATURE WHATSOEVER, INCLUDING ATTORNEY'S FEES, HOWEVER ALLEGED OR ARISING, INCLUDING BUT NOT LIMITED TO THOSE ARISING FROM BREACH OF CONTRACT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF WARRANTY, EQUITY, THE COMMON LAW, STATUTE OR ANY OTHER THEORY OF RECOVERY, OR FROM ANY PERSON'S USE, MISUSE, OR INABILITY TO USE THE REPORT OR ANY OF THE MATERIALS CONTAINED THEREIN OR PRODUCED, SO THAT THE TOTAL AGGREGATE LIABILITY OF THE COMPANY AND ITS AGENTS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS SHALL NOT IN ANY EVENT EXCEED THE COMPANY'S TOTAL FEE FOR THE REPORT.

CUSTOMER AGREES THAT THE FOREGOING LIMITATION ON LIABILITY IS A TERM MATERIAL TO THE PRICE THE CUSTOMER IS PAYING, WHICH PRICE IS LOWER THAN WOULD OTHERWISE BE OFFERED TO THE CUSTOMER WITHOUT SAID TERM. CUSTOMER RECOGNIZES THAT THE COMPANY WOULD NOT ISSUE THE REPORT BUT FOR THIS CUSTOMER AGREEMENT, AS PART OF THE CONSIDERATION GIVEN FOR THE REPORT, TO THE FOREGOING LIMITATION OF LIABILITY AND THAT ANY SUCH LIABILITY IS CONDITIONED AND PREDICATED UPON THE FULL AND TIMELY PAYMENT OF THE COMPANY'S INVOICE FOR THE REPORT.

THE REPORT IS LIMITED IN SCOPE AND IS NOT AN ABSTRACT OF TITLE, TITLE OPINION, PRELIMINARY TITLE REPORT, TITLE REPORT, COMMITMENT TO ISSUE TITLE INSURANCE, OR A TITLE POLICY, AND SHOULD NOT BE RELIED UPON AS SUCH. THE REPORT DOES NOT PROVIDE OR OFFER ANY TITLE INSURANCE, LIABILITY COVERAGE OR ERRORS AND OMISSIONS COVERAGE. THE REPORT IS NOT TO BE RELIED UPON AS A REPRESENTATION OF THE STATUS OF TITLE TO THE PROPERTY. THE COMPANY MAKES NO REPRESENTATIONS AS TO THE REPORT'S ACCURACY, DISCLAIMS ANY WARRANTY AS TO THE REPORT, ASSUMES NO DUTIES TO CUSTOMER, DOES NOT INTEND FOR CUSTOMER TO RELY ON THE REPORT, AND ASSUMES NO LIABILITY FOR ANY LOSS OCCURRING BY REASON OF RELIANCE ON THE REPORT OR OTHERWISE.

Ticor Title Company of Oregon Order No. 473817000137

IF CUSTOMER (A) HAS OR WILL HAVE AN INSURABLE INTEREST IN THE SUBJECT REAL PROPERTY, (B) DOES NOT WISH TO LIMIT LIABILITY AS STATED HEREIN AND (C) DESIRES THAT ADDITIONAL LIABILITY BE ASSUMED BY THE COMPANY, THEN CUSTOMER MAY REQUEST AND PURCHASE A POLICY OF TITLE INSURANCE, A BINDER, OR A COMMITMENT TO ISSUE A POLICY OF TITLE INSURANCE. NO ASSURANCE IS GIVEN AS TO THE INSURABILITY OF THE TITLE OR STATUS OF TITLE. CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES IT HAS AN INDEPENDENT DUTY TO ENSURE AND/OR RESEARCH THE ACCURACY OF ANY INFORMATION OBTAINED FROM THE COMPANY OR ANY PRODUCT OR SERVICE PURCHASED.

NO THIRD PARTY IS PERMITTED TO USE OR RELY UPON THE INFORMATION SET FORTH IN THE REPORT, AND NO LIABILITY TO ANY THIRD PARTY IS UNDERTAKEN BY THE COMPANY.

CUSTOMER AGREES THAT, TO THE FULLEST EXTENT PERMITTED BY LAW, IN NO EVENT WILL THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS, AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES AND SUBCONTRACTORS BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, PUNITIVE, EXEMPLARY, OR SPECIAL DAMAGES, OR LOSS OF PROFITS, REVENUE, INCOME, SAVINGS, DATA, BUSINESS, OPPORTUNITY, OR GOODWILL, PAIN AND SUFFERING, EMOTIONAL DISTRESS, NON-OPERATION OR INCREASED EXPENSE OF OPERATION, BUSINESS INTERRUPTION OR DELAY, COST OF CAPITAL, OR COST OF REPLACEMENT PRODUCTS OR SERVICES, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE, OR OTHERWISE AND WHETHER CAUSED BY NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF CONTRACT, BREACH OF WARRANTY, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE OR ANY OTHER CAUSE WHATSOEVER, AND EVEN IF THE COMPANY HAS BEEN ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES OR KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY FOR SUCH DAMAGES.

END OF THE LIMITATIONS OF LIABILITY



REGIONAL INDUSTRIAL SITE READINESS

2014 Inventory Update

Submitted September 2014

Project Number 2110160.03



MACKENZIE Since 1960 RiverEast Center | 1515 SE Water Ave, Suite 100, Portland, OR 97214 PO Box 14310, Portland, OR 97293 | T 503.224.9560 | www.mcknze.com

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APPENDICES

Appendix A:	June 2014 Site Inventory Matrix
Appendix B:	Regional Industrial Site Readiness 2014 Inventory Update – Site Maps
Appendix C:	Regional Industrial Site Readiness 2014 Inventory Update – User Designated and
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Μ.

PROJECT MANAGEMENT TEAM AND SPONSORS

Business Oregon - Sierra Gardiner and Mike Williams Metro - Ted Reid and John Williams NAIOP Oregon Chapter - Kirk Olsen Oregon Department of Land Conservation and Development – Jennifer Donnelly and Tom Hogue Port of Portland - Lise Glancy and Keith Leavitt Portland Business Alliance – Marion Haynes and Raihana Ansary













CONSULTANT TEAM

Mackenzie - Todd Johnson, Project Manager; Gabriela Frask; Brent Nielsen; and Matthew Butts



EXECUTIVE SUMMARY

This report is an update to the 2011 Regional Industrial Site Readiness Project of large (25+ acres) industrial sites within the Portland metropolitan area Urban Growth Boundary (UGB) and select urban reserves¹. The project is a partnership of Business Oregon, Metro, NAIOP - Commercial Real Estate Development Association Oregon Chapter, Oregon Department of Land Conservation and Development, Port of Portland, and the Portland Business Alliance, with cooperation from local governments and private property owners. This update is intended to inform local, regional, and state efforts to ensure an adequate supply of development-ready large industrial sites for traded-sector job creation.

Portland-Metro's Traded Sector, a 2012 Value of Jobs Report issued by Portland Business Alliance, found that on average a traded-sector worker in the Portland metropolitan area earns 42% more than a local-sector worker in the Portland metropolitan region. Promoting traded-sector job creation also spurs the local economy with a multiplier of 2.5 local-sector jobs created for each high-skilled traded-sector job. The production of traded-sector goods (i.e., manufacturing) remains a backbone of Portland metropolitan area's employment. Manufacturing jobs provide higher wages and better benefits than non-manufacturing jobs, particularly for those workers without a high school or college degree. The availability of large and market-ready industrial sites is critical to expanding and attracting traded-sector businesses and growing middle-income jobs key to a prosperous region.

This update intends to:

- 1. inventory and track changes in the region's large lot industrial site supply;
- 2. analyze movement of sites from varying states of site readiness;
- 3. inform policy makers on activity, such as policy changes or infrastructure investments, that have increased the supply and/or readiness of development-ready sites; and
- 4. support policy and investment decisions required to ensure an adequate supply of development-ready large industrial sites to support economic growth.

The development-readiness tiers used in this inventory are based on those established during the 2011 project:

Tier 1: Development-ready within 180 days of application submittal (i.e., projects can receive all necessary permits; sites can be served with infrastructure and zoned and annexed into the city within this timeframe).

ACTIONS THAT MADE SITES MORE DEVELOPMENT-READY		
Local and state legislative actions ²	2	
Changes in property owner willingness to transact	2	
Environmental constraint mitigation	2	
Infrastructure investments	5	

- **Tier 2:** Likely to require 7-30 months to become development-ready.
- Tier 3: Likely to require over 30 months to become development-ready.

Tier 1 sites are the only sites generally considered recruitment-ready for businesses expanding or locating in the Portland region. In a globally competitive environment, businesses increasingly require compressed timelines for

Although this inventory does not include sites within rural areas of these three counties that are outside the UGB and selected urban reserves, these sites are important to the region's economic prosperity.

² Legislative actions include Urban Growth Boundary (UGB) expansion, annexation, zoning, and concept planning.



decision making and development. While not considered marketable for most recruitments, Tier 2 could be feasible for expansions of existing businesses and for speculative development for investors. Tier 3 sites are viewed as being non-competitive in the market, and are therefore unavailable for business expansion and recruitment without significant investments, changes in regulatory compliance, or land price discounted by property owners.

Findings

Of the 54 sites in the 2014 inventory:

- There are 14 Tier 1 sites; 17 Tier 2 sites; and 23 Tier 3 sites.
- Seven new sites were *added* to the inventory since 2011.
- **I** Nine sites were *removed* from the inventory since 2011:

ACTIVITY RESULTING IN INVENTORY REMOVAL		
User designated ³ :	1	
Program changes ⁴ :	2	
Construction and development:	3	
Local and state legislative actions:	3	
Total:	9	

- Five sites moved up from Tier 2 to Tier 1.
- Six sites moved up from Tier 3 to Tier 2.
- Large industrial sites face multiple development constraints, including: required state and local legislative actions⁸, inadequate infrastructure and transportation⁹, land assembly needs, natural resources mitigation, brownfield remediation, and property owners not willing to transact.

Three of these sites are currently being developed and projected to result in \$38 million in investments and 416 new jobs when construction is complete⁵; one of the sites is being used as a temporary parking lot⁶ for Intel's Ronler Acres Campus expansion.

Since this June 2014 inventory was completed, three additional Tier 1 sites have been absorbed in the market⁷.



Total Sites and 2011-2014 Inventory Movement

³ User designated sites are sites owned and held for future expansion of existing regional firms and not available to the general market.

⁴ Current property owners have designated these sites to meet long-term operational needs. As a result, these sites are no longer available to the general market.

⁵ Site 11: Portland International Airport in Portland has two buildings under construction totaling 491,200 square feet with a \$28.5 million investment and 141 projected distribution and logistics jobs available in late 2014 (Port of Portland). Site 40: Pacific Realty in Tualatin has two buildings under construction totaling 100,000 square feet with a \$9.5 million investment and 275 projected distribution and logistics jobs available in 2015 (PacTrust), Site 44: Intel Corporation in Hillsboro was previously used as a staging area and is now a temporary parking lot for the D1X and D2X fabrication plants at the Intel Ronler Acres Campus with investment of \$1 billion (Intel).

⁶ Intel received land use approval for a temporary parking lot until 2023 at which point the property may be redeveloped.

⁷ Site 13: Specht Properties in Portland; Site 46: Development Services of America (Westmark site) in Hillsboro; Site 114: Colwood Ltd Partnership in Portland.

⁸ Local and state legislative actions include UGB expansion, annexation, zoning, and concept planning.

⁹ Infrastructure includes water, sewer, and stormwater utilities.

The following charts and tables compare site net developable acreage changes between the 2011 and 2014 inventories.



The increase in Tier 1 sites in the 2014 inventory is a result of the addition of three new sites to the inventory¹⁰ and five sites upgraded from Tier 2¹¹, offset by the market absorption of three Tier 1 sites. Of the 14 Tier sites, only seven have broad market appeal.

Of the 11 sites that moved up a tier, seven sites required investment in infrastructure and mitigation.

Two sites moved up a tier due to mitigation of environmental constraints.¹²

Five sites received transportation/infrastructure investments, totaling approximately \$39.5 million.¹³

Four of the sites which moved up a tier were able to do so without significant investment in infrastructure.

Г. н) f:: Я) Two sites had a change in the property owner's willingness to transact and were upgraded to Tier 2.14

Two sites were taken out of urban reserves and brought into the UGB by House Bill 4078 in 2014.¹⁵

¹⁰ Site 111: Weston Investment – an aggregated site; Site 113: Henningsen Cold Storage – increased in site acreage due to decision to vacate dedicated right-of-way and building demolition for future development; and Site 114: Colwood Ltd Partnership – open space rezoned to industrial.

¹¹ Site 13: Specht Propertlines Inc.; Site 22: Port of Portland – GVBP West; Site 29: Clackamas County Development Agency; Site 50: Shute North; Site 52: Shute South.

¹² Site 13: Specht Properties and Site 29: Clackamas County Development Agency.

¹³ Sites 18 and 19: Troutdale Reynolds Industrial Park Phase 2 - The Port has expended \$2.5M in planning and design to permit the infrastructure for Phase 2. \$8 million in regional transportation funding was approved for the local roads, along with a transfer of \$6 million in funding from the State-funded Troutdale interchange project and \$1.1 million from the City of Troutdale.; Site 29: Clackamas County Development Agency - \$1.1 million in State Immediate Opportunity Fund and Clackamas County funding was used to improve local road access to the site. An additional \$1.8 million in County funds paid for extension of 120th Avenue; Sites 50 and 52: Shute Road North and South - \$8 million in regional transportation funding and \$10 million transfer of I-26/Brookwood interchange savings was used to pay for the construction of nearby local road improvements. The City of Hillsboro contributed \$1 million dollars for water infrastructure and planning for sever line pump station and extension.

¹⁴ Site 23: Mt. Hood Community College and Site 47: Cranford.

¹⁵ Site 101: Vanrose Farms and Site 104: Meek Subarea.

Conclusions

- The Portland region's supply of large industrial sites over 25 net developable acres has decreased since 2011.
- There have been positive impacts in site readiness from investments in infrastructure, mitigation and local and state legislative actions. Movement between tiers is largely due to infrastructure investments, and environmental constraint mitigation (7 sites).
- Supply continues to be most limited for larger sites of 50 acres or more.
 - There is only one 100-plus acre Tier 1 site in the region. Larger sites are more complex and take patience to acquire and develop.
- Sites with multiple property owners require aggregation. This is a key issue to supplying larger sites to the market affecting a third of the Tier 2 and Tier 3 sites in the inventory (13 sites).
- There are multiple market-readiness site constraints for other sites in the pipeline.
- Over half of the Tier 2 and Tier 3 sites require local and state legislative actions such as annexation zoning, completion of concept planning, or addition to the urban growth boundary (23 sites).
- Between 40% and 60% of Tier 2 and Tier 3 sites have transportation, infrastructure, and/or environmental mitigation constraints (17-25 sites).
- While brownfield redevelopment affects only six large industrial sites, three industrial sites are located in the Portland Harbor Superfund site which will add significant costs, time, and brownfield redevelopment challenges and require coordinated strategies.
- While investments in infrastructure, changes in ownership willingness to transact, and legislative actions have improved the quality of sites in the inventory, with 11 sites moving closer to market readiness; site readiness is not occurring at a pace sufficient to keep up with demand.¹⁶

As the economy continues to recover and demand increases due to business growth and investment, additional strategies to increase the continued supply of land will be needed. In order to provide the required land supply to meet projected 2035 population and employment growth within the Metro UGB¹⁷, create middle income jobs to address income disparity, and achieve a sustainable tax base critical to public services¹⁸, state and regional policymakers must work from an accurate and practical employment land inventory and prioritize policy actions and investments to address industrial site readiness, aggregation, infrastructure, environmental constraint mitigation, legislative actions, and industrial brownfield identification and mitigation. Regular updates to the inventory support the region's traded-sector prosperity and job creation efforts allow tracking of progress in efforts to maintain a supply of sites and help target investments and policy decisions to ensure an adequate supply of development-ready industrial sites. With reduced federal funds, the region will need to be more strategic about investments required to move sites to market ready sites to support these goals.

¹⁶ The inventory shows an overall decrease in the total number acres and total number of sites, and a 26% decrease in Tier 3 sites over the two and a half year period.

¹⁷ The draft 2014 Metro Urban Growth Report forecasts 85,000 to 440,000 additional jobs and 300,000 to 485,000 additional people inside the Metro urban growth boundary by the year 2035.

¹⁸ State personal income taxes and local property taxes.



Regional Map of Tier 1, 2, and 3 Sites

Note: Additional maps are available in Appendix B of this report.

Source: Mackenzie

PROJECT SUMMARY

Project Purpose

The 2011-12 Regional Industrial Site Readiness Project assessed the Portland region's supply of developmentready large industrial sites, a critical part of a strategy to retain and attract traded-sector jobs. Portland-Metro's Traded Sector, a 2012 Value of Jobs Report issued by Portland Business Alliance, found that on average a tradedsector worker in the Portland metropolitan area earns 42% more than a local-sector worker in the Portland metropolitan region. In an income tax dependent state such as Oregon, these high wage traded-sector jobs generate more revenue for critical services like schools, health care, and social services than local-sector jobs. Traded-sector jobs have a multiplier effect throughout the economy, with an additional 2.5 local-sector jobs created for each traded-sector job. Manufacturing is the backbone of the Portland metropolitan area's tradedsector employment. Manufacturing jobs provide employment opportunities for those without a high school or college degree. The availability of market-ready industrial lands is critical for growing a prosperous traded-sector economy and middle-income jobs.

Because the Portland region must compete with other metropolitan areas for these traded-sector jobs, it must have an adequate inventory of development-ready large industrial sites for expanding and attracting companies. This report is an update to the 2011 inventory which described the supply and market-readiness of large (25 acres and larger) industrial sites in the Portland metropolitan region¹⁹. For purposes of this study, only vacant, industrially zoned or planned lands within the Portland metropolitan Urban Growth Boundary (UGB) and select Urban Reserves were analyzed. The 2014 inventory utilized the same methodology that was developed during the 2011-2012 Project.

The original project was conceived partly in response to Metro's 2009 Urban Growth Report, which identified a shortage of large industrial sites in the region and the need to replenish large industrial sites as they are developed. The original project report was produced by Mackenzie in partnership with Business Oregon, Metro, NAIOP - Commercial Real Estate Development Association Oregon Chapter, Port of Portland, and the Portland Business Alliance whose representatives served as the Project Management Team (PMT).

The 2011 inventory created in Phase 1 of this *Regional Industrial Site Readiness Project* provided a communitywide understanding of the supply of vacant large industrial lands, the time and investment needed to get land development ready, and the severity of development constraints. While the 2011 report and this update are limited in scope to industrial lands within the Metro UGB and urban reserves, several communities have replicated the work for other locations, most notably Clackamas County's county-wide work in 2013-14²⁰.

Phase 2 of the 2011-12 project analyzed the development readiness of 12 sites, identifying a development scenario, constraints to development, costs for on- and off-site developments, and economic benefits derived from such development. This analysis highlighted the significant economic benefit that would result from development, with a significant share of benefit accruing to the State through personal income taxes. The findings supported the passage of Senate Bills 246 and 253 in 2013, designed to provide State financial assistance for local site readiness and due diligence work.

¹⁹ The Regional Industrial Site Readiness Project examines vacant, industrially-zoned, or planned lands within the Portland metropolitan area's UGB and selected urban reserves that are suitable for large industrial development by new firms moving to the region, development companies who develop business and employment centers, or support the growth of existing firms. The study identified and documented user-owned sites held for future use, but excluded these from the detailed analysis because these sites were not available to the general marketplace. Rural areas of Clackamas and Washington counties outside the Metro UGB were not included in this analysis.

²⁰ http://cmap.clackamas.us/ccss/

Μ.

As with the 2011 inventory, the 2014 inventory update focuses on the quality of land and how ready it is for development versus the quantity of gross acres. The inventory is intended to be maintained and updated on a regular basis to reflect market changes, development, investments, and actions to move sites to market. It will also help to inform continued local and private sector efforts to increase site readiness, legislative actions to fund the site readiness, and due diligence programs, and Metro's 2014 Urban Growth Report and 2015 Growth Management Decision. The Urban Growth Report assesses the region's long-range industrial site inventory and, as such, has a broader perspective than this inventory, which focuses on site-readiness for short- and medium-term job creation opportunities. The common theme of both the Urban Growth Report and this inventory is that the public and private sectors need to work cooperatively to make sites available for private sector job creation.

The inventory update reflects conditions as of June 2014. Seven new sites have become available to the market and nine sites from the 2011 inventory are no longer available to the market. This report summarizes the findings of the 2014 inventory and highlights changes from the October 2011 inventory to show movement within the market and the impact of recent legislative changes.

2014 INVENTORY

Background on the Update

The 2011 inventory identified available land for traded-sector employment expansion and attraction within the Metro UGB. Since the 2011 inventory was completed, there have been many changes to the inventory, including market activity as shown on Table 9. The PMT initiated this inventory update to reflect those changes and provide data for Metro's 2014 Urban Growth Report. The PMT recommends future inventory updates on a similar cycle.

The 2014 inventory update assessed sites over 25 net developable acres to identify development-ready sites (Tier 1) and sites that need additional work and investment (Tier 2 and Tier 3). The 2014 inventory update did not analyze the size of investments needed to move Tier 2 and Tier 3 sites to development-ready status. Clackamas and Washington counties are undertaking detailed site assessments using the methodology developed in Phase 2 of the 2011-12 Regional Industrial Site Readiness Project.

The inventory update provides a database of industrial sites to support the region's economic development efforts. The database lays a foundation for the work of local jurisdictions, Greater Portland Inc., Metro, the Port of Portland, and the State, to grow the region's job base through market absorption of Tier 1 sites, make investments in site readiness, and bring Tier 2 and Tier 3 sites to Tier 1 status.

Mackenzie and the PMT evaluated sites using similar criteria and metrics as companies or developers would use, rather than limiting analysis to existing parcels or tax lots. A site in this inventory could be a single owner parcel or multiple adjacent parcels that can be combined into a single site; combined parcels could include adjacent parcels in the same ownership and/or in multiple ownerships. This update is also important because trends and changes can be examined since the previous inventory, not solely the quantity of land. It assesses legislative actions and market changes to understand the transformation of sites. It is anticipated that in future updates of the inventory additional data points will help identify trends that may further inform policymakers.

Tiering Criteria and the Process to Score the Sites

The tiering system utilized in this inventory update was based on development readiness criteria established during the 2011-2012 project. The tiers are based on industry standards and mirror the recruitment/development timeframe used by the State's Industrial Site Certification Process. The tiers are defined as follows.

- **Tier 1** Sites have over 25 net developable acres and are development-ready, or can be development-ready, within 180 days (six months). It is anticipated that no, or minimal, infrastructure or brownfield remediation is necessary and that due diligence and entitlements could be provided and/or obtained within this time period. A Tier 1 site does not have a use restriction and is currently on the market for sale or lease, or the ownership is willing to transact within 180 days. Sites in this tier would generally qualify for Business Oregon's Industrial Site Certification program.
- Tier 2 Sites have over 25 net developable acres and require additional actions that would take between seven to 30 months to be counted as development-ready. The seven to 30 month timeframe is for sites that are less competitive for expansions and recruitment, but may still be of some interest to more patient users/developers. These sites may have deficiency issues with regard to infrastructure or may require brownfield remediation, annexation, and additional local and state legislative actions that are assumed to take more than six months. Additionally, these sites may have a marine or aviation use restriction that limits, but does not eliminate, their market opportunity. These sites are-



currently on the market for sale or lease, or the property owner is willing to transact. If the property owners' willingness to transact is unknown, the site may still be considered a Tier 2 site. Should the site be in multiple ownerships, an agreement to aggregate within 30 months must be in place.

Tier 3 Sites have over 25 net developable acres and require the most cost and time to deliver a development-ready site. Tier 3 sites include those that require 30 months or more to be development-ready and represent the least competitive sites from an expansion, recruitment, or a speculative development perspective. In addition to the criterion for Tier 2, these sites may or may not be currently for sale or lease, or the owner may or may not be willing to transact. In a small number of cases, sites are in Tier 3 because required information was not available at the time this report was published.

Table 1 below shows the tiering criteria developed and used by the PMT and consultant team to tier the sites.

Table 1: Inventory Tiering Criteria

25 net levelopable Use Brownfi acres Restriction Remediat	eld Annexation tion Required	Sewer, Water, & Storm	System Mobility	Currently for Sale or Lease		Willingness to Transact
Within six (6) months No Six (6) mo (Score of	hin nths No A)	A or B	A or B	Yes	OR	Yes
Within 7-30 Months Yes or No Month (Score of	-30 s Yes or No B)	A, B, or C	A, B, or C	Yes	OR	Yes or Unknown
-30 months Yes or No (Score of	ths Yes or No	A, B, or C	A, B, or C	Yes or No	OR	Yes or No or Unknown
	(Score of	(Score of C)	(Score of C)	(Score of C)	(Score of C)	(Score of C)

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2014 INVENTORY UPDATE FINDINGS

Development Readiness

Industrial sites in the region are in varying states of readiness, requiring regulatory approvals (development permitting, environmental resource mitigation), local discretionary actions (concept planning, annexation, zoning), infrastructure (sewer, water, transportation), site/property owner aggregation, and brownfield remediation.

The study finds that the region has a limited supply of large industrial land readily available to attract and grow employers needed for the region to prosper, particularly sites of 50 net developable



Source: Mackenzie

acres or more. Net developable acres are gross acres less wetlands, floodplain, 10%+ slopes, streams, and other development constraints that limit development. Figure 1 represents the findings of the regional inventory as of June 2014.

The study found the following.

14 Tier 1 sites

Available for facility construction within 180 days

There are 14 Tier 1 "market-ready" sites available for development opportunities in the near term, mostly in the 25 to 49 acre range. Tier 1 sites total approximately 650 net developable acres.

17 Tier 2 sites

Available for facility construction between seven and 30 months

Tier 2 mid-term sites require additional investment and policy actions to be market-ready. Of the 17 Tier 2 sites totaling approximately 1,100 net developable acres, four of these sites require property owner assembly.

23 Tier 3 sites

Available for facility construction beyond 30 months

There are multiple challenges to address to bring these 23 Tier 3 sites to market. Investment and actions required to move these sites forward include site aggregation, brownfield remediation, wetland mitigation, transportation/infrastructure improvements, and annexation. Nine of the Tier 3 sites (40%) require property owner assembly. Net developable acres in Tier 3 totals approximately 1,300 acres.

50-plus and 100-plus acre size sites

There is a limited supply of 50-plus and 100-plus acre sites in the Portland region. With respect to 100-plus acre sites, the study found:

- IT One Tier 1 site: Site 21: Gresham Vista Business Park (owned by Port of Portland)
- Two Tier 2 sites: Site 104: Meek Subarea site and Site 101: Vanrose Farms/Bert & Bernie LLC (Hillsboro)
- Two Tier 3 sites: Site 7: West Hayden Island and Site 10: SW Quad (both owned by the Port of Portland)

Tier 2 and 3 Development Constraints

There are multiple development constraints impacting the 40 Tier 2 and Tier 3 sites as outlined in the table below. Parcel aggregation is an issue affecting 25% of the sites in the inventory. More than 50% of the Tier 2 and Tier 3 sites require local and state legislative action and 45% of Tier 2 and Tier 3 sites have significant site infrastructure constraints.

Tier 2 and Tier 3 Development Constraints			
Brownfield clean up:	6		
Natural Resources:	18		
Infrastructure (water, sewer, storm utilities):	17		
Transportation:	25		
Land Assembly:	13		
Local and State Legislative Actions:	23		
Willingness to Transact No: Unknown:	10 6		



Note: Most sites may have multiple constraints

Tier 1, 2, and 3 Site Results

The 2014 update is based on the best available public information available to the consultant as of June 2014. The inventory of industrial sites in the Portland region will change over time; as such, this inventory is a snapshot in time. Changes to this inventory update are based on better information, such as wetland delineations; site surveys; property owner conversations; new properties coming on the market; properties in the inventory coming off the market due to transactions; a change in tier status based on investment or other actions; and other issues, such as an increase in property owner willingness to transact or other user designation.

The inventory update identifies 54 large industrial sites in the Metro UGB and selected urban reserves (Figure 2). Of these 54 sites in the inventory, 14 sites (26%) are Tier 1; 17 sites (31%) are Tier 2; and 23 sites (43%) are Tier 3 sites. Many of the Tier 3 sites have significant barriers to market readiness and may not be able to be aggregated as a site at all. The complete inventory of sites detailing all of the data prepared for each site, their location in the region, and their tiers can be found in Appendix A with regional maps found in Appendix B.

TIER AND SITE DISTRIBUTION BY COUNTY						
Tier/Acres	Clackamas	Multnomah	Washington	Total		
Absorbed by the Market	0	1	2	3		
Tier 1	2	5	7	14		
25-49 acres	2	3	5	10		
50-99 acres	0	1	2	3		
100+ acres	0	1	0	1		

Tier/Acres	Tier/Acres Clackamas Multnoma		Washington	Total
Tier 2	1	5	11	17
25-49 acres	1	2	8	11
50-99 acres	0	3	1	4
100+ acres	+ acres 0 0		2	2
Tier 3	1	10	12	23
25-49 acres	1	8	9	18
50-99 acres	0	0	3	3
100+ acres 0		2	0	2
TOTAL	4	20	30	54

Tier 1 Sites

Of the 14 Tier 1 sites, seven are in Washington County, five are in Multnomah County and two are in Clackamas County (Figure 3). The number of larger sites is limited as approximately 70% of the Tier 1 sites are in the 25-49 acre range. There are only three 50-acre sites and one 100-acre site that are Tier 1.



In addition to development-readiness, there are a handful of economic factors that drive the suitability of industrial sites for immediate development. A closer look at the 14 Tier 1 sites (Table 2) reveals that the number of sites attractive to a broad range of potential tradedsector companies is even smaller. Of the 14 Tier 1 sites, there are seven sites that meet standard market requirements. Three sites have multiple owners and a potential user must aggregate these sites themselves. One site is currently for sale at an above market price for industrial development. It is unclear if, or when, the

current owner will align the asking price with current industrial market pricing. Three sites that have been absorbed by the market since June 2014²¹.



Over 85% of the Tier 1 sites are in Multnomah or Washington County²². Because the inventory only includes sites within the Portland metropolitan UGB or select urban reserves, industrial sites located in rural Washington

²¹ Site 13: Specht Properties in Portland; Site 46: Development Services of America (Westmark site) in Hillsboro; Site 114: Colwood Ltd Partnership in Portland.

County and Clackamas County, such as Banks, Canby, Sandy, Molalla, and Estacada are not included in this inventory²³. However, these sites are an important component of the regional economy. Table 3 details the Tier 1 sites.

²² Approximately 40% of Multhomah County is within the Metro UGB; 17% of Washington County; and 5% of Clackamas County.

²³ http://cmap.clackamas.us/ccss/

Table 3: Tier 1 Site Summary

13Specht Properties Inc.PortlandMultnomah28.1126.523SS21Port Of Portland GVBP - EastGreshamMultnomah115.98115.015S/L22Port Of Portland GVBP - WestGreshamMultnomah87.7967.843S/L29Clackamas County Development AgencyClackamasClackamas61.9340.0011S/L
21Port Of Portland GVBP - EastGreshamMultnomah115.98115.015S/L22Port Of Portland GVBP - WestGreshamMultnomah87.7967.843S/L29Clackamas County Development AgencyClackamasClackamas61.9340.0011S/L
22 Port Of Portland GVBP - West Gresham Multnomah 87.79 67.84 3 S/L 29 Clackamas County Development Agency Clackamas Clackamas 61.93 40.00 11 S/L
29 Clackamas County Development Clackamas Clackamas 61.93 40.00 11 S/L
32 Ralph & Shirley Elligsen Wilsonville Clackamas 33.42 30.20 2 S
46Development Services Of America (Westmark Site)HillsboroWashington30.0230.021S
48Dewayne Wafford (Baker/Bindewald Site)HillsboroWashington46.0644.581S
49 Majestic Realty Company Hillsboro Washington 75.11 62.75 9 S/L
50Shute North (Berger/Moore Trust/Boyles Trust)HillsboroWashington73.3155.0053\$
52Shute South (Berger Properties/Moore Trust)HillsboroWashington42.9142.9122S
57 Merix Corporation Forest Grove Washington 34.25 29.71 1 S
111Weston Investments and CCF Oregon LLCGreshamMultnomah34.9925.0022S
113 Henningsen Cold Storage Forest Grove Washington 28.57 26.44 3 V YES
114 Colwood LTD Partnership Portland Multnomah 47.55 39.42 1 S

Note: It is assumed that if a property is currently listed for sale or lease, the property owner is willing to transact.

Source: Mackenzie

Tier 2 Sites

The analysis found 17 Tier 2 sites within the Metro UGB. The bulk of these sites are in Washington or Multnomah County with only one site in Clackamas County. The number of large sites in Tier 2 is limited, with four sites that are between 50-99 acres and two 100-plus acre sites.

The few large sites in Tier 2 face significant challenges to become market-ready, including the need to build infrastructure (roads and sewer), mitigate wetlands, and assemble parcels currently under multiple ownerships. Many of these sites have multiple development constraints that limit their marketability. The inventory update did not identify specific constraints at each site, but the list of potential constraints includes environmental clean-up, infrastructure upgrades, property owner aggregation, annexation, wetland/floodplain fill. Of the 17 Tier 2

sites, four require aggregation and eight require local and state legislative actions, such as UGB expansion, annexation, zoning, and concept planning.

Generally, the constraints to readiness for Tier 2 sites are less extensive than Tier 3 sites, requiring less time and lower costs than the majority of the Tier 3 sites. Tier 2 sites present the best opportunity to focus resources to bring more sites to market. Table 4 details the Tier 2 sites.

Table 4	4:	Tier	2	Site	Summary	1
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Site ID	Owner/Site	Location	County	Gross Acres	Net Developable Acreage	Number of Tax lots	Number of Owners	Currently for Sale/Lease	Willing to Transact
1	Port of Portland (Rivergate)	Portland	Multnomah	51.44	51.21	4		L	
9	Port of Portland (NE Marine Drive & 33rd Avenue)	Portland	Multnomah	66.74	62.70	1		JL.	
18	Port of Portland (Trip - Phase 2)	Troutdale	Multnomah	42.67	30.18	3		S/L	
19	Port of Portland (Trip - Phase 2)	Troutdaie	Multnomah	80.53	80.34	2		S/L	
23	Mt Hood Community College	Troutdale	Multnomah	38.45	37.40	3			Yes
38	Biles Family LLC	Sherwood	Washington	39.60	30.89	1		S	
47	Julian & Sharon Cranford	Hillsboro	Washington	28.51	27.2 9	1		S	
54	5305 NW 253RD Avenue LLC	Hillsboro	Washington	38.49	28.59	1			N/A
55	Spokane Humane Society & Spokanimal Care	Hillsboro	Washington	45.49	36.00	1			Yes
56	East Evergreen Site	Hillsboro	Washington	70.74	61.00	9	7	S	Yes
62	Rock Creek Site	Happy Valley	Clackamas	40.83	36.82	5	2	s	Yes
63	Woodburn Industrial Capital	Forest Grove	Washington	26.17	25.01	1		S/L	
66	Kenneth Itel	Tualatin	Washington	46.25	30.25	2			Yes
101	Vanrose Farms and Bert & Bernie LLC	Hillsboro	Washington	271.64	224.83	2	2		Yes
104	Meek Subarea Site	Hillsboro	Washington	268.02	257.42	8	7		Yes
112	Hally Haworth	Forest Grove	Washington	38.19	36.15	2			Yes
115	SolarWorld	Hillsboro	Washington	46.23	46.23	1	Rente	S	

Note: It is assumed that if a property is currently listed for sale or lease, the property owner is willing to transact.

Source: Mackenzle

Tier 3 Sites

The analysis found 23 Tier 3 sites within the Metro UGB and selected urban reserves. While all but one of the Tier 3 sites are inside the UGB or select urban reserve sites, this category of sites has multiple and significant constraints to overcome to get to market-readiness. Similar to the other tiers, the number of larger Tier 3 sites is also limited, with three sites that are between 50-99 acres and two 100-plus acre sites.

Nine of the Tier 3 sites (nearly 40%) require aggregation of parcels in separate ownerships. Ownership ranges from two owners for the Woodfold site in Forest Grove (Site 64) and the Davis Family Trust & Taghon site in Cornelius (Site 110) to up to 16 owners for the Coffee Creek site #1 in Wilsonville (Site 33). Five of these nine sites have more than three ownerships. The more owners involved, the more complex and lengthy the aggregation process.

More than two-thirds (15) of the sites in Tier 3 will require some kind of local or state legislative actions such as UGB expansion, annexation, zoning and concept planning to become development-ready. Examples include sites that are outside the current UGB and West Hayden Island, which is inside the UGB but subject to a lengthy planning and annexation process that is likely to include significant mitigation requirements. If approved for development, the West Hayden Island site is at least seven years away from readiness due to permits, mitigation, and infrastructure requirements. There are also two sites on the edge of the UGB with tax lots that are partially inside the UGB and partially outside of the UGB included in this study. This split of urban and rural land creates a legislative challenge as only lots within the UGB are allowed to develop to urban use and intensity. Development to urban intensities includes a prohibition on partitioning of these lots to a size inconsistent with rural land uses and zoning. For the purpose of this study, only the portions of the tax lots inside the UGB are included as a site. Oregon Department of Land Conservation and Development is currently engaged in a process to fix this legislative issue.

Another issue affecting five Tier 3 sites is brownfield contamination. Three of these sites are located in the City of Portland adjacent to the Willamette River Superfund designation and have significant development issues, risk, and uncertainty.

Three of the Tier 3 sites (15%) are currently operating as active quarries with gross site acreage varying from 26 to 85 to 300 acres. These sites have been mined for decades and as a result are significantly sloped due to excavation.

Providing a market perspective on the quality of sites is a major objective of this analysis. Market-readiness requires first and foremost, a willingness to enter into a transaction by the property owner. However, simply a lack of willingness to transact, or a lack of information of a willingness to transact, was not a reason to exclude a site in the inventory. Of the 23 Tier 3 sites, 16 (nearly 70%) either lack a willingness to transact or the information was unable to be determined as part of this study. Slightly over 20% of the Tier 3 sites (four sites) are currently, or could be, available to the general market, as the property owner is willing to enter into a transaction. Only 13% (three sites) are currently listed for sale on the market. Table 5 provides a complete list of the Tier 3 sites.

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Table 5: Tier 3 Site Summary

Site ID	Owner/Site	Location	County	Gross Acres	Net Developable Acreage	Number of Tax lots	Number of Owners	Currently for Sale/Lease	Willing to Transact
2	Time Oil Company	Portland	Multnomah	51.10	39.40	7			Yes
4	ESCO Corp	Portland	Multnomah	37.62	29.92	6	3		N/A
5	Atofina Chemicals INC	Portland	Multnomah	59.76	47.25	6		The second second	N/A
7	Port of Portland (West Hayden Island)	Portland	Multnomah	472.00	300.00	3			Yes
10	Port of Portland (SW Quad)	Portland	Multnomah	209.69	206.47	5		01	Yes
16	Michael Cereghino	Gresham	Multnomah	41.63	25.00	5		s	
17	Port of Portland (Trip - Phase 3)	Fairview	Multnomah	34.14	30.00	1		S/L	
24	Jean Johnson	Gresham	Multnomah	37.17	33.82	1			N/A
25	Lester Jonak Jr.	Gresham	Multnomah	34.19	27.07	1			N/A
26	Michael & Ardele Obrist	Gresham	Multnomah	33.51	33.51	2			N/A
33	Coffee Creek Industrial Area - Site 1	Wilsonville	Washington	89.59	84.70	21	16	mt m	No
34	Kennedy/Fitzpatrick/ Vanleeuwen	Wilsonville	Washington	52.88	25.50	3			N/A
35	Tonquin Industrial Area	Tualatin	Washington	49.52	34.32	8	7	·	Yes
36	Tigard Sand & Gravel Site	Tualatin	Washington	301.08	25.00				No
37	Orr Family Farm LLC	Sherwood	Washington	96.26	77.00	1			No
59	Coffee Creek Industrial Area - Site 2	Wilsonville	Washington	45.07	44.49	12	7		No
60	Coffee Creek Industrial Area - Site 3	Wilsonville	Washington	28.82	26.22	10	6		No
61	Coffee Creek Industrial Area - Site 4	Wilsonville	Washington	46.57	42.37	12	8		No
64	Woodfold-Marco MFG Inc. (East Oak Street)	Forest Grove	Washington	27.67	25.06	2	2		No

Site ID	Owner/Site	Location	County	Gross Acres	Net Developable Acreage	Number of Tax lots	Number of Owners	Currently for Sale/Lease	Willing to Transact
65	Woodforld-Marco MFG Inc. (West Oak Street)	Forest Grove	Washington	53. 66	52. 9 7	5			No
109	Morse Bros. Inc.	Tualatin	Washington	83.68	25.00	7			No
110	Davis Family Trust & Remi Taghon	Cornelius	Washington	49.01	40.21	10	2		Yes/ No
111	Northwest Sand & Gravel Inc.	Unincorporated	Clackamas	26.2	25.10	6	1	S	

Source: Mackenzie

Note: "YES/NO" is for a property with two owners - one willing to transact and one not willing to transact. Additionally, it is assumed that if a property is currently listed for sale or lease, the property owner is willing to transact.

Additional Sites

There are several dozen industrially designated sites that are not included in this inventory update. These sites fall into three categories.

- 1. The parcel/site is greater than 25 gross acres, but when constraints (environmental or restrictive zoning/overlay) are taken into consideration, the net developable acreage falls below 25 acres. (See Table 6)
- 2. The parcel/site is owned by a company that is **part of an existing campus/development** and the company has future expansion plans. This vacant land is not currently available to the market for another prospective user. The site is partially vacant but reserved for expansion. (See Table 7)
- 3. The parcel/site is owned by a company that has **future development plans**; therefore the site is not currently on the market for a prospective user. The site is fully vacant and land banked for new development. (See Table 7)

Although these sites do not appear in the 2014 inventory in this report, they are still an important portion of the region's industrial land supply. Appendix C provides regional maps of these sites.

Sites with Less Than 25 Net Developable Acres

There are 16 parcels and/or sites in this study that have 25 gross acres, but do not have 25 net developable acres. However, these sites are still part of the region's inventory of industrial land as they may be developable for smaller users. These sites are identified in Table 6 below, but are not included in the 2014 inventory because they did not meet the criteria of this study.

Table 6: Parcels or Sites with Less Than 25 Net Developable Acres

Owner	Location	Gross Acreage	Approximate Net Developable Acres	Notes
McCormick & Bassili Investments LLC	Happy Valley (HWY 212 & 162nd)	33.98	7.5	Environmental constraints result in <25 net developable acres – according to Clackamas County
Weaver Russell	Happy Valley (HWY 212 & 162nd)	34.19	3.5	Environmental constraints result in <25 net developable acres – according to Clackamas County
Fazio	Portland (East of NE MLK & Gertz)	34.96	22	Existing drainage ditch bisects site into a 21.5 acre site; net developable acres in largest development parcel is less than 25 acres
Graphic Packaging	North Portland (Marine Drive & Portland)	26.2 6	2.75	Environmental constraints result in <25 net developable acres
Catellus	Portland (N of Airport and 185th)	31.99	3.5	Environmental constraints result in <25 acres remaining (wetlands and floodplain)
Langer Family	Sherwood (TS Road & Adams)	56.48	< 25	Public utility district overlay on site results in <25 net developable
Orwa Sherwood LLC	Sherwood (T/S Road & Adams)	50.25	6	Bisecting road results in <25 net developable acres
Fred Fields property	Tigard (Hall and Hunziker)	35.6	<25	Environmental constraints result in <25 net developable acres (market/site knowledge)
David Young	Wilsonville (S of Boeckman W of I5)	33.9	0	Significant Resource Overlay Zone environmental constraints – according to City of Wilsonville
Gary Walgraeve	Tualatin (Herman Road & 118th)	54.95	14.5	Environmental constraints result in <25 net developable acres – according to City of Tualatin
Edward Wager	Tualatin (T/S Road & 124th)	32.14	13	Environmental constraints result in <25 net developable acres – according to City of Tualatin
Joe Bernert Tow Inc.	Wilsonville (Wilsonville Road & Boones Ferry)	31.18	13,5	Significant Resource Overlay Zone – according to Wilsonville
Rock Creek aggregate site	Happy Valley (Rock Creek Blvd & SE 172nd Avenue)	25.03	21.04	Slope constraints
Powin Pacific Properties LLC	Tualatin (T/S Road & 115th)	29.47	13.45	Wetlands and stream on site
Port of Portland	Portland (NE 33rd; South of Marine Drive)	28	23	Drainage ditches result in <25 net developable acres
Port of Portland	Portland (South of SW Quad)	67.5	0	Reserved for open space/wetlands mitigation. Land is not greater than 25 net developable acres – according to Port of Portland

Owner	Location	Gross Acreage	Approximate Net Developable Acres	Notes
Port of Portland	Fairview (South of site 17)	100	O	Reserved for open space/wetlands mitigation. Land is not greater than 25 net developable acres according to Port of Portland
Port of Portland	Troutdale (East of Troutdale Reynolds Industrial Park site 20)	64	0	Reserved for open space/conservation. Land is not greater than 25 net development acres – according to Port of Portland
Xerox (2 parcels)	Wilsonville (East of Interstate5)	95.81	34,1	Remaining 34.1 acres are reserved for future on site environmental mitigation for the Xerox campus and not developable

Source: Mackenzie

User Owned and User Designated Sites

This analysis also excluded land-banked parcels that are owned and held for future expansion by existing regional firms. These parcels are an important part of the regional industrial land inventory, but since they are being held by their current owners for future development, they are not considered to be available to the general market, which is the focus of this study. There are 25 user-owned sites with at a minimum 25 net developable acres that are being held for future development in this study (Table 7). Twelve (12) of these sites are vacant (for future use) with 25 or more net developable acres; and 13 are partially vacant (buildings on site/part of existing campus), but still have a minimum of 25 acres vacant for future expansion.

Table 7: User Owned and User Designated Sites

Owner	Location	Gross Acreage	Vacant Acreage	Vacant: for future use	Partially Vacant: in use	Notes
N Pacific Union Conference Association SDA	Gresham (Foster & Tillstrom)	66.9	66.9	x		Reserved for future use/development
Providence Health	Happy Valley (HWY 212 & 162nd)	49.7	49.7	х		Reserved for future use/development
intel (Future parking lot)	Hillsboro (Cornell & Cornelius Pass)	47.36	47.36	x		Reserved for future use/development (parking lot)

Owner	Location	Gross Acreage	Vacant Acreage	Vacant: for future use	Partially Vacant: in use	Notes
Legacy Health Services	Hillsborø (Cornell & Cornelius Pass)	28.95	27.3	x		Reserved for future use/development (easement on site)
Intel	Hillsboro (West Union & Cornelius Pass)	72.54	68.4	x		Reserved for future use/development
Port of Portland (PIC WEST)	Portland (NE Alderwood Drive)	69.45	58.96	x		Future relocation site for PDX rental cars
Port of Portland	Troutdale (East of site 17)	34	32.7	х		Vacant; reserved for utility use (substation) – according to Port of Portland
Port of Portland	Hillsboro (NW Evergreen Road)	71.81	67.6 9	x		Brought into UGB in 2014 with House Bill 4078; reserved for future Hillsboro Airport use (airport restrictions)
Port of Portland	Hillsboro (NW Evergreen Road and 264th)	39.22	34.15	x		Inside Hillsboro Airport fence, and included in FAA Airport Layout Plan; reserved for aviation related development only
Mentor Graphics	Wilsonville (S of Boeckman E of I5)	43.4	43.4	x		Reserved for future use/development - split from main campus by public street; Significant Resource Overlay Zone on site and wetlands
Phight LLC	Tualatin (T/S Road & 118th)	28.8	28.8	x		Reserved for future use/development
BT Property LLC (UPS)	Gresham (NE 185th and NE Portal Way)	51.45	51.45	х		Reserved for future use/development
Clackamas CDA	Clackamas County (1205/82nd)	32.2	32.1		x	Excess land - in use and not available – according to Clackamas County
Great American TVR	Clackamas County (1205/82nd)	49.35	47.5		x	Communication towers and infrastructure on site
State of Oregon (3 parcels)	Clackamas County (1205/Hwy 212)	232	97		x	In use and not available – according to Clackamas County
Nacco Materials Company	Fairview (Marine & Blue Lake Road)	78.7	58.7		x	Excess land; some environmental constraints on site
Microchip Technology (Formally Linde)	Gresham (Glisan & 223rd)	137	75		x	Not available – according to City of Gresham
Mutual Materials	Gresham (Hogan Road)	86.08	56.8		x	Excess land: currently in use

Owner	Location	Gross Acreage	Vacant Acreage	Vacant: for future use	Partially Vacant: in use	Notes
Novellus Systems Inc.	Tualatin (SW Tualatin Road & SW 108th)	58.4	27.46		x	Excess land: currently in use
PGE Portland	Gresham (Powell & E of 182nd)	72.13	62.8		х	Reserved for future use and not available
Genentech (entire campus)	Hillsboro (Evergreen & Brookwood)	75.3	60		x	Reserved for future use and not available
Tokyo Ohka Kogyo	Hillsboro (Evergreen & Brookwood)	38.89	28.5		x	Reserved for future use and not available
Intel (Ronler Acres)	Hillsboro (Shute Road)	111.7	61		x	Reserved for future use and not available
PGE Portland	North Portland (St Helens)	63.1	43.9		x	Excess land currently in use
Cookin (Siltronic)	Portland (St Helens Road)	79.27	38.6		x	Reserved for future use and not available

Source: Mackenzie

Changes from 2011 Inventory to 2014 Inventory

Movement in and Out of the Inventory

The 2011 inventory included 56 sites, compared to the 2014 inventory of 54 sites. The breakdown among tiers is shown in Figure 5 and 6 below. Nine sites were removed from the inventory, including three sites that are being developed or used for construction staging. Seven sites were added to the inventory. The number of Tier 1 sites has increased by six sites; Tier 2 sites increased by one site; and Tier 3 sites decreased by eight sites. Of the Tier 1 sites, only seven of the sites meet standard development criteria.



Movement between Tiers

From 2011 to 2014, there has been significant movement between the tiers. The 2014 update found 11 sites that moved up a tier; five Tier 2 sites became Tier 1 sites and six Tier 3 sites became Tier 2 sites in the 2014 update. The table below shows movement between the tiers in the past two and a half years. The majority of movement between tiers is a result of environmental mitigation and infrastructure investments.

Table 6. Movement in the inventory										
	2014 Inventory	Remain from 2011	Upgraded from 2011	Added Sites in 2014						
Tier 1	14	6	5 (previously Tier 2 site)	3						
Tier 2	17	8	6 (previously Tier 3 site)	3 ²⁴						
Tier 3	23	21	(ST)	2						
TOTAL	54	35	11	7						

Table 8: Movement in the Inventory

Of the 11 sites that moved up a tier:

- Five sites are located in Hillsboro, five sites are located in the East Multhomah County submarket, and one site is located in Portland.
- Six sites are in private ownership and five sites are in public ownership three (3) sites owned by the Port of Portland, one site owned by Mount Hood Community College, and one site owned by Clackamas County Development Agency.

Seven of the 11 sites that moved up a tier required investment in infrastructure and mitigation.

- Two sites moved up a tier due to environmental constraint mitigation.²⁵
- Five sites received transportation/infrastructure investments.²⁶

²⁴ One of the three new Tier 2 sites is site number 1 (Port of Portland - Rivergate). In 2011, this was a Tier 1 site; however, due to the listing of the streaked horned lark species, the site requires mitigation and is no longer developable within a 6 month timeframe. Environmental mitigation required is a 7-30 month process which drops the site from Tier 1 to Tier 2.

²⁵ Site 13: Specht Properties and Site 29: Clackamas County Development Agency.

²⁶ Sites 18 and 19: Troutdale Reynolds Industrial Park Phase 2, Site 22: Gresham Vista Business Park West, and Sites 50 and 52: Shute Road North and South.

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Additionally, of the 11 sites that upgraded a tier, four were able to do so without significant investment in infrastructure.

- Two of the sites experienced a legislative change, and were taken out of urban reserves and brought into the UGB.²⁷
- Two of the sites had a change in the property owner willingness to transact, and therefore were upgraded to Tier 2.²⁸

Sites Deleted from the inventory

Using the methodology developed during the 2011 inventory project, the team removed nine sites, resulting in a total of 54 sites in the June 2014 inventory. The tables below show which 2011 inventory sites are no longer on the inventory with an explanation of why. Between the 2011 and 2014 Regional Industrial Land Inventory Report, nine sites and approximately 400 estimated net developable acres were removed from the inventory. In contrast, the seven sites added to the 2014 inventory accounted for approximately 240 acres.

Site ID	Owner/Site	Location	County	Gross Acres	Net Developable Acres	Sale/Lease/ Transact (2011)	Development and/or Action	
Tier 1	Sites	n Bernet & Carolin	AND PRATE					
11	Port of Portland (PIC East)	Portland	Multnomah	43.50	41.18	L	Currently under construction; results in less than 25 developable acres	
44	Intel Corporation	Hillsboro	Washington	31.39	31.39	S	Currently used as a paved/gravel parking lot and staging area for Intel	
Tier 2 Sites								
40	Pacific Realty Associates	Tualatin	Washington	26.80	26.80	S/L	Currently under construction; results in less than 25 developable acres	
67*	Port of Portland (PIC West)	Portland	Multnomah	69.45	58. 9 6	Ĺ	Held by Port of Portland for future relocation of rental cars at PDX ²⁹	

Table 9: 2011 Inventory Sites Removed from 2014 Inventory

²⁷ Site 101: Vanrose Farms and Site 104: Meek Subarea

²⁸ Site 23: Mt. Hood Community College and Site 47: Cranford

²⁹ With passenger volumes increasing to 15 million in 2013, the timeframe for the relocation of the rental cars at Portland International Airport has shortened, necessitating the removal of this site from the inventory.

Site ID	Owner/Site	Location	County	Gross Acres	Net Developable Acres	Sale/Lease/ Transact (2011)	Development and/or Action	
68*	Port of Portland (Hillsboro Airport)	Hillsboro	Washington	39.22	34.15	L	Port of Portland Hillsboro Airport planning has changed, requiring this site for future airport use only	
Tier 3 Sites								
6	McCormick & Baxter Creosoting	Portland	Multnomah	42.39	33.39	No	Designated for University of Portland expansion and development (City of Portland approved conditional use master plan)	
15*	BT Property LLC (UPS)	Gresham	Multnomah	51.45	49.45	No	Owner has decided to develop site for future use	
28	James & Mollie Siri	Happy Valley	Clackamas	26.40	25.2 6	No	Dedication along SE 172nd results in less than 25 developable acres	
100	Holzmeyer Richard Henry	Forest Grove	Washington	111.37	100.12	N/A	Designated from urban reserves to rural reserves during Grand Bargain; no longer eligible to be included in inventory	

* This site was removed from the 2011 inventory as it is no longer available to the general market; however, it now appears on Table 7; User Owned and User Designated Sites

Sites Added to the Inventory

Using the methodology developed during the 2011 inventory project, the team found seven new sites to add to the inventory and removed nine sites, resulting in a total of 54 sites in the June 2014 inventory. The table below shows which 2011 inventory sites are no longer on the inventory with an explanation of why. Approximately 240 estimated net developable acres were added in the same time period with seven newly identified sites. The net decrease of large industrial site acreage in the metro-region is an estimated 160 net developable acres.

Site ID	Owner/Site	Location	Location County		Net Developable Acres	Sale/Lease/ Transact (2014)			
Tier 1 Sites									
111	Weston Investments and CCF Oregon LLC	Gresham	Multnomah	34.9 9	26.00	s			
113	Henningsen Cold Storage	Forest Grove	Washington	28.57	26.44	Yes			
114	Colwood Ltd Partnership	Portland	Multnomah	47.55	39.4 2	S			
Tier 2 Sites									
112	Hally Waworth	Forest Grove	Washington	38.19	36.15	Yes			
115	SolarWorld	Hillsboro	Washington	46.23	46.23	S			
Tier 3 Sites									
110	Davis Family Trust & Remi Taghon	Cornelius	Washington	49.01	40.21	Yes/No			
116	Northwest Sand & Gravel INC	Unincorporated	Clackamas	26.2	21.10	S			

Table 10: Sites Added to the 2014 Inventory

2014 Inventory Update Conclusions

The 2014 industrial land inventory analysis finds that Portland metropolitan area's supply of large industrial sites has decreased over the past two and a half years. Supply continues to be most limited for sites of 50 acres or more, consistent with the 2011 inventory. The sites that are available are concentrated in the Columbia Corridor in Multhomah County, Hillsboro, and Wilsonville/Tualatin in Washington County. The location distribution reflects previous local and regional land use planning decisions to maintain a compact regional form.

Larger sites are more complex and take patience to acquire and develop. Parcel aggregation is a key issue to supplying larger sites to the market, affecting 25% of the sites in the inventory.

While this analysis has identified the available sites, and at a high level outlined the challenges that exist to bringing Tier 2 or 3 sites to development-ready status, the timeframes in the analysis assume that the jurisdictions, property owners, land-use regulatory bodies, and potential interveners are all working in support of the site's development and that appropriate public investments will be made to move these sites to market.

It is important to note that this inventory is a snapshot in time. As Tier 1 sites are absorbed by the marketplace, the expectation is that Tier 2 sites will continue to move to Tier 1 status and Tier 3 sites will continue to move to Tier 2. The inventory should be updated over time to ensure that the database of market-ready industrial sites is current, helps identify and prioritize required site readiness investments, and supports the region's recruitment and expansion efforts.

The experience of state and regional economic development experts indicates that accomplishing our region's traded-sector industrial retention, expansion, and recruitment strategy depends in part on the availability of an adequate supply of well-located, market-priced, and developable large industrial sites. The inventory can be used as a reference for monitoring and tracking changes of absorption of industrial land in the region, and can also be used by the public sector as the basis for making informed land use and investment decisions around the supply, regulation, and market readiness of industrial lands.

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NEXT STEPS

The 2011-12 Regional Industrial Site Readiness project found that many large industrial sites in the region are not development-ready, impacting the region's ability to meet forecasted job growth requirements³⁰, and potentially causing the region to miss business growth, recruitment opportunities, and the jobs and payroll they represent. The 2014 inventory update reinforces the importance of continued state and regional focus on the market-readiness of large industrial sites within the region. The well-paying jobs provided by traded-sector industries will help Oregon achieve economic prosperity, reduce income disparity, and secure funding for public services and amenities.

Regional policymakers have acknowledged the importance of a development-ready supply of large industrial sites in local and regional land use planning documents, such as Metro's 2014 Urban Growth Report and separate local comprehensive plan updates, and should retain a policy focus on identifying and prioritizing funding to move industrial sites within the region to market. In addition to this work, the PMT has identified five next steps that could be helpful in the region and statewide.

Improvements to Regulatory Processes that Reduce Uncertainty for Firms Seeking Sites

Existing permitting processes sometimes add uncertainty and extend development timelines to the extent that targeted industry employers may choose sites in other regions, states, or countries. Options could include alignment of federal, state, regional, and local permitting processes; allowing wetland permitting and mitigation occur prior to identifying a site user; prioritizing technical assistance and funding; and dedication of staff with industrial development expertise within state permitting agencies. In addition, a regional focus on environmental mitigation strategies to support industrial development is appropriate (wetland banks, technical assistance). Although brownfield remediation is an issue, which affects a smaller number of larger industrial sites, industrial to industrial brownfield remediation is a significant challenge facing the region with remediation costs two to four times the sale price of industrial land³¹. Portland Harbor superfund sites have even greater costs challenges and require special focus. The state and region should consider incentives and regulatory relief to move these sites to productive industrial uses.

Expansion of and Support for Existing Business Development Programs

Existing state programs like Industrial Site Certification, Regionally Significant Industrial Areas, Immediate Opportunity Fund, Special Public Works Fund, and the brownfield programs deserve ongoing support and increased funding. Business Oregon and the Metro Regional Solutions Team should continue to collaborate on strategic efforts and prioritize site-specific work, leveraging Business Oregon programs to address the array of infrastructure and development constraints in the region.

Creation and Funding of New Capital and Financial Tools

New or refined tools are needed to address the upfront costs of capital investments for transportation, sewer, water, brownfield cleanup, wetlands mitigation, and site aggregation. Because of the personal income tax benefits that accrue to the state when large firms locate here, the state could play a role in providing upfront capital for industrial land site preparation.

³⁰ The draft 2014 Metro Urban Growth Report forecasts 85,000 to 440,000 additional jobs and 300,000 to 485,000 additional people inside the Metro urban growth boundary by the year 2035.

³¹ Metro Brownfield Scoping Project and Portland Brownfield Assessment – Maul, Foster & Alongi, Inc. 2012.

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In 2013, the Oregon Legislature approved enabling legislation for two sources of state funding for industrial site readiness (Senate Bill 246 and Senate Bill 253), but did not provide funding for these programs. To support the region's job growth requirements identified in the draft 2014 Urban Growth Report, state funding for these two new Industrial Site Readiness Programs should be pursued, including due diligence assessments and forgivable loans to address the broad range of industrial site readiness constraints.

To address the limited supply of larger industrial sites and assembly challenges affecting 25% of sites in the inventory, the region should develop new tools to support the acquisition and aggregation of industrial lands needed for "game changer" traded-sector investments (e.g., Coffee Creek in Wilsonville, North Hillsboro industrial lands). The region should also retain a policy focus on identifying sources of infrastructure funding to meet the region's \$21-47 billion³² in infrastructure funding needs.

Completion of Due Diligence Work on Sites

Continued work on industrial site due diligence (such as identifying needed infrastructure improvements, scoping environmental cleanup, understanding the scale of wetlands, and producing preliminary cost estimates for brownfield and wetland mitigation) will help to remove uncertainty surrounding sites. A relatively small investment in due diligence work could catalyze accelerated site preparation and prioritize scarce funding.

Regular Update of the Inventory and Completion of Follow Up Studies

Since the June 2014 inventory was completed, three Tier 1 sites have been absorbed into the market³³. Regular updates to this inventory and due diligence on sites could significantly benefit the region's economic development efforts. Statewide application of this methodology could benefit other regions.

³² Regional Infrastructure Analysis, Metro July 2008

³³ Site 13: Specht Properties Inc. in Portland; Site 46: Development Services of America (Westmark site) in Hillsboro; Site 114: Colwood Ltd Partnership in Portland.





LAND AVAILABILITY | LIMITED OPTIONS

An analysis of industrial land ready for future employers

About this report

This report examines the current and near-term supply of large industrial sites available to accommodate the expansion of existing employers and recruitment of potential new employers to the Portlandmetro region.¹ The project was conceived partly in response to Metro's 2009 Urban Growth Report analysis that identified a shortage of large-iot industrial sites in the region and in recognition of the need for a mechanism to replenish large-iot industrial sites as they are developed.

The report was produced by Group Mackenzie in partnership with the Portland Business Aliance, Port of Portland, Business Oregon (an Oregon state agency), NAIOP Oregon Chapter (a commercial real estate development association) and Metro

1 The Regional Industrial Lands inventory examined vacant, industrially-zoned or planned lands within the Metro urban growth boundary and selected urban reserves that are suitable for large lot industrial development by new firms moving to the region or to accomine date the growth of existing firms that do not hold and for future expansion. The study identified and documented user-owned sites held for future use but excluded these from the detailed analysis.

Why land availability matters

The Value of Jobs Coalition believes that quality of life begins with a good job and that a thriving economy creates the foundation for quality schools, healthy parks and happy families. According to a study sponsored by the coalition, in the late 1990s, the Portland-metro region's wages and incomes fell below the national average and have stayed there. Other peet regions have passed us by in terms of income level and employment. The coalition is sponsoring a series of studies to take a closer look at our economy to see what our region's economic needs and issues are.

There are a number of factors that help a metro region's economy thrive – an educated workforce, sound infrastructure, a coordinated transportation system and available land to grow and attract employers, to name a few. This analysis examines one ingredient of regional economic health: the readiness of large-lot industrial lands.

A consistent inventory of sites is a key requirement for meeting market demand, either by expanding local employers or attracting new employers to our region. This analysis shows, however, that we have a supply of industrial land that is not readily available to attract and cultivate the types of catalytic employers that will help our region's ability to grow and thrive.

Our region has a land use history to be proud of, and we take a measured approach to development. Most of the large-lot sites that will become available for industrial development within the foreseeable future are inside the existing Metro urban growth boundary (UGB) or urban reserves. Advancing the readiness of those sites improves our economic competitiveness, maximizes the efficient use of existing infrastructure and reduces outward pressure on the UGB.

We hope the information in this report will start a conversation among public- and private-sector leaders to help move public policy in a direction that enhances our quality of life by creating well paying jobs and laying the foundation for innovative tools that grow employers in, and attract employers to, our region.

A focus on industrial lands

While this analysis could have looked at a variety of employment land types, it focuses specifically on large industrial sites. Metro has identified a shortage of these sites in the regional industrial lands inventory. Many of the region's largest and often highest-paying industrial firms are located on parcels 25 acres or more in size.

Such firms include high-tech manufacturing (Intel Corporation and Genentech), heavy manufacturing (Vigor Industrial, Gunderson, Freightliner), research and development labs (Oregon Health & Sciences University) and firms that support other business such as warehouses and shipping terminals. These employers create products or services that are sold outside of Portland-metro and bring new dollars into the region. These businesses are commonly referred to as "traded-sector" employers. With these employers come good, family-wage jobs and tax revenues that support critical public services such as schools, health care and law enforcement.

The state of Oregon, the Portland-Vancouver region, the city of Portland and most of the region's counties and cities all identify a similar universe of traded-sector business as the centerpiece of their economic development. strategies.2 A successful strategy includes retention and growth of existing businesses as

See for example: Business Oregon's Strategic Plan May 2009; Comprehensive Economic Development Strategy for the Portland-Vancouver Metropolitan Region 2010-2011 Update; City of Portland Economic Development Strategy, A Five Yeat Plan for Promoting Job Creation and Economic Gro.vth, 2009.

We're competing globally to retain, expand and recruit tradedsector companies and the quality jobs and wages they bring. The window of opportunity to win major investment is often short and very competitive. Building an inventory of shovel-ready sites is a key ingredient to positioning the Greater Portland region for long-term job creation.

Sean Robbins, Chief Executive Officer, Greater Portland Inc.

well as the recruitment of new traded-sector businesses. Although not all traded-sector firms require large parcels, nationally or globally scaled firms that can have a significant impact on regional economic growth - such as Intel, Genentech and Freightliner - do require large parcels.

The experience of state and regional economic development experts indicates that accomplishing our region's industrial retention, expansion and recruitment strategy depends on the immediate availability of an adequate supply of well-located, market-priced and readily developable large-lot industrial lands.

BY THE NUMBERS:

5.

Number of broadly attractive 25-acre or larger sites available for industrial development within 180 days.

1.

Number of 50-acre or larger sites available for immediate development within 180 days.

1.

Number of 100-acre sites available for immediate development within 180 days.

0.

Number of 100-acre sites available for development between seven and 30 months.

35%.

Percentage of the region's total payroll that came from the traded sector in 2007.

\$14,600.

Average additional wage earned by workers in traded-sector jobs vs. non-traded-sector jobs.

65,500.

Number of jobs at firms located on parcels of 25 acres of more.

50%.

Percentage of all industrial land development in the past 20 years that took place during two, three-year peaks of development (1996-1998) and (2006-2008).

Why the focus on traded-sector clusters?

Traded-sector employers export goods and services from the region and import revenue into the region, in the Portland region, many of these traded-sector firms ate manufacturers. Economic development strategies focus on these tradedsector employers because they pay nigher wages and can increase the wealth of the community.

A 2010 analysis by ECONOrthwest for the Value of Jobs Coalition, 2010 Check-Up on the Portland-Region's Economic Health, found that the average Portland-metro traded sector wage was \$53,000 in 2007. \$14,600 greater than the average non-traded-sector wage. The analysis also found that traded-sector jobs accounted for 28 percent of the region's total jobs and 35 percent of total payrolic According to a Business Oregon analysis in 2008, the average wage for the High Technology cluster was \$82,000.3

The wealth generated by these traded-sector jobs circulates in the community, ultimately supporting supplier or service companies and neighborhood businesses. Larger traded-sector firms also seed entrepreneurs who spin out to orbate start-up firms that grow into larger firms. This process is what produces the economic clusters that are vital to the economic success of the region. Traded-sector firms also support public services directly and indirectly with higher wage jobs and taxable incomes, resulting in funding for schools, social services, parks and other critical public services.

3 www.oregon4biz.com/dev/www/BOR/ The-Oregon-Advantage/Industry/ This land inventory analysis provides a snapshot of the industrial land supply inside the Metro UGB and selected urban reserves established in mid-2011. The inventory can be used as a reference for monitoring and tracking changes and absorption of industrial land in the region and can also be used by Portland-metro municipalities as the basis for making informed land use and investment decisions around the supply, regulation and market readiness of industrial lands.

The market-based approach

This analysis started with a simple question: What is the inventory of market ready sites this region needs to be competitive in a global marketplace and successful in attracting large traded-sector firms to locate or expand here?

Business Oregon has extensive experience recruiting national and international tradedsector businesses into the state and the Portlandmetro region. Their experience is that the majority of employers considering whether to locate in the region require sites where they can break ground within 180 days of site selection.

It is also important for the region to offer a number of potential sites for employers to choose from in order to receive serious consideration by site selectors. The fewer the number of sites available for immediate development, the lower the odds are that the region will be able to meet the new employer's requirements.





.

What about Clark County?

Could the Portland-metio industrial land readiness issue be addressed by looking conth to Clark County? Not according to a report recently issued by the Columbia River Economic Development Council, which found only 13 sites are available and it would take up to 12 to 18 months to get permits in place for construction. The report noted that the shortage of readily available land has already red some businesses to look elsewhere to grow, and could has over the community's economic recovery, according to local leaders!

What do large-lot industrial developments add to the regional economy?

A 2010 Metro report found that 60 employers located on parcers of 25 acres or more accounted for more than 8 percent of the region's total employment in 2006 or 65,500 jobs./ A Business Oregon analysis of recent redruiting efforts found the economic impact per acre of large-fot developments varies depending on the type of company and ranges from \$200,000 per acre for warehouse and distribution centers to \$1.4 million per acre for clean tech manufacturing.

4 "Few places to build jobs," The Columbian, Tuesday, January 10, 2012.

5 Metro 2009-2030 Urb<mark>an Growth Report, Appendix 4,</mark> January 14, 2010 Based on experience, Business Oregon has identified the characteristic minimum parcel size and other site requirements for most cluster recruitment targets. Most of these cluster industry recruitments require net developable sites of at least 25 acres with a number of clusters, such as globally scaled high tech, requiring much larger sites.

This analysis focuses on the net developable acreage, as some sites have a high number of gross acreage but limited area that would be suitable for an employer to build a facility.

To identify the inventory of market-ready sites in the region, the project applied a series of filters from the perspective of potential employers. Starting with Metro's 2009 Buildable Lands Inventory, supplemented with information from local jurisdictions throughout the region, the analysis identified parcels with the following characteristics:

- Inside the UGB or in selected urban reserves
- Zoned, planned, or, in the case of urban reserves, suitable for industrial uses
- Containing at least 25 net buildable, vacant acres after accounting for constraints such as wetlands, flood plains and slope
- Not set aside by existing firms for future expansion opportunities

Using Business Oregon and industry expertise, the parcels identified through this initial process were further analyzed as to their market readiness using sufficiency of infrastructure and transportation facilities, brownfield or environmental issues, need for land assembly, need for annexation and availability for lease or sale.

This more refined analysis resulted in an inventory of existing or potential industrial sites that were assigned a tier based on market readiness or estimated length of time before they can be developed. Tire 1 sites could be shovel ready within 180 days (six months). With sufficient resources and expeditious jurisdiction approvals, Tier 2 sites could be development ready in seven to 30 months. Sites that will require more than 30 months to be ready for development were designated Tier 3.⁶

6 The Value of Jobs Coalition is working with the Regional industrial Lands Study partners on a second phase of this analysis that will examine the costs and benefits of moving Tier 2 and Tier 3 sites into the Tier 1 level of readiness.

What the numbers show

Tier 1 Sites

The analysis found that there are only nine sites in the UGB that are both 25 net acres or larger and can be developed within 180 days. Washington County has five of these sites, followed by three in Multnomah County and one in Clackamas County.⁷ The number of very large sites is even more limited. There is only one 50-acre and one 100-acre site in Tier 1.

Figure 1: Distribution of sites by acreage



Beyond shovel-ready availability, there are

a handful of economic factors that drive the

suitability of industrial sites for immediate

development. A closer look at the nine Tier 1

sites reveals that the number of sites attractive to

a broad range of potential traded-sector cluster

companies is even smaller. Of the nine sites, two

are for lease only, which is typically less desirable

capital investments, want to own rather than lease.

to potential users who, anticipating significant

7 . This analysis only included the area within the Metro UGB, or adjacent urban reserves. It did not examine industrial sites outside the Metro boundary.

It is also more difficult to secure financing for a land lease versus a fee-simple ownership project.

Another Tier 1 site is of an irregular shape and would require an unusual development footprint, possibly increasing costs and precluding marketaccepted building design.

One last factor is, of course, price. One site is currently for sale at a price that is much higher than industrial development could support and it is unclear when, if ever, the current owner will align the asking price with current industrial market pricing.

The net result is only five Tier 1 sites that can meet the business retention, expansion or recruitment criteria for a broad range of potential users.

Figure 2: Tier 1 sites that meet development critera

TIER 1 SITES	9
Lease only	-2
Irregular shape	-1
Above market price	-1
TOTAL SITES	5

It is important to recognize that, for site selectors, these requirements are the absolute minimum requirements for a location to even be considered. Meeting these requirements is like reaching first base in a baseball game: all significant, potential employers require much more than simply meeting the minimum threshold. To make it all the way home, many factors must fit for the transaction ultimately to work and result in hiring.

The smaller the inventory of sites that meet even the minimum requirements, the less the region's odds are of successfully making it to first base, let alone hitting a home run and successfully recruiting the employer. Given the region's lagging wages and incomes, it should be our goal to increase our opportunities for success by ensuring that we have a variety of development ready sites.

CC

No one wants to go to their company president with only one possible site.

Peter Bragdon, senior vice president of legal and corporate affairs for Columbia Sportswear, in reference to his experience with site selection.

Tier 2 and 3 sites

The analysis found 16 Tier 2 sites (seven to 30 months from shovel ready) and 31 potential Tier 3 sites (more than 30 months to shovel ready) within the UGB and selected urban reserves. The bulk of these sites are in either Washington or Multnomah counties. Here again, the number of larger sites is very constrained. Tier 2 has no 100plus acre sites, and only four 50-plus acre sites. Tier 3 has only four potential 50-plus acre and six potential 100-plus acre sites.

The few large sites in Tier 2 and 3 face significant challenges to becoming ready, including the need to complete brownfield clean up, build infrastructure such as roads and sewers, remediate wetlands and assemble parcets currently under multiple separate ownerships.

Ten of the potential Tier 3 sites would require aggregation of parcels in separate ownership, and ownership ranges from two owners up to 17 owners, depending on the site. The more owners involved, the more complex and lengthy the development process would be. Twenty of the sites in Tiers 2 and 3 will require some kind of state, regional or local action such as concept planning, annexation or UGB expansion to become development ready.

All of these steps can be challenged through the land-use process. Thirty-one of the Tier 2 and 3 sites face multiple challenges. The table to the right shows the variety of challenges faced by sites in the pipeline.

Figure 3: Tier 2 and 3 potential development constraints

	TOTAL
Legislative Actions	20
Infrastructure	19
Transportation	18
Not willing to transact	18
Land Assembly	14
National Resources	13
Brownfield/Cleanup	8

The largest sites face tremendous challenges and limitations. One is West Hayden Island, which has extensive environmental limitations associated with future marine terminal development and will require annexation into the city of Portland. Three sites are outside the current urban growth boundary and one is limited to aviation-oriented, lease-only development. In sum, there are very few of the largest sites currently available and the supply of future large sites is equally or even more constrained.

Figure 4: Estimated industrial land consumption in acres, 1991-2010



Demand for land

Being market ready is critical as industrial land development is very cyclical. According to an analysis by Business Oregon and NAIOP, the majority of the demand for industrial lands comes in short bursts. Fifty percent of all industrial land acres developed in the study area over the past 20 years came during two three-year peak periods of development (1996-1998) and (2006-2008).⁴ If the region does not have developable sites ready to go when the

8 2011 Industrial Lands Policy Paper. Large Lot Supply & Dervand, Business Oregon (Source: Costar, NAIUP). Analysis of Industrial construction square footage reported in Costar for all parcel sizes converted to acreage assuming an alverage 30 percent coverage ratio. growth cycle hits, it will miss the opportunity for significant job and income expansion for a decade or more. How our region grows jobs and improves wages and incomes depends on getting these sites ready for employers. The goal of this inventory study is to move conversations forward so our region can better coordinate, recruit and grow the number of traded-sector employers and grow jobs.

Land-banked parcels

The analysis excluded land-banked parcels (owned and held for future expansion by existing firms) and sites with structures comprising more than 25 percent of the land area for redevelopment. While land-banked parcels may become available for recruitment in the luture, there is currently no way to judge if or when this might occur. Redevelopment of occupied parcels may be possible but is generally not broadly attractive to targeted diuster industry companies due to uncertain tinuing and costs that can greatly exceed. market rates for inclustria; land in other parts. of the country or world. Additional analysis of redevelopment costs and opportunities was outside the scope of this analysis.

Conclusions

The industrial land inventory analysis confirms that Portland-metro's market-ready supply of large-lot industrial lands for targeted tradedsector employer expansion and recruitment is limited, particularly for potential developments that require 50 acres or more.

The sites that are available are concentrated in the Columbia Corridor of Multnomah County and around Hillsboro in Washington County, limiting the potential to more broadly distribute job opportunities within the Portland-metro area.

While this analysis has identified the available sites and, at a high level, outlined the challenges that exist to bringing Tier 2 or 3 sites to shovel-ready status, the timeframes in the analysis assume¹ that the jurisdictions, property owners, land-use regulatory bodies and potential interveners are all working in support of the potential employer and the site's development.

Figure 5: Economic impact per acre



Source: 2011 Industrial Lands Policy Paper: Large Lot Supply & Demand, Susiness Oregon

The tier designations assume the "best case" and do not reflect issues that could significantly delay development such as unidentified wetlands or brownfields, opposition from interest groups, or requests from local jurisdictions for additional planning or design reviews. Any one of these factors could dramatically extend the timeframe for these sites to become market ready. Our dwindling inventory of available industrial lands is making it difficult to respond to companies interested in expanding their operations into Oregon. We need to find strategies to make potential sites shovel ready so we can compete, not just for recruitment, but for expansion and retention of the great companies we already have.

lim McCabe, Director, Business Oregon

Future analysis, known as Phase 2 of this study, will look at the costs and benefits of getting these sites ready and what the potential impact of successful recruitments or expansions could be in terms of jobs, incomes and taxes generated and improving the Portland-metro region's quality of life.

Partners











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PORT WESTWARD GOAL EXCEPTION, COMPREHENSIVE PLAN AMENDMENT, AND ZONE CHANGE ALTERNATIVES ANALYSIS

To Beery, Elsner & Hammond, LLP

For Port Westward Zone Change

Submitted April 10, 2017

Project Number 2160462.00



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- 2. Letters from Portland General Electric to Port of St. Helens, dated June 16, 2016 and September 11, 2007
- 3. Inventory of Recent Port Westward Site Inquiries and Economic Development Leads
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I. INTRODUCTION AND PURPOSE

In 2013 the Port of St. Helens (the Port) submitted an application to Columbia County (the County) seeking to rezone land adjacent to the Port Westward Industrial Park from Primary Agriculture-80 Acres (PA-80) to Resource Industrial-Planned Development (RIPD), for incorporation into the Industrial Park. The subject 837-acre tract is directly adjacent to the existing Port Westward Industrial Park (PWW) facility, which is already zoned RIPD. Since the proposed rezone area is currently designated for agricultural uses, the County was required to take an Exception to Statewide Planning Goal 3 (Agricultural Lands) as part of the rezone and accompanying comprehensive plan amendment. The application was approved by Columbia County in 2014, but that decision was appealed to the Oregon Land Use Board of Appeals (LUBA). LUBA remanded the decision, in part, identifying areas in which the record and findings provided insufficient justification for an Exception to Goal 3 and the rezoning of the subject property to RIPD.

In response to the remand, the Port has modified its land use application to align with the direction provided by LUBA in its remand decision, *Columbia Riverkeeper, et al. v. Columbia County,* LUBA No. 2014 – 017/018 (2014). As a component of this modified application, Mackenzie was retained to address the concerns raised by LUBA by providing a technical assessment of proposed uses, long-term needs and a site alternatives assessment in support of the proposed Goal 3 Exception, comprehensive plan amendment, and zone change application.

The analysis in this report evaluates the underlying need and site requirement characteristics across a range of potential rural industrial uses at the subject site. The report is structured as follows:

- Section II describes the existing PWW (including its development limitations) and the area proposed for a zone change by the Port of St. Helens to overcome PWW's development constraints.
- Section III characterizes the Port of St. Helens' proposed industries for the modified zone change application and analyzes each industry to demonstrate that the uses are rural.
- Section IV examines examples of several specific industrial operations that fall within the proposed uses as a means of identifying common characteristics.
- Section V catalogs the site characteristics required for the proposed uses.
- Section VI identifies market trends among uses in the Port's zone change application and potential to capture future growth.
- Section VII presents an analysis of alternative sites to demonstrate the appropriateness of the requested zone change for the Port Westward site and to illustrate why other sites are not viable for the proposed uses.
- Section VIII provides a conclusion and recommendations.

II. SUBJECT SITE

This section describes the existing PWW (including its development limitations) and the area proposed for a zone change by the Port of St. Helens to overcome PWW's development constraints.

Existing Port Westward Industrial Park

PWW, owned by the Port of St. Helens, is a 905-acre rural industrial exception area with 4,000 linear feet of deepwater Columbia River frontage at the confluence of the Bradbury Slough near Clatskanie in Columbia County, Oregon (see Figure 1). The Port operates a 1,500-foot dock at Port Westward with direct access to the Columbia River, which is part of the U.S. Department of Transportation's M-84 Marine Highway Corridor and connects to the M-5 Marine Highway Corridor along the Pacific coast.¹ The river has a 43-foot navigation channel to accommodate vessels needing deepwater port access. In addition to waterfront access, PWW also offers rail access via Portland & Western's rail line from the east, and roadway access connecting to U.S. Highway 30 via Kallunki Road or Hermo Road.

The site is served by private water systems that utilize wells and draw from the river. The rural property has a small private sewage system, and tenants may also manage their own sanitary wastes via private onsite septic systems. The Port also operates a discharge system for tenants' process water. Taken together, these facilities provide sufficient service for rural industrial users, but preclude urban industrial uses that have a higher demand for public utilities. Electric power, natural gas, and high-speed telecommunications are readily available on site.

According to the Port, in recent years, considerable investment has been made for the benefit of PWW, including the following:

- Dock improvements (\$8.5 million)
- On-site rail improvements (\$6.7 million)
- Rail improvements on Portland & Western Railroad's "A" line (\$20.7 million)
- Roadway development (\$8 million)
- Hermo Road improvements (\$5.4 million)
- Water system improvements (\$8 million)

The entirety of PWW is zoned Resource Industrial-Planned Development (RIPD) by Columbia County, as illustrated in Figure 2. Adjacent land is zoned Primary Agriculture-80 Acres (PA-80). Given the proximity to the Columbia River and local soil conditions, a large portion of PWW consists of wetlands² and floodplain. Approximately 100 acres of PWW are in the floodplain and 479 acres are in wetlands (33 acres of which are also in the floodplain), as illustrated in Figure 3.

The existing PWW has three tenants. The Clatskanie Public Utility District leases 3 acres for an electrical substation, the Columbia Pacific Bio-Refinery ethanol facility holds 43 acres, and the remainder is held on a lease by Portland General Electric (PGE) with expiration dates in 2066 and 2096.³ See Figure 4 for depiction of lease areas.

¹ https://www.marad.dot.gov/wp-content/uploads/pdf/Click-here-for-Route-Descriptions.pdf

² As used in this document, the term "wetlands" includes delineated naturally-occurring wetlands, potential wetlands that have not been delineated, and wetlands created through previous mitigation activities.

³ This includes approximately 116 acres of which PGE holds in fee, but also in which the Port has a reversionary interest at the completion of PGE's lease, providing the same practical effect.



FIGURE 1. PORT WESTWARD VICINITY MAP Columbia County, Oregon

LEGEND

- Port of St. Helens Properties
- Thompson Property
- Proposed Zone Change Area
- State Boundary



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FIGURE 2. PORT WESTWARD ZONING MAP Columbia County, Oregon

LEGEND

Port of St. Helens Properties
Thompson Property
Tax Lots
Proposed Zone Change Area
─ + ─ Rail
State Boundary
Columbia River
ZONING
RIPD Resource Industrial- Planned Development
PA-80 Primary Agriculture
PF-80 Primary Forest
CS-I Community Service- Industrial
CS-U Community Service- Utility
RR-2 Rural Residential- 2 Ac. Min
RR-5 Rural Residential- 5 Ac. Min.



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FIGURE 3. PORT WESTWARD WETLAND & FLOODPLAIN MAP

Columbia County, Oregon

LEGEND

- Port of St. Helens Properties
- Thompson Property
- '____' Tax Lots
- Proposed Zone Change Area
- Non- Port Property
- 100-Year Floodplain
- 📉 Wetlands
- 🕂 Rail
- Columbia River
- State Boundary



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FIGURE 4. PORT WESTWARD SITE CONSTRAINTS Columbia County, Oregon

LEGEND

- Port of St. Helens Properties
- Thompson Property
- Tax Lots
- State Boundary
- 🗕 Rail
- Columbia River
- 100-Year Floodplain
- 🚫 Wetlands
- **PGE** Lease
- Proposed Zone Change Area
- Conservation Easement
- Ethanol Plant Lease
- Generation Sites

PGE Electrical Transmission Corridor



SOURCE DATA: Columbia County GIS Data, Oct 2016 GEOGRAPHIC PROJECTION: NAD 83 HARN, Oregon North Lambert Conformal Conic

Date: 2/27/2017 File: Port Westward_Site Constraints Map_2

Map Created By: KWB Project No: 2160462.00



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Development Challenges of the Port Westward Industrial Park

Mapping analysis indicates that 479 acres, or 53% of PWW, contain wetlands, the placement of which leave limited area for large-scale rural industrial development unless the wetlands are filled and mitigated per U.S. Army Corps of Engineers (Corps) and Oregon Department of State Lands (DSL) regulations. The state requires a minimum of 1.5 acres of new wetland creation for every acre filled.⁴ After deducting the approximately 40 acres of wetlands that lie within conservation easements, filling the remaining 439 acres of wetlands to create developable area would require at least 658 acres of land, which is not feasible within the boundaries of the existing PWW exception area. Significantly, wetland mitigation costs serve as a nearly-insurmountable hurdle to utilization of the remaining acreage at PWW, as wetland creation costs run on the order of \$77,000-\$82,000 per acre.⁵ Filling the wetland acreage noted above, and acquiring the requisite mitigation acreage, would cost on the order of \$50 million above and beyond the acquisition costs—assuming that the Corps and DSL granted authorization to fill the wetlands.

The site is also encumbered by a number of easements for roadways, utilities, drainage facilities, levees, pipelines, and 46 acres of conservation areas, which serve to divide developable areas into smaller sections less conducive to large-scale rural industrial development. See Appendix 1. Together with the required security fencing, gates, and other infrastructure, these encumbrances serve as barriers to development.

PGE currently operates three power generation facilities on 147 acres within PWW. The remainder of PGE's lease area includes dedicated wetland mitigation areas, areas held for future expansion (including future wetland mitigation needs), and necessary buffering of its operations. PGE subleases a portion of its leasehold to local farmers for agricultural production. While PGE and the Port have entertained potential suitors for additional subleases in the past, such commitments have been precluded by potential conflicts with PGE's uses, restrictions imposed by the lease, existing encumbrances, and physical site constraints including wetlands and the cost related to developing in those wetlands. Many industrial tenants have been reluctant to locate in PWW due to the physical site constraints and requirements imposed by PGE. PGE and the Port previously had a Joint Marketing Agreement to coordinate facilitating future additional development of the PGE leasehold. This agreement was allowed to expire at the end of 2005 and PGE formally terminated it in 2007 (see 2007 letter in Appendix 2).

As evident in Figure 4, there are few developable portions of PWW that are not encumbered by wetlands, conservation easements, power generation facilities, transmissions lines, the ethanol plant, and long-term leases. The southeast corner of the Port's existing PWW property could perhaps provide one last small development site outside PGE's lease area, though, as described below, this would be insufficient to satisfy the overall demand for rural industrial sites and is too small to effectively site one of the five uses proposed by the Port.

In its remand decision, LUBA held that the County could not presume the undeveloped acreage within the PGE leasehold is unavailable for future industrial development, absent a statement that PGE is "categorically unwilling" to sublease part or all of its leasehold. In response, in 2016 PGE provided a letter to the Port (see Appendix 2), in which PGE indicates that, for future planning purposes, the Port should

⁴ Oregon Department of State Lands, A Guide to the Removal-Fill Permit Process, December 2016. http://www.oregon.gov/dsl/ WW/Documents/Removal_Fill_Guide.pdf

⁵ Oregon Department of State Lands, Report on Off-Site Compensatory Mitigation, Fiscal year 2015, December 1, 2015.

https://www.oregonlegislature.gov/citizen_engagement/Reports/ODSL_2015Report%20on%20Off-Site%20Compensatory%20 Mitigation.pdf



consider the undeveloped portion of PGE's leasehold unavailable for siting additional tenants. The letter states the following:

Maintaining and protecting PGE's assets at Port Westward is imperative to the company's current and future operations. Protecting the long-term interests of the electric generation capabilities at the site requires PGE to maintain adequate land buffers around the facilities for security and reliability purposes, <u>thus restricting third-party use on the 854-acre leasehold</u>. In addition, it is important to our future operations there is adequate space in our leasehold for building future generating plants. This limits the physical space, location and other related dynamics that might otherwise make the area available to third-parties. Given the company's investment at Port Westward and the critical nature of the site to support reliable electric service, third-party compatibility is a high bar which some proposed industrial facilities in the past could not meet. <u>Due</u> to this high bar, PGE supports the Port's effort to bring additional industrial land outside the buffer into Port Westward. (emphases added)

Given PGE's statement, other development constraints such as the high cost of developing in wetland areas and the existing encumbrances burdening PWW, we conclude that further development within the PGE lease area is not economically or practically feasible. This dynamic has left the Port Westward facility—a strategically significant economic resource, one of only five public deepwater facilities in Oregon,^{6,7} one of only two *rural* public deepwater ports in the state, and the only rural deepwater port serving the M-84/Columbia River corridor and Portland market—underused due to lack of marketable industrial land.

Proposed Zone Change Area as a Response to PWW Constraints

Due to the current development impediments present at PWW, the Port is proposing that Columbia County rezone 837 acres from Primary Agriculture-80 Acres (PA-80) to Resource Industrial-Planned Development (RIPD) to accommodate rural industrial development. Of these 837 acres, approximately 51 acres are owned by the Thompson family, while the remaining 786 acres are owned by the Port.

The proposed zone change requires a comprehensive plan map amendment and an Exception to Statewide Planning Goal 3 (Agricultural Lands). The proposed zone change area is intended to capitalize on the valuable deepwater port facility to address a statewide industrial land deficit and meet the needs of potential future Port tenants. The proposed zone change area, illustrated in Figure 1, wraps around the current PGE leasehold to the west, south, and east. The zone change area has Bradbury Slough waterfront access on the east, and deepwater Columbia River access on the north.

Adjacent zoning includes RIPD to the north and east (existing PWW) and PA-80 to the west, south, and east (see Figure 2). Unlike the PGE leasehold, the proposed zone change area contains only a small amount of undelineated wetlands, primarily at the west and east ends (see Figure 3). Significantly, unlike the majority of PWW, the proposed expansion area is not subject to lease restrictions, and thus if successfully rezoned would be available for industrial development in accordance with Columbia County's RIPD zoning regulations.

⁶ As recognized in statute at ORS 777.065.

⁷ Oregon's deepwater ports can accommodate vessel drafts of 40 feet or deeper (Record at 95).



III. PROPOSED RURAL INDUSTRIAL USES

This section characterizes the Port of St. Helens' proposed industries for the modified zone change application and analyzes each industry to demonstrate that the uses are rural in nature.

Port Westward Proposed Uses

At the recommendation of LUBA in its remand decision, the Port undertook an assessment of potential uses and provided Mackenzie information on a narrowed list of five proposed rural industrial uses for analysis applicable to the Port's modified land use application. Proposed uses were largely based on the Port's engagement with potential tenants and users in the current business cycle (as documented in Appendix 3). These uses include:

- Forestry and Wood Products processing, production, storage, and transportation
 - This has historically been one of Oregon's leading rural industrial land uses. Several uses within this category include sawmills, pulp and paper mills, wood pellet production, utility pole production, sawdust, or log debarking. Semi-finished wood products range from assembly-required flat-pack furniture to base and crown molding for wholesale uses or wood flooring production. Other possibilities include bulk import, export, or domestic transfer of logs, lumber, or other wood-based products.
- Dry Bulk Commodities transfer, storage, production, and processing
 - Examples include grain, metals, or lumber. Commodities refers to merchandise, product, or substance produced or distributed for sale to or for use by others. Bulk refers to significant unpackaged quantities generally transported as a single commodity. Dry describes items transported in solid, not liquid form. These commodities require consolidation at a single location before further transportation or distribution. For example, sawdust or grain would be carried in a semi-truck, consolidated and stored, and then loaded on a ship for further transport. Processing is usually a value-added task performed before shipping and can be as simple as removing bark from logs before shipping overseas.
- Liquid Bulk Commodities processing, storage, and transportation
 - Examples include petroleum, ethanol, milk, cooking oil, or other edible fluids. Commodities refers to merchandise, product, or substance produced or distributed for sale to or for use by others. Liquid bulk is cargo transported or stored unpackaged in large volumes in a fluid state. These commodities are moved in large quantities by ship or barge, stored in tanks, and distributed by tanker trucks. Processing could, as an example, include the mixing of additives to petroleum.
- Natural Gas and derivative products, processing, storage, and transportation
 - Natural gas is a resource with abundant existing infrastructure at Port Westward. Natural gas is a raw material used to produce a range of chemical products such as fertilizer or methanol suitable for transportation by river. There may be on-site storage of the raw material or its refined products before shipment.



- Breakbulk storage, transportation, and processing
 - Breakbulk refers to a system of transporting cargo as separate pieces, not in containers or single commodity loads, but typically by the use of bags, boxes, crates, drums, barrels, or single units (e.g., wind turbine blades, turbines, heat exchangers, automobiles, etc.). This use would allow for any items meeting local, state, and federal requirements to be stored on site either before or after transfer across the dock. Processing would include limited work such as modifications or alterations to allow for safe transportation by river, rail, or roads.

While the list above is primarily oriented toward export markets, PWW would also efficiently serve users within the categories above with domestic operations dependent on deepwater port access. Of the five proposed uses noted above, Columbia County's RIPD zone currently allows Forestry and Wood Products processing, production, storage and transportation as an outright permitted use⁸ in recognition of its rural nature. The remaining four proposed uses would be subject to conditional use review in the RIPD zone.

Port Westward Rural Industrial Industry Definition by NAICS

The proposed use profiles are descriptive of the range of economic functions and physical activities typical of targeted rural industrial uses. However, they are not reflective of "industries" in the formal sense as classified by the North American Industry Classification System (NAICS). According to the U.S. Census Bureau, NAICS, "...is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy." Most states, including the State of Oregon, also utilize NAICS for business statistics and macroeconomic analysis. Therefore, analysis begins by defining a range of industries by NAICS that reflects the economic functions described above. In other words, firms within the following NAICS categories would be considered candidates as rural industrial tenants at Port Westward within the five uses proposed in the Port's application, as modified. The NAICS categories discussed below are not being specifically proposed as part of the Port's modified application, but are reflective of potential future uses that could be sited at PWW if the application is approved.

Data Limitations

The primary limitation of NAICS-based analysis is in the nature of how firms are classified. Businesses selfreport business units into the NAICS classification and, while this process provides a generally reliable representation of a given industry in aggregate, accuracy can vary at the individual firm level. For example, some firms with corporate functions report as 551 Management of Companies and Enterprises, despite the fact that actual processing activities may occur on site. Another common discrepancy is that firms involved in transport and processing functions may report as wholesalers. While errors in source data may exist at the individual firm level, NAICS-based employment data includes the entire universe of firms with covered employment⁹ and in aggregate is a highly reliable and broadly accepted source for macroeconomic evaluation.

⁸ CCZO 682.2 permits "Management, production, and harvesting of forest products, including wood processing and related operations" in the RIPD zone.

⁹ Covered employment includes firms that have employees that are "covered" under unemployment insurance. Workers that are not "covered" tend to be commissioned workers, student workers, agricultural workers, and sole proprietors.



Exceptions

Representative NAICS sectors in this study are intended to be used as a macroeconomic guide linking intended uses to data available for economic analysis. The following set of industries is a subset of sectors that represent the Port's five proposed uses that require unique characteristics offered by the Port Westward site and that are also rural in nature. This set is intended to be neither comprehensive nor limiting.

NAICS Industry Definitions

Industry descriptions and example production sectors described below are sourced directly from the U.S. Census Bureau.¹⁰

488320 Marine Cargo Handling

This industry comprises establishments primarily engaged in providing stevedoring and other marine cargo handling services (except warehousing).

- Loading and unloading services at ports and harbors
- Longshoremen services
- Marine cargo handling services

488210 Port and Harbor Operations

This industry comprises establishments primarily engaged in operating ports, harbors (including docking and pier facilities), or canals.

- Harbor operation
- Port facility operation
- Waterfront terminal operation (e.g., docks, piers, wharves)

483111 Deep Sea Freight Transportation

This U.S. industry comprises establishments primarily engaged in providing deep sea transportation of cargo to or from foreign ports.

- Deep sea freight transportation to or from foreign ports
- Shipping freight to or from foreign ports, deep sea
- Transporting freight to or from foreign ports, deep sea

483211 Inland Water Freight Transportation

This U.S. industry comprises establishments primarily engaged in providing inland water transportation of cargo on lakes, rivers, or intracoastal waterways (except on the Great Lakes System).

- Freight transportation, inland waters (except on Great Lakes system)
- Shipping freight, inland waters (except on Great Lakes system)

¹⁰ Accessed January 2017, http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2012

River freight transportation

484230 Specialized Freight (except Used Goods) Trucking, Long-Distance

This industry comprises establishments primarily engaged in providing long-distance specialized trucking. These establishments provide trucking between metropolitan areas that may cross North American country borders.

- Dry bulk carrier, truck, long-distance
- Forest products trucking, long-distance
- Grain hauling, long-distance
- Bulk liquids trucking, long-distance
- Waste hauling, nonhazardous, long-distance
- Recyclable material hauling, long-distance

488210 Support Activities for Rail Transportation

This industry comprises establishments primarily engaged in providing specialized services for railroad transportation including servicing, routine repairing (except factory conversion, overhaul or rebuilding of rolling stock), and maintaining rail cars; loading and unloading rail cars; and operating independent terminals.

- Loading and unloading services at rail terminals¹¹
- Grain leveling and trimming in railroad cars
- Railroad and railway terminals
- Locomotive and rail car repair (except factory conversion, factory overhaul, factory rebuilding)¹²

424510 Grain and Field Bean Merchant Wholesalers

This industry comprises establishments primarily engaged in the merchant wholesale distribution of grains, such as corn, wheat, oats, barley, and unpolished rice; dry beans; and soybeans and other inedible beans. Included in this industry are establishments primarily engaged in operating country or terminal grain elevators primarily for the purpose of wholesaling.

- Grain elevators
- Grain merchant wholesalers
- Rice and soybean merchant wholesalers

493190 Other Warehousing and Storage

This industry comprises establishments primarily engaged in operating warehousing and storage facilities (except general merchandise, refrigerated, and farm product warehousing and storage).

- Bulk petroleum storage
- Lumber storage terminals

¹¹ These facilities are commonly located on port properties and in adjacency to marine cargo uses where rail cargo is transferred to shipping vessels and vice versa.

¹² Includes routine repair and maintenance.



325193 Ethyl Alcohol Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing non-potable ethyl alcohol.

- Ethyl alcohol, nonpotable, manufacturing
- Ethanol, nonpotable, manufacturing

325311 Nitrogenous Fertilizer Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

- Ammonia, anhydrous and aqueous, manufacturing
- Ammonium nitrate manufacturing
- Anhydrous ammonia manufacturing
- Nitrogenous fertilizer materials manufacturing
- Fertilizers, mixed, made in plants producing nitrogenous fertilizer materials

325199 All Other Basic Organic Chemical Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

Methyl alcohol (i.e., methanol), synthetic, manufacturing

321999 All Other Miscellaneous Wood Product Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

- Kiln drying lumber
- Wood Pellets

NAICS Analysis Commentary

This alternatives analysis uses a quantitative assessment of employment and trade data to establish need for additional rural industrial land that is dependent on deepwater port facilities in Oregon. The NAICS examples above were specifically selected to reflect uses that rely on large rural sites offering access to multi-modal transportation and export facilities. For many of these industries, the linkage is obvious. Marine Cargo Handling (488320) and Deep Sea Transport (483111) are clearly port-dependent uses. For other uses, the connection to port facilities is related to the multi-modal transfer of goods. For example, Specialized Freight Trucking (484230) and Support Activities for Rail Transport (488210) involve activities that transfer goods from one mode of transportation to another, including vessels for import or export.



Other uses co-locate with port facilities for safety, security, economic and logistical reasons. In the case of chemical and other liquid bulk manufacturing (fertilizers, methanol, ethanol, etc.), proximity to port facilities increases reliability and reduces cost and risk.

Because broadly-available quantitative data is organized around NAICS and by extension commodity classifications, the NAICS representation of proposed uses allows us to draw conclusions from the data. It is worth noting that this NAICS representation is a decidedly narrow range of uses. In all likelihood, PWW would appeal to a much broader range of uses. For example, producers across a range of product types including coal processing and storage, fabricated metals, lumber and engineered wood products, and building materials, among others, could capitalize on PWW's physical and locational attributes. However, many uses within these sectors do not necessarily require rural locations, and were not considered here. In its 2014 approval of the zone change, Columbia County specifically excluded the storage, loading and unloading of coal, and the Port has not included coal in this modified application.

Shaffer Factor Analysis of Rural Proposed Uses

In its remand decision, LUBA noted that the findings adopted by Columbia County need to demonstrate that the proposed industrial uses to be allowed via the zone change are rural in nature:

In Shaffer v. Jackson County, 17 Or LUBA 922, 931 (1989), we rejected an argument that industrial uses are inherently urban in nature. Absent rule-making on the part of LCDC, we concluded that whether a particular industrial use of rural land is urban or rural requires a case-by-case determination, based on factors identified in case law. Id. To our knowledge, LCDC has not adopted any rule-making that clarifies how to answer the highly problematic question of whether an industrial use is urban or rural in nature.

Shaffer involved a decision that rezoned resource land to the county's Rural Limited Industrial (RLI) zone to allow development of an asphalt batch plant. The relevant factors discussed in Shaffer that point toward a rural rather than an urban industrial use include whether the industrial use (1) employs a small number of workers, (2) is significantly dependent on a site-specific resource and there is a practical necessity to site the use near the resource, (3) is a type of use typically located in rural areas, and (4) does not require public facilities or services. Id. at 933-40. None of the Shaffer factors are conclusive in isolation, but must be considered together. Under the analysis described in Shaffer, if each of these factors is answered in the affirmative, then it is relatively straightforward to conclude, without more, that the proposed industrial use is rural in nature. However, if at least one factor is answered in the negative, then further analysis or steps are necessary. In that circumstance, the county will either have to (1) limit allowed uses to effectively prevent urban use of rural land, (2) take an exception to Goal 14, or (3) adequately explain why the proposed use, notwithstanding the presence of one or more factors pointing toward an urban nature, should be viewed as a rural use. 70 Or LUBA 171, 211 (2014).

This section analyzes the Port's proposed uses using the *Shaffer* factors specified above to demonstrate that the proposed uses are rural. General discussion of the proposed uses as they relate to the *Shaffer* factors is included below, while Table 4 presents the *Shaffer* analysis for each of the five proposed uses.

Small Number of Workers

The proposed uses identified in the Port's modified application are characteristic of uses that employ a relatively small number of employees per acre, due to the large amount of physical space dedicated to the storage and movement of commodities and buffering from adjoining uses. These large outdoor areas have a demand for only a limited number of employees.



The Port of St. Helens provided Mackenzie a list of siting inquiries over the recent business cycle at PWW (see Appendix 3). For 18 of the 40 reported inquiries, the data included both site size and estimated employment levels. Taking this data, we have established an average employment density for those uses that fall within the use categories proposed as part of this modified application.¹³ On average, employment density for uses within the Port's proposed uses totaled 1.5 jobs per acre, as presented in Table 1, below. By comparison, urban industrial uses for suburban¹⁴ areas area generally average 18.1 and 5.9 jobs per acre for general industrial and warehousing uses, respectively.¹⁵

Use Type	Port Westward Proposed Use Category	Acres Needed	Estimated Employees	Density (iobs/acre)
Natural Gas/Energy	Natural Gas	20	25	1.3
Wood Products	Forestry/Wood Products	20	24	1.2
Chemicals/Liquid Bulk	Liquid Bulk	25	25	1.0
Chemicals/Liquid Bulk	Liquid Bulk	25	30	1.2
Solar Panels*	N/A	40	500	12.5
Chemicals/Liquid Bulk	Liquid Bulk	50	140	2.8
Chemicals/Liquid Bulk	Liquid Bulk	50	120	2.4
Chemicals/Liquid Bulk	Liquid Bulk	50	200	4.0
Natural Gas/Energy	Natural Gas	50	44	0.9
Chemicals/Liquid Bulk	Liquid Bulk	80	72	0.9
Natural Gas/Energy	Natural Gas	100	60	0.6
Chemicals/Liquid Bulk	Liquid Bulk	100	250	2.5
Wood Products	Forestry/Wood Products	100	75	0.8
Chemicals/Liquid Bulk	Liquid Bulk/Natural Gas	140	140	1.0
Coal*	N/A	150	100	0.7
Automobile	Breakbulk	193	250	1.3
Automobile	Breakbulk	200	200	1.0
Coal	N/A	300	200	0.7
AVERAGE DENSITY OF USES V	VITHIN THE PORT'S PROPOSE	D USES:		1.5 jobs
				per acre
Typical Urban Industrial Density:				18.1 jobs
				per acre
Typical Urban Warehousing Density:			5.9 jobs	
			per acre	

Table 1: Average Employment Density Among Port Westward Inquiries

*N/A = Use is not part of the Port's proposed list of uses at Port Westward

¹³ Not all of the site inquires in Table 1 or Appendix 3 would be permitted under the uses proposed as part of this modified application (e.g., coal is excluded).

¹⁴ The word "suburban" refers to cities and associated urban growth areas excluding the City of Portland (e.g., Hillsboro, Gresham, etc.).

¹⁵ Metro. 2014 Urban Growth Report, Appendix 6 (October 2015), http://www.oregonmetro.gov/sites/ default/files/2014UGR-Appendix-6-employment-land-demand-analysis-Final.pdf. Jobs per acre calculations created by Mackenzie using stated floor area ratios (FAR) and square feet per employee assumptions.



Based on the data in Table 1 and further examples detailed in Section IV, the Port's proposed uses have job densities well below that of urban industries and consistent with rural industries, so we conclude that the uses employ a small number of workers.

Dependence on a Site-Specific Resource/Practical Necessity to Site Near Resource

The proposed uses selected by the Port of St. Helens for the Port Westward zone change area are dependent upon immediate proximity to a deepwater port. The port and its existing dock facilities are necessary for transferring materials from one mode to another, for both domestic and foreign transport (e.g., rail to marine) and for accommodating low-margin industrial operations which rely upon deepwater access to maintain an economically viable business in current market conditions. Transportation costs are minimized by placing storage yards and transloading facilities at a port. In the case of industrial uses related to bulk commodities and natural-gas related products, which are primarily transported by tanker vessel, such facilities can be located nowhere but at port facilities with sufficient depth to accommodate the ships.

Uses with foreign trade markets and marine-served domestic markets for products that are shipped by marine vessel are, by definition, reliant on deepwater port facilities. Table 2 demonstrates that each of the five proposed uses for PWW involve foreign import/export operations and are thus dependent upon a deepwater port. The proposed uses will achieve a significant operational advantage due to deepwater port access with nearby storage yards. As the proposed uses are low-margin businesses, port proximity is necessary to minimize operational costs for both import/export and domestic shipping operations. An external benefit of these firms' locations near port facilities is that locating their yards close to the port minimizes impacts on offsite transportation infrastructure.



Use	Use Product Examples	
Forestry/Wood Products	 Sawmills Pulp and paper mills Wood pellets Wood chips Utility poles Sawdust Flat-pack furniture Flooring Logs 	YES
Dry Bulk	 Grain Metals Lumber Potash Aggregates Sawdust 	YES
Liquid Bulk	 Petroleum Ethanol Methanol Ammonia Milk Liquid fertilizers Liquid chemicals 	YES
Natural Gas	Natural gasFertilizerMethanol	YES
Breakbulk	 Bagged, boxed, or crated materials Drums or barrels Single units (wind turbine blades, turbines, heat exchangers, etc.) Automobiles Containerized agriculture products Steel slabs 	YES

Table 2: Use Reliance on Deepwater Port Facilities for Import and Export

Note: Deepwater ports are vital for items denoted by "YES."

Typical Setting in Rural Areas

The Port's proposed uses at PWW under this modified application are land-intensive uses that require large sites, favoring rural areas due to lower land cost than urbanized areas. Additionally, these industries are best sited with ready access to raw materials, which generally originate in rural areas (e.g., wood products processors need access to timber, and grain shipment facilities need access to agricultural areas). Another reason that the proposed uses favor rural sites is the need for buffering due to potentially sensitive or hazardous operations. Table 3 identifies factors for each of the five proposed uses for PWW to demonstrate how each use is reliant on a rural location.



		Proximity/Access to Natural	Large Yard/Deck	Significant Buffering
Use	Product Examples	Resource	Requirement	Required
Forestry/Wood Products	 Sawmills Pulp and paper mills Wood pellets Wood chips Utility poles Sawdust Flat-pack furniture Flooring Logs Lumber 	YES	YES	NO
Dry Bulk	 Grain Metals Lumber Potash Aggregates Sawdust 	SOME	YES	NO
Liquid Bulk	 Petroleum Ethanol Methanol Ammonia Milk Liquid fertilizers Liquid chemicals 	YES	NO	YES
Natural Gas	Natural gasFertilizerMethanol	YES	NO	YES
Breakbulk	 Bagged, boxed, or crated materials Drums or barrels Single units (wind turbine blades, turbines, heat exchangers, etc.) Automobiles Containerized agriculture products Steel slabs 	SOME	YES	NO

Table 3: Use Reliance on Rural Locations

Note: Rural locations are vital for items denoted by "YES."

Multiple examples of the Port's proposed uses are found in Columbia County and other counties along the M-84/Columbia River corridor. The most obvious examples are those already at PWW, such as the Columbia Pacific Bio-Refinery's ethanol processing facilities, and PGE's power generation facilities utilizing natural gas supplies. Other rural examples include mills; bark processors; wood product manufacturers;


grain elevators; sand and gravel mines and associated bulk shipping operations; fertilizer plants; grain shippers; fruit and vegetable wholesalers/exporters; and recyclable material wholesalers.

While there are some urban examples of the proposed uses, those examples largely stem from longestablished rural facilities which later became surrounded by urban areas (e.g., the Rainier log yard) and are therefore best categorized as rural uses originally sited in rural areas that have urbanized over time, or they stem from rural operations that rely on a port that currently only exists in urban areas (e.g., gasoline storage in Portland). In other words, such examples are indicative of traditionally rural uses with surroundings that have changed over time or that have been required to site in urban areas out of practical need, not that those uses are urban in character. Analysis of such examples under the other *Shaffer* factors makes that much clear, and reinforces a conclusion under this factor that a particular use tends to be rural in nature.

Independence from Public Facilities or Services

The proposed uses selected by the Port are not dependent upon an urban level of public facilities. Like the existing uses at PWW, the proposed uses do not require public water due to their low employee density, and any process water needs could be satisfied from PWW's existing water rights. Similarly, public sewer systems are not necessary due to low wastewater levels generated by the low number of potential employees, at approximately 35 gallons per day per person.¹⁶ The low employee count combined with the large acreage requirements makes any on-site sanitary sewer systems a small portion of land needs or development costs. The Port also operates a discharge system for tenants' process water at PWW.

Marine and rail facilities are in place at levels sufficient for rural development at the site, and the proposed uses can be appropriately served by Columbia County's and the State's existing network of arterial and collector roadways. The proposed uses are anticipated to generate on the order of 10-40 average daily trips per acre, compared to 50-150 average daily trips per acre for urban industrial uses (see discussion and analysis of Table 7 in Section V). This *Shaffer* factor, applied prospectively to the Port's proposed uses, functions as a bar to siting urban uses at PWW, in addition to functioning as a guide for determining whether a proposed use is rural in character and appropriate for future siting at PWW. Because the provision of public facilities or services is not proposed by the Port or anticipated in the future, it will not be feasible for users needing access to an urban level of such facilities or services to locate at PWW.

Shaffer Analysis Conclusions

Based on the discussion above and the detailed information in Table 4, the proposed uses are appropriately characterized as rural uses. In the case of urban examples of the proposed rural uses, those locations would more fittingly be considered rural industries located in an urban area. For instance, facilities that store or process liquid bulk commodities transported by tanker ship can only be located where there is adequate deepwater access, port facilities exist, and land is available for development; up until this point, that has limited those businesses to urban locations. If deepwater facilities with developable rural land were available, then such uses would be able to consider the rural locations.

¹⁶ Goldstein, Steven N. and Walter J. Moberg, Jr. Wastewater Treatment Systems for Rural Communities. Washington, D.C.: Commission on Rural Water, 1973. http://www.ircwash.org/sites/default/files/301-73WA.pdf

	Shaffer Factors				
Proposed Land Use	Industrial use employs a small number of workers	Industrial use is significantly dependent on a site-specific resource and there is a practical	Industrial use is a type of use typically located in rural areas	Industrial use does not require public facilities or services	
		necessity to site the use near the resource			
Forestry and Wood Products processing, production, storage, and transportation Examples: Sawmills Pulp and paper mills Wood pellets Wood chips Utility poles Sawdust Flat-pack furniture Flooring Logs Lumber	 Employment density is generally low, ranging from 0.3-2.1 jobs per acre based on Table 1 and examples in Section IV This land use utilizes large storage areas (may be indoors or outdoors) 	 Materials shipped by marine/rail as much as possible and consolidated at deepwater port facilities Low-margin business necessitates proximity to port Industry hubs form around deepwater port facilities Uses are dependent upon proximity to natural resources found in rural areas 	 Land-intensive use that requires large sites, favoring rural areas due to lower land cost than urbanized areas Facilities are sited near raw materials, which originate in rural areas (e.g., Coast Range) Rural Columbia County has mills, bark processors, and wood product manufacturers, many of which transport goods by ship The Teevin Bros. log yard on the Columbia River is within Rainier city limits. However, the log yard is on the site of a former Crown Zellerbach mill in a community that has had mills since the mid-nineteenth century, long before Oregon adopted a statewide planning system 	 Land use does not require public water or sewer infrastructure due to low employee density Process water, if any, could be obtained from existing PWW water sources Transportation infrastructure (roadway, marine, and rail) is already in place at a level sufficient for rural development 	
Dry bulk commodities transfer, storage, and processing Examples: Grain Metals Lumber Potash Aggregates Sawdust	 Employment density is generally low, ranging from 0.7-2.3 jobs per acre based on Table 1 and examples in Section IV This land use utilizes large storage areas (may be indoors or outdoors) Mechanization for materials transfer limits the need for a large number of employees 	 Materials shipped by marine/rail as much as possible and consolidated at deepwater port facilities Immediate proximity to deepwater port facilities is a prerequisite for marine shipping from a dry bulk facility Transportation costs are minimized by placing storage yards and processing facilities at a port Low-margin business necessitates proximity to port Uses are dependent upon proximity to natural resources found in rural areas 	 Land-intensive use that requires large sites, favoring rural areas due to lower land cost than urbanized areas Grain elevators and similar facilities are located in rural communities along the Columbia River that serve rural agricultural areas Facilities need ready access to sources of raw materials which typically originate in rural areas Aggregate companies predominate in rural areas along the Columbia River (including Columbia County) where they can mine sand and gravel and ship material by water 	 Land use does not require public water or sewer infrastructure due to low employee density Process water, if any, could be obtained from existing PWW water sources Transportation infrastructure (roadway, marine, and rail) is already in place at a level sufficient for rural development 	

Table 4: Shaffer Analysis for Proposed Port Westward Land Uses

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	Shaffer Factors			
Proposed Land Use	Industrial use employs a small number of workers	Industrial use is significantly dependent on a site-specific resource and there is a practical necessity to site the use near the resource	Industrial use is a type of use typically located in rural areas	Industrial use does not require public facilities or services.
Liquid bulk commodities processing, storage, and transportation Examples: Petroleum Ethanol Methanol Ammonia Milk Liquid fertilizers Liquid chemicals	 Employment density is generally low, ranging from 0.9-4.0 jobs per acre based on Table 1 and examples in Section IV This land use utilizes large storage areas for tanks Mechanization for materials transfer limits the need for a large number of employees 	 Vast majority of materials shipped by deepwater tanker ships Need to locate near deepwater port facilities to minimize piping and other unnecessary infrastructure, permitting, hazards, expenses, etc. Locating facilities near deepwater marine terminals enables secure and efficient operations Uses may be dependent upon proximity to natural resources or end users found in rural areas 	 Land-intensive use that requires large sites, favoring rural areas due to lower land cost than urbanized areas Some uses, while safe in practice, may present potential hazards which are best suited to rural areas to minimize potential impacts Some facilities are sited near raw materials, which originate in rural areas (e.g., dairy producers) Facilities are in rural areas with proximity to raw materials and/or transportation infrastructure Ethanol facilities are located in rural areas at PWW and in Morrow County Ammonia fertilizer plant is in rural Columbia County Other Columbia River counties have rural fertilizer processors Some sites are within urban areas (e.g., Portland's fuel tank farms) due to the presence of marine facilities and lack of available sites in rural areas 	 Land use does not require public water or sewer infrastructure due to low employee density Process water, if any, could be obtained from existing PWW water sources Transportation infrastructure (roadway, marine, and rail) is already in place at a level sufficient for rural development
 Natural Gas and derivative products, processing, storage, and transportation Examples: Natural gas Fertilizer Methanol 	 Employment density is generally low, ranging from 0.6-1.5 jobs per acre based on Table 1 and examples in Section IV This land use utilizes large storage areas Mechanization for materials transfer limits the need for a large number of employees 	 Materials almost exclusively shipped by deepwater tanker ships Need to locate near deepwater port facilities to minimize piping and other unnecessary infrastructure, permitting, hazards, expenses, etc. Locating facilities near marine terminals enables secure and efficient operations Uses may be dependent upon proximity to natural resources found in rural areas such as those in close proximity to PWW 	 Land-intensive use that requires large sites, favoring rural areas due to lower land cost than urbanized areas Some uses, while safe in practice, may present potential hazards which are best suited to rural areas to minimize potential impacts and/or security risks Facilities are sited near raw materials, which originate in rural areas (e.g., PGE's power generation facilities at PWW capitalize on the Mist-Birkenfeld natural gas fields and underground natural gas storage facilities in Columbia County) 	 Land use does not require public water or sewer infrastructure due to low employee density Process water, if any, could be obtained from existing PWW water sources Transportation infrastructure (roadway, marine, and rail) is already in place at a level sufficient for rural development
 Breakbulk storage, transportation, and processing Examples: Bagged, boxed, or crated materials Drums or barrels Single units (wind turbine blades, turbines, heat exchangers, etc.) Automobiles Containerized agriculture products Steel slabs 	 Employment density is generally low, ranging from 1.0-2.3 jobs per acre based on Table 1 and examples in Section IV This land use utilizes large storage areas (may be indoors or outdoors) 	 Materials shipped by marine/rail as much as possible and consolidated at port facilities Industry requires minimizing transfer distance from one mode of transport to another and access to multiple transportation modes Significant operational advantage provided by deepwater port access with nearby storage yards Breakbulk needs significant space close to deepwater port facilities to store materials until a sufficient quantity has accumulated for shipment 	 Land-intensive use that requires large sites, favoring rural areas due to lower land cost than urbanized areas Facilities are ideally located at the intersection of multiple modes of transportation Facilities are sited near raw materials, which typically originate in rural areas (e.g., agricultural products) Columbia County and other Columbia River counties produce and export agricultural products Deepwater ports allow for economical export of materials from rural areas while minimizing transport costs Rural laydown yards are ideal for bulky products such as wind turbine blades and towers Products can be transloaded from deepwater to shallow water vessels to allow transport farther up the Columbia River Some sites are within urban areas due to the presence of marine facilities and lack of available sites in preferred rural areas 	 Land use does not require public water or sewer infrastructure due to low employee density Process water, if any, could be obtained from existing PWW water sources Transportation infrastructure (roadway, marine, and rail) is already in place at a level sufficient for rural development

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IV. EXISTING EXAMPLES OF RURAL INDUSTRIES

Mackenzie surveyed a representative sample of precedent uses in the State of Oregon along the M-84/Columbia River corridor to demonstrate typical site location characteristics of potential uses. Information about individual businesses was derived from Mackenzie surveys, as well as third-party data sources including Dun & Bradstreet, Hoover's, and ESRI. This section describes characteristics of the precedent uses as a means of identifying common characteristics.

Columbia Pacific Bio-Refinery

Ethanol plant that shifted its business model to export crude oil, then shifted back to process and export ethanol.



Figure 5: Columbia Pacific Bio-Refinery

Industry: Ethyl Alcohol Processing Location: Rural Clatskanie, Oregon Rail: Yes Water Access: Yes Port Access: Yes, Port of St. Helens, Port Westward facility Employees: < 20 Acreage: 43 acres Maximum Employment Density: 0.5 jobs/acre

Pacific Ethanol

Pacific Ethanol is a leading producer of low-carbon renewable fuels. Its Columbia Ethanol Plant at the Port of Morrow in Boardman, Oregon produces corn ethanol for export.



Figure 6: Pacific Ethanol

Industry: Ethyl Alcohol Processing Location: Boardman, Oregon Rail: Yes Water Access: Yes Port Access: Yes, Port of Morrow (not deepwater access) Employees: < 50 Acreage: 25 acres Maximum Employment Density: 2.0 jobs/acre

Dyno Nobel

Chemical manufacturing plant processing ammonia/nitrogen-based fertilizer. The project is Oregon's largest fertilizer plant.¹⁷



Industry: Ammonia Fertilizer Processing Location: Deer Island, Oregon Rail: Yes Water Access: Yes Port Access: Yes, private (not deepwater access) Employees: < 75 Acreage: 62 acres Maximum Employment Density: 1.2 jobs/acre

Figure 7: Dyno Nobel

Astoria Forest Products

Astoria Forest Products exports over 75 million board feet of logs annually. It operates at Pier 1 and Pier 3 at the Port of Astoria.



Figure 8: Astoria Forest Products

Industry: Wood Products Processing and Transport Location: Astoria, Oregon Rail: No Water Access: Yes Port Access: Yes, Port of Astoria Employees: < 10 Acreage: 37 acres Maximum Employment Density: 0.3 jobs/acre

¹⁷ The Oregonian. Oregon's Largest Fertilizer Plant Dyno Nobel has Low Explosion Risk, Firefighters Say. April 25, 2013. http://www.oregonlive.com/environment/index.ssf/2013/04/oregons_largest_fertilizer_pla.html

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Auto Warehousing Inc./Honda

Processing and transport of wholesale automobiles for import/export.



Industry: Break Bulk Transport (Automobiles) Location: Portland, Oregon Rail: Yes Water Access: Yes Port Access: Yes, Port of Portland Employees: < 75 Acreage: 75 acres Maximum Employment Density: 1.0 jobs/acre

Figure 9: Auto Warehousing Inc./Honda

Port of Portland Terminal 4

Multiple businesses involved in the transport and processing of mineral bulk materials, automobiles, and liquid bulks. Firms include Kinder Morgan and Toyota Logistics.



Figure 10: Port of Portland Terminal 4

Industry: Deep Sea Transport, Bulk and Liquid Bulk Materials, Marine Cargo Handling Location: Portland, Oregon Rail: Yes Water Access: Yes Port Access: Yes, Port of Portland Employees: Est. 600 workers Acreage: 262 acres Maximum Employment Density: 2.3 jobs/acre

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Columbia Grain

Grain transfer and export facility at Terminal 5 at the Port of Portland



Figure 11: Columbia Grain

Industry: Dry Bulk Commodities Transfer, Grain Location: Portland, Oregon Rail: Yes Water Access: Yes Port Access: Yes, Port of Portland Employees: < 50 Acreage: 41 acres Maximum Employment Density: 1.2 jobs/acre



V. SITE NEED CHARACTERISTICS

The preceding examples have a shared commonality, access to deepwater ports with existing facilities. In some cases, proximity to natural resources (i.e. logging, agriculture) and lack of regional deepwater facilities highlights the importance of rail or river marine linkages. For example, eastern Oregon grain production is transferred via barge or rail to deepwater export facilities in and along the M-84/Columbia River corridor. Building on the examples in Section IV, this section catalogs the range of potential site characteristics required for the proposed uses.

Dependency on a Site-Specific Resource

The use profiles and industry classifications identified in Section III represent a cross-section of economic functions primarily engaged in the final transport, distribution, and processing of products for final export. These functions have a critical shared site need. Specifically, these functions require *proximity and direct access to deepwater transportation infrastructure, where there is typically an intermodal connection to rail and highway transportation facilities*. These uses were deliberately chosen for PWW's deepwater port and existing facilities to comply with OAR 660-004-0022(3), the state administrative rule allowing an Exception to Goal 3 for uses "significantly dependent on a unique resource located on agricultural land" including "river or ocean ports." Additionally, the proposed uses at this location are consistent with the very similar *Shaffer* factor specifying that, in order for a particular use to be deemed a rural industrial use, it must be significantly dependent on a site-specific resource and there is a practical necessity to site the use near the resource (in this case, the deepwater port and existing facilities at PWW).

For identified transport and distribution uses involved in the export or import of goods via deep sea loading and transport and marine cargo handling, this dependency is clear and by definition a requisite and essential function. These uses clearly require dock facilities capable of handling foreign export/import vessels, as well as an efficient and cost-effective network for inbound/outbound distribution across a range of commodity types. The viability and profitability of individual companies depends on efficient operations and reliable service.¹⁸ Low margins and high cost competitiveness make access and reliability (provided by multi-modal access) an economically-dependent function of the industry.

For processors that manufacture, alter, or package value-added products, users will seek sites that balance access to process inputs as well as transport/export of finished products. For producers of goods with domestic markets, in some cases deepwater access may be less critical. However, the uses identified in the Port's modified land use application are highly driven by foreign trade and the associated ocean marine transport, and Oregon's largest trading partners are along the Pacific Rim.¹⁹ Table 5 lists the state's top export partners in 2016. This list accounts for 90% of Oregon's export value. Among the top 20 export partners, 14 are Pacific Rim countries, including Canada and Mexico. These 14 markets account for 82% of all of Oregon's export value.

 ¹⁸ Dun & Bradstreet. Profile on Port, Harbor and Marine Terminal Management, accessed January 2017 http://www.hoovers.com/industry-facts.port-harbor-marine-terminal-management.1613.html
 ¹⁹ U.S. Census Bureau, U.S. Import and Export Merchandise trade statistics, accessed January 2017, https://usatrade.census.gov/

Rank	Trading Partner	Export Value (in Millions)			
Pacific Rim Countries					
1	China	\$5,227.7			
2	Malaysia	\$2,188.4			
3	Canada	\$1,997.1			
4	Vietnam	\$1,718.7			
5	Japan	\$1,452.4			
6	South Korea	\$988.2			
7	Taiwan	\$739.2			
8	Singapore	\$530.1			
9	Philippines	\$371.0			
13	Australia	\$294.4			
14	Thailand	\$290.7			
15	Mexico	\$289.6			
17	Hong Kong	\$250.0			
19	Indonesia	\$191.1			
	Total Export Value:	\$16,528.6			
	Other Trading Partners				
10	Germany	\$350.8			
11	United Kingdom	\$319.3			
12	Israel	\$303.8			
16	Netherlands	\$254.6			
18	Switzerland	\$224.0			
20	Ireland	\$172.0			

Table 5: Top 20 Oregon Export Partners (2016, through November)

In this context, multi-modal access at deepwater port sites, alongside the minimization of transport distance, is an essential operational and economic function as firms look to improve reliability of supplychain inputs and product delivery.

This is consistent with the Port's modified zone change application in which it has identified the deepwater port and its existing facilities at PWW as the single reason for taking an Exception to Goal 3, per Oregon Administrative Rules.²⁰ The uses that the proposed zone change and Goal 3 Exception would allow are significantly dependent on the deepwater port and facilities, which is one of only five public deepwater facilities in Oregon and one of only two rural public deepwater ports in the state. In addition, it would be the only deepwater port along the M-84/Columbia River corridor with capacity for large-lot industrial development if the Port's modified application is approved. The Port of St. Helens' Port Westward facility is approximately 50 miles closer to the Pacific Ocean than the Port of Portland, which has important implications regarding the site's economic potential and gives the site a locational advantage over Portland. The advantages and potential to site large-lot rural industrial development at PWW is contrasted

²⁰ OAR 660-004-0022(3)(a) is reproduced below:

⁽³⁾ Rural Industrial Development: For the siting of industrial development on resource land outside an urban growth boundary, appropriate reasons and facts may include, but are not limited to, the following:
(a) The use is significantly dependent upon a unique resource located on agricultural or forest land.
Examples of such resources and resource sites include geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports.



with the inability to site such uses at the Port of Portland, which lacks the necessary acreage with deepwater port access or facilities necessary to site the uses proposed by the Port, as described in Section VII.

Demand for Large, Flat, Contiguous Sites

The Port's original zone change application observed that heavy rural industrial uses require large lots (Record at 112). As described in Section III, the Port's proposed uses have low employment density, correlating to their need for large sites and consistent with the *Shaffer* factor specifying that rural uses employ a small number of workers. Furthermore, rural industrial uses have a need for flat, contiguous sites to accommodate their facilities while allowing for efficient operations.

For uses defined in this report, a large share of physical space is required for the storage and movement of commodities in a rural industrial setting. Bulk commodities including aggregates, steel, logs, wood chips, liquid bulks, and automobiles, for example, all require extensive space for circulation, storage and laydown yards. In the case of uses involving the presence of hazardous materials or other externalities, required buffering increases users' overall site needs. Another contributing factor to large site needs is land banking. Because the proposed uses' storage needs for products and cargo is quite high, uncertainty about future space needs leads firms to locate on sites with the flexibility and scale to accommodate future growth. The PGE leasehold at Port Westward is a classic example of this kind of land banking, and is clearly explained by PGE in its 2016 letter in Appendix 2.

Preference for a Rural Location

For the proposed uses identified in the Port's modified land use application, several considerations impact a firm's preference for a rural as opposed to urban location. As previously discussed, proximity to rural production inputs, rural destinations, and raw materials provide considerable cost advantages. In many cases, natural resource inputs are heavily concentrated in rural areas, leading to rural location preferences where other factors are equal. Common examples of this condition in Oregon include the seafood, timber, and wood products industries. Within the proposed PWW uses, local examples dependent on natural resources include mills, bark processors, wood product manufacturers, and sand and gravel mines and their associated bulk shipping operations. The Port's proposed uses for PWW have been selected in recognition of the types of industries that prefer rural locations, consistent with the *Shaffer* factor specifying that the industries appropriate for rural areas should be those typically located in rural areas.

Low employment densities translate into a reduced need for proximity to a deep labor pool, consistent with the *Shaffer* factor specifying that rural uses employ a small number of workers. This allows firms to seek locations with other cost advantages, namely rural locations with lower land costs that do not require a competitive labor advantage.

Another consideration includes the operational cost advantages with respect to labor and real property. Specific to labor, rural locations do not command the price premium for units of land and labor. Outlined in Table 6 as an example, the marginal cost of labor inputs is one-third cheaper in Columbia County compared to the Portland metro area.

Industry	Portland MSA	Columbia County Alone
Total Average Wage	\$55,523	\$36,892
Manufacturing Sector	\$79,140	\$52,175
Wholesale Trade Sector	\$69,935	\$50,246
Transportation & Warehousing Sector	\$46,681	\$37,080

Table 6: Average Annual Wage by Industry

Source: Oregon Employment Department, Quarterly Census of Employees and Wages (QCEW), 2015 https://www.qualityinfo.org/ed

An additional consideration for a firm's rural location decision is the presence of potential externalities on neighboring properties or the broader community. This commonly leads to sites that include adequate buffers between the use and neighboring uses, a condition that is cost-prohibitive in urban markets where land costs are high, suitably large sites are scarce or nonexistent, property is generally encumbered in some way (e.g., environmental issues, title and/or zoning restrictions, etc.), sites are in proximity to conflicting uses, or some combination of the above.

In the case of identified liquid bulk and natural gas products (ammonia, ethanol, fertilizers, methanol), where the likelihood of a hazardous event is exceptionally low, firms will still generally not consider locating in densely populated areas or near schools, housing, or other sensitive receptors. This assessment is consistent with the *Shaffer* factor specifying that the industries appropriate for rural areas should be those typically located in rural areas.

While these factors are certain to be on the list of site selection criteria, we conclude that access to the rural deepwater port and associated facilities is the most significant factor for Port Westward's considerable development potential. Certainly, the deepwater port is the most appropriate reason under OAR 660-004-0022 for taking an Exception to Goal 3 for the proposed expansion area at Port Westward. It is exactly the situation envisioned by the Administrative Rule for allowing a "Reasons" Exception for uses "significantly dependent upon a unique resource located on agricultural or forest lands" including "river or ocean ports."

Other port facilities (even some located within an urban growth boundary) may offer some of these characteristics, and in fact we do find some of the Port's proposed uses located within urban growth areas. However, in most of those cases, these sitings pre-date the state's growth management system. Furthermore, where this is true, the proposed uses largely opt to locate in port areas that offer land and site characteristics like those typically available in rural locations, as well as proximity to markets. Further, Port Westward is the state's only rural deepwater port in Oregon serving the M-84/Columbia River corridor, and the only such deepwater port with existing facilities in place for deepwater marine transport and acreage available to site the uses proposed by the Port as part of this modified application. Thus, if the Port's modified application were not approved, all future rural industrial uses dependent on deepwater port access along the M-84/Columbia River corridor would need to locate in urban areas (if suitable sites could be found at all), thereby exacerbating the existing urban industrial land deficit and continuing the existing trend of forcing rural industrial uses to locate in urban areas.



Limited Need for Public Facilities

Rural industrial uses generally have a low demand for public facilities such as municipal water systems due to their low employment density and low floor area per acre. Given that rural industrial uses generally have limited access to municipal water systems, the types of industries that choose to locate at rural sites will therefore have limited needs for potable water for industrial processes, which is consistent with the *Shaffer* factor specifying that rural uses do not require public facilities or services. In addition, because the Port does not intend to provide urban services or facilities at PWW, the existing level of facilities acts as a natural barrier to industrial uses that are urban in nature.

Industry may have a need for industrial process water (such as cooling water), which can be obtained from the Columbia River rather than from a public water system. Access to Columbia River water and groundwater for industrial process needs is a valuable resource for some industrial users. These water needs can be provided under the available water rights and private on-site water intake infrastructure.

Similarly, rural industrial uses generally have a low demand for municipal sanitary sewer systems due to their low employment density and low floor area per acre. For instance, employees at rural factories may generate approximately 35 gallons of wastewater per day per person,²¹ which equates to approximately 55 gallons per day per acre based on the average employment density of 1.5 jobs per acre tabulated in Table 1. Total flows would be the sum of 55 gallons per day per acre and the specific wastewater flows generated by the industrial process itself, which vary depending on the use. Cooling water or other industrial discharges may require significantly less treatment than municipal wastewater treatment systems, and the Port operates and maintains a discharge system for tenants' process water at PWW.

The transportation demands posed by rural industrial uses in general, and port terminals in particular, are generally lower than urban industrial uses, as demonstrated by the data from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9th Edition.

²¹ Goldstein, Steven N. and Walter J. Moberg, Jr. Wastewater Treatment Systems for Rural Communities. Washington, D.C.: Commission on Rural Water, 1973. http://www.ircwash.org/sites/default/files/301-73WA.pdf



ITF Land Use Code	Description	Average Daily Trips per Acre	Rural or Urban
010 Waterport/ Marine Terminal	Areas used for the transfer of materials between land and sea and possibly for the storage of these materials	11.93	Rural
110 General Light Industrial	Facilities devoted to a single use with an emphasis on activities other than manufacturing	51.80	Urban
130 Industrial Park	Mix of manufacturing, service and warehouse facilities	61.17	Urban
140 Manufacturing	Areas where the primary activity is the conversion of raw materials or parts into finished products	38.88	Rural
770 Business Park	Group of flex-type buildings, may include 20- 30% office/commercial and 70-80% industrial/warehousing	149.79	Urban

Table 7: Trip Generation by ITE Land Use Code

Land Use Codes 010 and 140 correspond to industrial uses typical in rural areas, while Land Use Codes 110, 130, and 770 correspond to industrial uses typical in urban areas. As detailed in Table 7, the rural industrial uses have lower trip rates than the urban industrial uses, resulting in a lower transportation demand due to lower employee density.



VI. NEEDS ASSESSMENT

The needs assessment in this section identifies market trends among uses in the Port's zone change application and potential to capture future growth.

Geographic Market Area

The Port Westward site is an inherently unique site, offering a rare mix of affordable land, access to rail, transportation, and a deepwater port with existing port facilities. Port Westward is of statewide significance and strategic economic focus. Specifically, ORS 777.065 states that

...development and improvement of port facilities suitable for use in world maritime trade at the Ports of Umatilla, Morrow, Arlington, The Dalles, Hood River and Cascade Locks and the development of deepwater port facilities at Astoria, Coos Bay, Newport, Portland and St. Helens is declared to be a state economic goal of high priority.

Demand for the proposed uses at Port Westward will be driven predominately by global trade and the flow of goods from, to, and through the State of Oregon, specifically along the M-84/Columbia River corridor. Given the statewide significance of the site, the geographic market area for the subject site is defined as counties along, in adjacency, or with direct connectivity to the M-84/Columbia River corridor. This geographic area represents the downstream linkages of domestic production, as well as the corridors for out-of-state commerce the proposed site would serve.

Growth in Demand: Trends in Foreign Trade Volume

The State of Oregon is strategically positioned to capitalize on growth in purchasing power in emerging foreign markets, specifically countries in the Pacific Rim. The potential and strategy for export expansion has been heavily studied in recent years in the Portland Metropolitan Area.^{22, 23} While foreign trade may be facing new headwinds in a strengthening dollar and shifting political climate, opportunities for Oregon remain strong and comparatively stronger than other states and regions.

This dynamic is demonstrated in the trend of Oregon's marine export market. Table 8 displays the change in export volume (by vessel shipping weight) for key vessel export commodities. These eight commodities represent 95% of all marine export volume (excluding containerized vessels). Table 8 highlights extensive growth in key emerging sectors, including timber, specialty foods, miscellaneous agricultural products, and chemicals/fertilizers.

²² The Brookings Institute. Greater Portland Export Plan (2012). https://www.brookings.edu/wp-content/uploads/2016/07/ 02_export_overview_portland.pdf

²³ The Brookings Institute. Greater Portland Global, Global Trade and Investment Plan (2014).

https://www.greaterportlandinc.com/assets/documents/Resources/GPG%20Trade%20and%20Investment%20Plan.pdf



	Volume (in millions)			Percent Change		
Industry	2005	2010	2015	'05-'10	'10-'15	'05-'15
1111 Oilseeds & Grains	7,471.4	6,867.0	3,655.9	-8%	-47%	-51%
1119 Other Agricultural Products	676.2	847.1	693.3	25%	-18%	3%
1133 Timber & Logs	95.4	104.1	399.4	9%	284%	319%
3114 Fruits & Veg Preserves &						
Specialty Foods	69.3	123.3	165.1	78%	34%	138%
3211 Sawmill & Wood Products	1,410.7	1,690.9	1,587.0	20%	-6%	12%
3221 Pulp, Paper & Paperboard						
Mill Products	446.5	344.0	289.0	-23%	-16%	-35%
3251 Basic Chemicals	24.4	141.2	552.5	478%	291%	2,163%
3253 Pesticides, Fertilizers &						
Other Agr. Chemicals	1.7	2,484.0	2,000.1	147,553%	-19%	118,790%
1111 Oilseeds & Grains	7,471.4	6,867.0	3,655.9	-8%	-47%	-51%

Source: U.S. Census Bureau, U.S. Import and Export Merchandise Trade Statistics. https://usatrade.census.gov/

Demonstrated Demand: Local Deal Velocity

Perhaps the most compelling evidence of demonstrated need for marketable industrial sites at Port Westward lies directly in the interest and inquiries for sites at the subject property. As noted in Section IV, the Port of St. Helens and Business Oregon maintain an inventory of recent site inquiries and economic development leads at the Port (see Appendix 3). There have been many more inquiries that did not develop to the point of being listed in Appendix 3. Details about individual prospects is limited to size demand and general industry description (and in some cases expected investment and employment) to protect the confidentiality and proprietary nature of business decisions.

As illustrated in Figure 12 and Figure 13, since 2007 there have been over 40 active prospects seeking land at Port Westward totaling over 2,800 acres of rural industrial land. These prospects have been heavily concentrated in energy production (solar, biomass, other); chemical/liquid bulk (ethanol, fertilizer, methanol, crude oil, other) processing and transport; and dry bulk products (iron, coal, grain) transport. While sitings have been prohibited by regulatory (e.g., PA-80 zoning) and physical constraints (e.g., wetlands and existing leaseholds), this velocity is reflective of the site's economic development potential.





SOURCE: Port of St. Helens, Business Oregon

Figure 12: Port Westward Acreage Inquiries by Industry, 2007-2016

Within these sectors, the site need profile is consistent with what we observed across existing firms in peer locations, previously reviewed in Section IV. Site needs ranged from 10 to over 300 acres in size. The most common request was for sites between 50 and 100 acres, as illustrated in Figure 13. Over just a 10-year period, an interval that included the worst economic downturn in a generation, there were 11 potential deals at Port Westward of 100 acres or larger.



SOURCE: Port of St. Helens, Business Oregon

Figure 13: Port Westward Inquiries by Site Need, 2007-2016

Collectively, this prospect list represents over 2,800 acres of potential demand over a 10-year period. This amounts to more than three times the size of the zone change area. Because the data to calculate this rate was observed over a period that included a severe recession and tepid recovery, we can assume that



this rate of business activity represents a conservative assessment of future velocity, all else being equal. At this rate of demand velocity, capturing 15% of similar inquiries would fully absorb the PWW zone change area over a 20-year period. Given observed market interest and recent activity in similarly configured areas, we would consider this to be a completely feasible scenario. However, the economic outlook for Columbia County and PWW is likely to be more favorable in the context of emerging supply and demand factors discussed here.

Limited Supply of Competitive Sites

As detailed in Section VII, the supply of adequately sized, rural properties with deepwater access and port facilities in Oregon is increasingly limited. A growing lack of supply will increase Port Westward's potential market capture of future market growth and development opportunities. See Section VII for further discussion demonstrating that alternative sites lack available developable land.

Improved Marketability

Marketability of the Port Westward property would improve considerably with regulatory entitlements in place. The top site selection criteria for major project sitings is time to market. Historically, this has been a barrier for Port Westward. The removal of the zoning barrier would provide certainty to the market, reduce development timelines, and encourage investments that also further promote readiness and exposure.

Continued Strong Growth in Foreign Demand

The economies of Oregon's primary trading partners are expected to exhibit continued economic growth over the coming decade. Among these nations, average annual growth in real gross domestic product is expected to range from 6.5% (Vietnam) to 1.0% (Japan) over the next 10 years (see Table 9). Strong economic growth in these economies will translate into growth in demand for all goods and services.

Nation	2016-2026 GDP Growth (annual)
Australia	3.4%
Canada	2.0%
China	4.9%
Indonesia	5.6%
Japan	1.0%
Korea	2.9%
Mexico	2.8%
Hong Kong	3.3%
Malaysia	4.5%
Philippines	5.2%
Thailand	3.6%
Vietnam	6.5%

Table 9: Projected Growth in Pacific Rim Economies²⁴

Deteriorating Trade Advantage of Foreign Producers

Incomes in foreign markets that produce similar goods as the United States are increasing at faster rates than domestically.²⁵ Over time, this condition will have the dual impacts of increasing foreign demand (due to more wealth in foreign markets that purchase U.S. goods) and deteriorating the labor cost advantage of foreign production. In other words, the labor cost advantage of foreign markets that led to the offshoring trend over the last 20 years will begin deteriorating. With transportation costs stabilizing, it is hypothesized²⁶ that a U.S. production "reshoring" trend is emerging. This in turn will place greater pressure on the demand for sites suitable for domestic production, processing, and export capacity.

Commodity Market and Trade Outlook

Despite near-term headwinds resulting from a strong U.S. dollar, the outlook for U.S. export market growth remains strong over the intermediate term. A recent report from Oxford Economics detailed the intermediate-term outlook for U.S. foreign trade.²⁷ Some excerpts on export demand growth include:

Through 2030, total export growth is expected to average 5% annually. The largest contributors to
growth include transportation equipment, machinery, and chemicals. See Figure 14.

²⁴ OECD (Organisation for Economic Co-operation and Development) Estimates for these countries were derived from the OECD long-range economic forecast data.

OECD (2017), GDP long-term forecast (indicator). doi: 10.1787/d927bc18-en (Accessed on 01 February 2017) https://data.oecd.org/gdp/gdp-long-term-forecast.htm

Data for non-OEDC countries was aggregated from the International Macroeconomic Data Set and published by the U.S. Department of Agriculture.

US Department of Agriculture (February 2017), USDA Agricultural Projections to 2025. (Accessed on 01 February 2017) https://www.ers.usda.gov/publications/pub-details/?pubid=37818

²⁵ OECD (2014), "Shifting Gear: Policy Challenges for the next 50 Years", OECD Economics Department Policy Notes, No. 24 July 2014. https://www.oecd.org/eco/growth/Shifting%20gear.pdf

²⁶ There is a comprehensive body of research and analysis covering U.S. reshoring prospects. A broad library of literature is compiled by "The Reshoring Initiative". http://reshorenow.org/main-reshoring-library/

²⁷ Oxford Economics. "United States Trade Report". HSBC Research Report. (December 2016)





Source: Oxford Economics. https://globalconnections.hsbc.com/global/en/tools-data/trade-forecasts/us

Figure 14: Average Annual Export Growth by Sector (2016-2030)

- "U.S. Exports are expected to increasingly find their way to markets in developing economies, as their medium-term growth prospects remain bright. In particular, the economies of Asia (excluding Japan) are expected to grow in importance as export destinations, increasing their share of U.S. merchandise exports from 20% in 2015 to 23% by 2030."
- "The U.S. shale gas 'revolution' has also triggered significant investments in the capacity of many energy-intensive industries. In particular, chemicals and plastics that benefit from proximity to feedstock supplies of oil and gas are expected to continue to contribute strongly to overall growth in merchandise exports in the decade to 2030."
- The fastest growing export markets include several of Oregon's most strategic trading partners (see Table 10).



Country	2016-2020	Country	2021-2030
Vietnam	9%	Vietnam	9%
UAE	7%	China	9%
India	6%	India	9%
Mexico	5%	Malaysia	8%
Malaysia	5%	Turkey	8%
Turkey	4%	UAE	6%
Canada	4%	Saudi Arabia	6%
Singapore	3%	Canada	6%
Japan	3%	Korea	6%
Australia	3%	Mexico	5%

Table 10: Fastest Growing Export Trade Routes, Average Annual Export Growth (2016-2030)

Source: Oxford Economics https://globalconnections.hsbc.com/global/en/tools-data/trade-forecasts/us

Port Westward Share of Oregon's Economic Outlook

The Oregon Employment Department produces long-range economic forecasts by industry every two years to assist in long-range planning and revenue forecasting. In its most recent forecast,²⁸ Oregon's manufacturing, wholesaling, and transportation sectors are expected to add over 35,000 jobs over the next 10 years alone. Most growth at PWW will fall within these sections. Assuming an average job density of 1.5 jobs per acre as reported earlier in this assessment, build-out of the Port Westward zone change area would represent 3.8% of the ten-year total. Extrapolated over a 20-year period, build-out of the Port Westward zone change area, at a facility considered to be a strategic economic asset, would comprise 1.6% of statewide industrial employment growth.

These captures represent an exceedingly small share of projected growth in commerce relating to the production and movement of goods in Oregon. Given PWW's identified role of significance in accommodating future growth, coupled with the scale of known recent opportunities (see Appendix 3), it is reasonable to expect that the full site could be absorbed within a 20-year period.

²⁸ Oregon Employment Department. "Oregon Industry Employment Projections, 2014-2024". (June 2016). https://www.qualityinfo.org/documents/10182/92203/Oregon+Industry+Employment+Projections+2014-2024?version=1.5



VII. ALTERNATIVE SITES ANALYSIS

OAR 660-004-0020 specifies that new exception areas are allowed with adequate justification, including demonstration that "areas that do not require a new exception cannot reasonably accommodate the use." This section presents an alternative sites analysis to demonstrate the appropriateness of the requested zone change for the Port Westward site and to illustrate why other sites in the M-84/Columbia River corridor are not viable for the proposed uses.

The Port's modified application would limit the proposed uses to those rural industries which require access to deepwater port facilities. The alternatives analysis is predicated on this fundamental site need, which limits the range of site alternatives to port facilities with deepwater access. Any alternatives that do not offer this significant use-dependent resource are not competitively valid for the proposed set of uses and, as a result, are eliminated from further consideration. As stated in LUBA's remand decision, "...if the county had limited the proposed uses to port-dependent uses that require deep-water access, then the county could easily reject alternative sites that do not provide deep-water access." In response, the Port has modified its request to reflect that guidance.

Port of St. Helens Properties

The Port owns land at Port Westward and at other locations in Columbia County, discussed below.

Existing Vacant Port Westward Property

As detailed in Section II, the existing PWW industrial park has multiple development constraints, including expansive long-term leaseholds; wetlands that cover half the land area and, as explained in Section II, would be cost-prohibitive to fill; floodplain; transmission lines; roadways; utilities; drainage facilities; levees; conservation easements; and so forth. These site constraints divide the property into small areas that are not conducive to large-scale rural industrial development which needs large, flat, contiguous sites, as noted in Section V. We have identified that the southeast corner of the Port's existing PWW property could provide one small contiguous development site outside PGE's lease area. While that area has value and is available for development, its size is insufficient for addressing the land needs targeted by the Port in its modified application or for competing on a national scale for large-lot industrial businesses (Record at 93). Additionally, that last single site will not satisfy the economic demand for rural industrial sites in Columbia County, the M-84/Columbia River corridor, or Oregon as a whole, as demonstrated in Section VI which noted that over a 20-year period, build-out of the Port Westward zone change area (if this application is approved) would comprise just 1.6% of statewide industrial employment growth. Furthermore, as this is the last remaining vestigial portion of PWW available for development, the Port and Columbia County have a responsibility to plan for the future by providing developable land with appropriate zoning that can accommodate rural industrial uses. Therefore, the existing Port Westward site by itself is inadequate to serve an economic development need.

Other Port of St. Helens Properties

As noted in the original application (Record at 94), there are several other sites owned by the Port of St. Helens, including the Columbia City Industrial Park, McNulty Creek Industrial Park, Milton Creek Industrial Park, Multnomah Industrial Park, Railroad Corridor Park, Scappoose Bay Marine Park, and Scappoose Industrial Park. None of these sites has deepwater port access or related facilities and is therefore inappropriate for the proposed PWW uses in the Port's modified application.



Oregon's Deepwater Ports

Among Oregon's 22 ports with marine access, cataloged in Appendix 4, only five ports offer the unique site characteristic of deepwater access (see Table 11 and Figure 15). Of the nine ports with Columbia River access, only three are deepwater facilities (Port of Astoria, Port of Portland, and Port of St. Helens' Port Westward site) and, as discussed above, Port Westward provides the only non-urban deepwater port access along the state's entire M-84/Columbia River corridor.

As detailed in Table 11, Oregon's five public deepwater ports include the Port of Astoria, the Oregon International Port of Coos Bay (Port of Coos Bay), the Port of Newport, the Port of Portland, and the Port of St. Helens (Port Westward site). The Ports of Astoria, Newport, and Portland are located within urban growth boundaries, the Port of St. Helens' Port Westward site is outside an urban growth boundary, and the Port of Coos Bay has deepwater facilities both inside and outside an urban growth boundary. Neither the Port of Newport nor the Port of Coos Bay serve Columbia River commerce. The only other rural Port is the Port of Tillamook Bay, which lacks marine access entirely (see Appendix 4).

Port	Location	Columbia River Access	Rail Access	Urban or Rural ¹
Port of Astoria	Astoria	Yes	Yes	Urban
Oregon International Port of				
Coos Bay	Coos Bay	No	Yes	Urban & Rural
Port of Newport	Newport	No	No	Urban
Port of Portland	Portland	Yes	Yes	Urban
Port of St. Helens (Port	Columbia			
Westward site)	County	Yes	Yes	Rural
Note:				

Table 11: Oregon's Deepwater Ports

1. "Urban" means the port is in city limits or in an urban growth boundary, while "rural" means the port is outside an urban growth boundary.



FIGURE 15. OREGON PORTS

LEGEND

- State Boundary
- **Oregon Counties**

Oregon Ports

- **Deepwater Ports**
- Non-Deepwater Ports
- (U)= In Urban Growth Boundary
- (R)= Rural, outside Urban Growth Boundary



NAD 83 HARN, Oregon North Lambert Conformal Conic

Date: 2/27/2017 Map Created By: KWB File: OregonPorts Project No: 2160462.00



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Port of Astoria

The Port of Astoria has deepwater facilities at Central Waterfront and Tongue Point, each of which is discussed in turn below.

Central Waterfront

The deepwater port facilities at the Port of Astoria's Central Waterfront includes three piers. The main industries served out of the Port of Astoria include log exports, U.S. Military ships and research ships, cruise boats, and seafood processing. Astoria Forest Products is the main tenant occupying space at Pier 1 and most of Pier 3.



Source: Port of Astoria

Figure 16: Port of Astoria's Central Waterfront

There is no vacant land available at the Port of Astoria Central Waterfront deepwater facilities. Accordingly, the Port of Astoria Central Waterfront is not a viable candidate for the PWW proposed uses.

North Tongue Point

The Port of Astoria owns the approximately 34-acre paved parcel at the northern portion of the city limits, zoned S1 Marine Industrial Shorelands. Per the Port of Astoria, Tongue Point facilities are a former military installation used by the Navy in World War II. Per the Port of Astoria, existing facilities include:

- Five finger-piers with 15,000 linear feet of dock space
- 30 acres of paved tarmac surface
- Roughly 130,000 square-feet of existing built warehouse space
- Deepwater rail access
- An industrial boat ramp

Tongue Point activities include seafood processing (Del Mar Seafoods) fabricated metal products (J&H Boatworks), and marine environmental and construction services (J.E. McAmis Inc., NRC Environmental Services, WCR Marine & Construction Inc.).²⁹ The parcel currently has several smaller warehouse spaces available for lease.³⁰

The southern portion of North Tongue Point, Lot 5800, is a 15-acre vacant parcel of land owned by the Oregon Department of State Lands (DSL). A two-acre landfill was discovered in 1983 on the extreme southern portion of the DSL site; 1992 sampling found groundwater beneath the landfill contaminated with heavy metals and PCBs above drinking water standards. Landfill remedial activities commenced in 2003. The site is still undergoing various monitoring and remedial activities.³¹ Given the insufficient acreage available for development and the level of remediation that remains, the property is unable to site the uses proposed by the Port and additionally is unlikely to be marketable from both an economic and a time-to-market perspective. This assessment was confirmed by the Oregon DSL property manager for the site.³²

²⁹ A full list of tenants can be found at http://portofastoria.com/Tongue_Point_Tenants.aspx

³⁰ Rates for North Tongue Point Moorage can be found here: http://portofastoria.com/Tongue_Point_Moorage.aspx

³¹ http://www.deq.state.or.us/lq/ECSI/ecsidetailfull.asp?seqnbr=171#actions

³² Phone Interview with Amber Ross, Property Manager for Oregon Department of State Lands, March 1, 2017

Μ.



Source: Port of Astoria

Figure 17: Port of Astoria's North Tongue Point

In light of the insufficient acreage available to accommodate the uses proposed by the Port in its modified application, and in the context of the other factors discussed above, the North Tongue Point area is not considered available for siting any of the proposed uses.

South Tongue Point

South Tongue Point consists of approximately 137 acres in four parcels, three of which are owned by the Oregon Department of State Lands, and one of which is owned by the U.S. Army Corps of Engineers. The area is zoned S1 Marine Industrial Shorelands and S2 General Development Shorelands Zone. Clatsop Community College is currently in negotiations to acquire all three state-owned parcels for its use and has a purchase and sale agreement in place. The U.S. Army's Joint Base Lewis-McChord is proceeding with investigations to repurpose the Army Corps of Engineers' property for use as an Army training facility.

According to an Oregon Department of State Lands Property Manager, industrial developers have previously inquired about developing these parcels of land, and have received extensive negative feedback from the community about developing this area for industrial purposes.³³ The area is home to wetlands and other environmentally sensitive areas that provide crucial tidal habitat for threatened salmon to acclimate before heading to the ocean, as well as habitat for other wildlife.

In light of the insufficient acreage being available to accommodate the uses proposed by the Port in its modified application, and in the context of the other factors discussed above, the South Tongue Point area is not considered available for siting any of the proposed uses.

³³ Phone Interview with Amber Ross, Property Manager for Oregon Department of State Lands, March 1, 2017

Μ.



Source: Port of Astoria

Figure 18: Port of Astoria's South Tongue Point

Port of Portland

The Port of Portland is Oregon's largest export area, offering multiple terminals with access on both the Columbia and Willamette Rivers. The primary export/import terminals, Terminals 4, 5, and 6, measure 262, 159, and 419 acres, respectively. Primary commodities processed at these facilities include grain, automobiles, mineral bulk products, steel slab, and liquid bulks. These terminal facilities are largely built out.

The Port of Portland has previously pursued development of additional port facilities at West Hayden Island. However, after concluding that development was not possible, future West Hayden Island development has been indefinitely placed on hold. In 2014 the Port of Portland withdrew its annexation proposal from further consideration by the City of Portland in light of significant development obstacles that the Port of Portland deemed to be insurmountable. The January 8, 2017 letter from the Executive Director of the Port of Portland to the Mayor of the City of Portland, included in Appendix 5, demonstrates that the Port of Portland has determined that it is economically infeasible to develop West Hayden Island given the regulations it would be facing at the federal, state, and local levels.

In the letter, the Executive Director states that "[T]he [Portland] Planning and Sustainability Commission (PSC) has recommended annexation, but on terms that render the development of the 300-acre marine terminal parcel impossible." The letter also states, "From our conversation, I understand that you believe the Council is unwilling to take action on a modified proposal. Based upon your assessment that the Council's policy choice is to not bring forward a package that is viable in the market, the Port will not continue with the annexation process at this time and withdraws its consent to annexation" and "The city, unfortunately, will now have to deal with the consequences of a severe shortfall in industrial land." The letter elsewhere explains that, given the regulatory burdens West Hayden Island faces, development will be economically infeasible. As the Executive Director explains, "The Port is enterprise funded: only 4 percent of our revenues come from taxes. Any development at WHI must meet basic, sustainable market requirements. The PSC recommendations put the development cost of the property at about double its



value in the market." Further, as the Executive Director makes clear, it is not only the local regulations that make development of West Hayden Island infeasible:

"Furthermore, the PSC recommendations exceed what is required by Goal 5 by obligating us to go back at the time of development for further review for any docks or other in water development that would be integral to the development of a water dependent use (on top of the lengthy and contentious, federal and state permitting processes). This type of approach does not give us any assurance that we'll have the opportunity to actually develop the property once annexation occurs."

Finally, West Hayden Island currently has no deepwater port dock facilities and would require dredging to construct such facilities. Given these conditions, the Port of Portland's statement in Appendix 5, and the fact that circumstances have not changed since 2014, we conclude that development of West Hayden Island is not economically or practically feasible and therefore not viable for PWW proposed uses.



Source: Port of Portland

Figure 19: Port of Portland Terminals

The Port of Portland facilities are approximately 50 miles upriver from the Port Westward site. As noted earlier, the Port of St. Helens' Port Westward facility therefore has a locational advantage over Port of Portland. As the Port of Portland deepwater facilities are largely built out without the necessary acreage



to site any of the kinds of uses proposed by the Port of St. Helens, the Port of Portland is not a viable candidate for PWW proposed uses.

Port of Newport

The Port of Newport is a deepwater port along Oregon's central coast. The Port of Newport is located 115 nautical miles from the mouth of the Columbia River. Over 60% of Oregon's manufacturing, warehousing, and transportation-based economy is located along the Columbia River corridor (M-84 Marine Highway Corridor), based on employment data from 2015.³⁴ For commerce beyond Oregon, the confluence of national or regional waterways (Columbia River/Snake River system), freeways (I-5, I-84), and rail networks (Union Pacific and BNSF Class I rail lines) occurs at the Portland metropolitan area only 50 nautical miles from PWW, but over 200 nautical miles from Newport. In this respect, properties in Newport are not economically comparable to PWW to serve the M-84/Columbia River corridor economy. Accordingly, the Port of Newport is not a viable candidate for PWW proposed uses as it does not serve the M-84/Columbia River corridor or the Portland metropolitan area.

Oregon International Port of Coos Bay

The Oregon International Port of Coos Bay is a deepwater port which serves the southern Oregon market. The Port of Coos Bay facilities are located 200 nautical miles from the mouth of the Columbia River and over 300 nautical miles from Portland. For the reasons noted in the discussion of the Port of Newport, the Oregon International Port of Coos Bay is not a viable candidate for PWW proposed uses as it does not serve the M-84/Columbia River corridor or the Portland metropolitan area.

Alternative Sites Raised by Objectors

During prior proceedings, objectors suggested several sites as alternatives to the proposed exception area and zone change at Port Westward. The record contains extensive analysis of these sites based on the original proposed uses. As stated in LUBA's remand decision, "...if the county had limited the proposed uses to port-dependent uses that require deep-water access, then the county could easily reject alternative sites that do not provide deep-water access." Now that the Port has modified the application to restrict the proposed uses to rural industries dependent on deepwater port access, the alternative sites are each analyzed based on this requirement. Port facilities in Astoria and Portland are addressed above while the remaining sites are addressed below.

Prescott

Objectors suggested that the site of the former Trojan nuclear power plant, south of Prescott, and additional property north of Prescott should be assessed as alternatives. According to the record, both of these sites are owned by PGE (Record at 95). As neither site has deepwater port access, they are inappropriate for the proposed PWW uses.

³⁴ Oregon Employment Department. Quarterly Census of Employment and Wages (QCEW) (2015). https://www.qualityinfo.org/ed

Columbia City

There is no property within or near Columbia City limits with deepwater port access, so this area cannot reasonably accommodate the proposed uses.

St. Helens Boise Cascade Paper Mill

The paper mill site has no deepwater port access, so this area cannot reasonably accommodate the proposed uses.

Mayger

There is no property near Mayger with deepwater port access, so this area cannot reasonably accommodate the proposed uses.

Portland Area Urban Growth Boundary

The Portland area Urban Growth Boundary (UGB) has only one deepwater port that could be considered an alternative to the Port Westward site. However, as documented above, the Port of Portland's facilities are largely built out, lack available developable land, or are unable to develop in the foreseeable future (e.g., West Hayden Island). Consequently, the Portland area UGB cannot reasonably accommodate the proposed uses.

Rainier

The City of Rainier and nearby unincorporated Columbia County have industrially-zoned land along the Columbia River near the Lewis and Clark Bridge. Some of this land is utilized by the Teevin Bros. log yard and the United States Gypsum wallboard manufacturing plant, both of which make use of private waterfront access. Excluding these two facilities, the site is highly parcelized (as noted in the record), which poses an economic and timing hurdle for potential industrial users seeking large, contiguous sites without having to purchase multiple properties. The degree of lot consolidation required to yield a large developable site would take longer than many industrial users are willing to endure due to the need to complete multiple real estate transactions following repeated negotiations. Most significantly, Rainier does not have deepwater port facilities (Record at 101), so it cannot reasonably accommodate the proposed uses.

Alternatives Analysis Summary

As documented above, the four other deepwater ports in Oregon have constraints on available land, rail access, nearby incompatible uses, and market factors. Only two of the five public deepwater port locations, Coos Bay and Port Westward, are in rural areas, and each of these serves different markets, with only the Port Westward facility serving the M-84/Columbia River corridor and Portland metropolitan region. The other alternative sites analyzed here lack deepwater port access entirely. As a result, none of the alternative sites is higher-ranked for PWW's proposed uses.



VIII. CONCLUSION AND RECOMMENDATIONS

This report offers a technical evaluation of the proposed goal exception, comprehensive plan amendment, and zone change proposed by the Port of St. Helens for property at Port Westward, as modified in response to the LUBA remand. This analysis provides evidence that the five proposed uses in this modified application are rural in nature, have a demonstrated need and are dependent on deepwater port access. This evaluation demonstrates that other sites that do not require a new exception cannot reasonably accommodate the proposed uses, as required by administrative rule. Finally, this investigation has determined that the existing Port Westward Industrial Park has insufficient developable area to satisfy local and statewide economic demand for the proposed rural export industries, but that increasing the developable area would capitalize on the site's locational advantages.

As noted in Columbia County's supplemental findings for Ordinance 2014-1 approving the Port's original application, "Port Westward and the proposed expansion land benefits from existing infrastructure and services that need only be extended to a new development site (rather than developing all new infrastructure) and an existing deep-water port and multi-modal transportation support." Expanding the footprint of the Port Westward Industrial Park allows for efficient use of existing facilities at current levels, such as power, gas, transportation, and other systems that may currently be underutilized, rather than requiring additional investment at other locations.

Based on this evidence, we recommend that the Port proceed with the modified application seeking authorization from Columbia County for an exception area and zone change to RIPD to accommodate the following specific uses:

- Forestry and Wood Products processing, production, storage, and transportation;
- Dry Bulk Commodities transfer, storage, production, and processing;
- Liquid Bulk Commodities processing, storage, and transportation;
- Natural Gas and derivative products, processing, storage, and transportation; and
- Breakbulk storage, transportation, and processing.

APPENDIX 1

PGE MAP OF BEAVER – PORT WESTWARD GENERATION PROJECT PROPERTY BOUNDARY LINES, LEASE BOUNDARY LINES, EXISTING AND PROPOSED EASEMENTS



6. AN EASEMENT FOR RIGHT-OF-WAY TO BUILD, CONSTRUCT, RECONSTRUCT AND REPAIR LEVEES, EMBANKMENTS, REVETMENTS, CANALS, DITCHES AND OTHER WORKS APPURTENANT TO THE BEAVER DRAINAGE DISTRICT, RECORDED ON JANUARY 5, 1938, IN BOOK 61, PAGE 623, C.C.D.R., LOCATION IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.

X=X=x=

7. AN EASEMENT FOR RIGHT-OF-WAY AND LEVEES, CONVEYED TO UNITED STATES OF AMERICA RECORDED AUGUST 13, 1939, IN BOOK 64, PAGE 471, C.C.D.R., LOCATION IS BLANKET IN

8. THE RIGHT OF RE-ENTRY AND EASEMENTS RESERVED BY THE PORT OF ST. HELENS RECORDED ON MAY 9, 1974 IN BOOK 196, PAGE 122, AND AMENDED ON JUNE 8, 2006 IN FEE NUMBER 2006-007553, C.C.D.R., LOCATION ARE BLANKET IN NATURE AND THEREFORE NOT

9. PROTECTIVE COVENANTS, CONDITIONS AND RESTRICTIONS BETWEEN THE PORT OF ST. HELENS AND COLUMBIA COUNTY, AS RECORDED ON OCTOBER 17, 2005 IN FEE NUMBER 2005-013779, C.C.D.R., LOCATION IS BLANKET ARE NATURE AND THEREFORE NOT SHOWN HEREON.

<u>LEGEND</u>

C.C.D.R. = COLUMBIA COUNTY DEED RECORDS EEA = CENTERLINE OF A 20.00 FOOT WIDE ELECTRICAL EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006–007495, C.C.D.R. FSE = A FIRE SUPPRESSION EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON SEPTEMBER 21, 2007, IN FEE NUMBER 2007-012217, DEED RECORDS, C.C.D.R. GTE = A GRAIN TRANSFER EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006-008863, C.C.D.R. LEA = CENTERLINE OF A 150.00 FOOT WIDE LEVEE EASEMENT AGREEMENT BETWEEN THE PORT OF OF ST. HELENS AND BEAVER DRAINAGE IMPROVEMENT COMPANY RECORDED FEBRUARY 16, 2005, IN FEE NUMBER 2005-002243, C.C.D.R. NGEA = CENTERLINE OF A 50.00 FOOT WIDE NATURAL GAS EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006-007494, C.C.D.R. PEA = CENTERLINE OF A 30.00 FOOT WIDE PIPE LINE EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006–007498, C.C.D.R. PEA2 = CENTERLINE OF A 40.00 FOOT WIDE PIPE LINE EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON SEPTEMBER 21, 2007, IN FEE NUMBER 2007-012219, C.C.D.R. PEE = CENTERLINE OF A 20.00 FOOT WIDE PROPOSED ELECTRICAL EASEMENT DATED JUNE 4, 2007, PREPARED BY DAVID EVANS AND ASSOCIATES, INC. UNKNOWN IF RECORDED AT THIS TIME. PLEA = CENTERLINE OF A PROPOSED 150.00 FOOT WIDE LEVEE EASEMENT EXTENSION TO THE PGE LEASE BOUNDARIES PRD = CENTERLINE OF A 60.00 FOOT WIDE PROPOSED ROADWAY DEDICATION FROM HERMO ROAD THROUGH PGE SITE PREPARED BY DAVE MILLS CONSULTING, INC. DATED JULY 12, 2007, UNKNOWN IF RECORDED AT THIS TIME. REA = CENTERLINE OF A VARIABLE WIDTH ROAD EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006-007496, C.C.D.R. RREA = CENTERLINE OF A VARIABLE WIDTH RAILWAY EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006-007493 AND RE-RECODED ON JULY 6, 2006, IN FEE NUMBER 2006–008865, C.C.D.R. SWE = A 50.00 FOOT WIDE STORM WATER EASEMENT AGREEMENT BETWEEN THE PORIT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006-008864, C.C.D.R., DOES NOT AFFECT SUBJECT PROPERTY AND IS SHOWN HEREON. SWPE = CENTERLINE OF A 30.00 FOOT WIDE STORM WATER PIPE EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON SEPTEMBER 21, 2007, IN FEE NUMBER 2007–012218, C.C.D.R. TEA = CENTERLINE OF A 20.00 FOOT WIDE TELECOMMUNICATIONS EASEMENT AGREEMENT BETWEEN THE PORT OF ST. HELENS, PORTLAND GENERAL ELECTRIC COMPANY AND CASCADE GRAIN PRODUCTS, LLC. RECORDED ON JUNE 8, 2006, IN FEE NUMBER 2006-007497, C.C.D.R. T.R.O.W. = TRANSMISSION RIGHT OF WAY, 250' WIDE U.S.G. = UNITED STATES GYPSUM GAS PIPELINE (INSIDE PGE T.R.O.W.)V.R.E. = VAPOR RECOVERY EASEMENT. OUGH 22-10. A ROADWAY PERMIT CONVEYED FROM THE UNITED STATES OF AMERICA TO

THE PORT OF ST. HELENS, AS RECORDED ON MARCH 31, 1966, IN BOOK 161, PAGE 292, C.C.D.R., LOCATION IS BLANKET IN NATURE AND THEREFORE NOT SHOWN HEREON. 11. RESTRICTIVE COVENANTS, CONDITIONS AND RESTRICTIONS BETWEEN THE PORT

OF ST. HELENS, WESTWARD ENERGY, LLC, PORTLAND GENERAL ELECTRIC AND CASCADE GRAIN PRODUCTS, LLC, AS RECORDED ON AUGUST 02, 2007 IN FEE NUMBER 2007-010161, C.C.D.R., LOCATION ARE BLANKET IN NATURE AND THEREFORE NOT SHOWN HEREON.

APPENDIX 2

LETTERS FROM PORTLAND GENERAL ELECTRIC TO PORT OF ST. HELENS

Portland General Electric Company 121 SW Salmon Street - Portland, Oregon 97204

June 16, 2016

Port of St. Helens PO Box 190 Columbia City, OR 97018

Dear Patrick Trapp:

Portland General Electric is writing in support of the Port of St. Helens' pending application to the Columbia County Board of Commissioners to expand the Port Westward Industrial Site by adding additional acres of industrial land to the Port in support of economic development in Columbia County. As a long-standing member of the community, PGE supports the goal of improving the region's economic health.

As you know, PGE has a 99-year lease of 854 acres at Port Westward ending in 2062. Beaver, Port Westward Unit 1 and Port Westward Unit 2 generating plants are PGE's largest concentration of electricity generating resources. With a total installed capacity of 1,141 megawatts, the power generated at the Port Westward site serves 30 percent of PGE customers at peak load and represents hundreds of millions of dollars in investment and maintenance to serve PGE customers with reliable and cost-effective energy. The site plays an important role in PGE's diversified portfolio of resources and also provides critical support for the reliability and stability of the western electric grid.

Maintaining and protecting PGE's assets at Port Westward is imperative to the company's current and future operations. Protecting the long-term interests of the electric generation capabilities at the site requires PGE to maintain adequate land buffers around the facilities for security and reliability purposes, thus restricting third-party use on the 854 acre leasehold. In addition, it is important to our future operations there is adequate space in our leasehold for building future generating plants. This limits the physical space, location, and other related dynamics that might otherwise make the area available to third-parties. Given the company's investment at Port Westward and the critical nature of the site to support reliable electric service, third-party compatibility is a high bar which some proposed industrial facilities in the past could not meet. Due to this high bar, PGE supports the Port's effort to bring additional industrial land outside the buffer into Port Westward.

PGE continually evaluates additional investments at the Port Westward site – both new investments and upgrades to existing facilities. Long-term resource planning is a complex

process for the company, and the Port Westward site is critical to support PGE's diverse portfolio due to the access to natural gas pipelines and storage reserves.

PGE is a long-standing member of the community in Columbia County and neighbor to the Port of St. Helens. Beginning with the Trojan Nuclear Plant in the 1960s, PGE and its employees have been proud to live and work in Columbia County. It is our intention to continue our commitment to the county for many years to come.

Sincerely,

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Maria Pope Senior Vice President of Power Supply and Operations and Resource Strategy

Grab Junkins

Brad Jenkins Vice President of Power Supply Generation


CC: G.M & PM



Portland General Electric Company 121 SW Salmon Street • Portland, Oregon 97204 PortlandGeneral.com

September 11, 2007

Gerry Meyer, Executive Director Port of St. Helens 100 E Street Columbia City, Oregon 97018

RE: Marketing - Port Westward Site

Dear Gerry,

As we discussed several wooks ago, the Marketing Agreement and the Consulting and Leasing Agent Agreement between PGE and the Port of St Helens dated October, 1999, are both outdated and no longer reflect the current state of affairs at Port Westward. These agreements were both completed well prior to the development of the new Port Westward Power Plant and Cascade Grain as well as the potential impact of the Summit project. These recent developments necessitate an updated review of the compatibility criteria as well as land area available for future development.

The Consulting and Marketing Agent Agreement expired by its terms on Dec. 31, 2005. The Marketing Agreement provides that it may be terminated on one year's notice. Please consider this letter as written notice of PGE's election to terminate the Consulting and Marketing Agreement.

While PGE is committed to the commercial growth and development of Port Westward, we believe that it is best for all involved to enter into new agreements that reflect the current and projected use of the property. PGE will work together with the Port, County and other interested parties to develop updated agreements regarding the future marketing efforts at Port Westward. Please let us know if this is of interest to you.

Your continued cooperation and assistance are appreciated.

Very truly yours,

PORTLAND GENERAL ELECTRIC COMPANY

Mile Link

Mike Livingston Property Services Manager



Cc: Addressee, PO Box 598, St. Helens Oregon 97051 Harold Olson, Esq, 275 Strand, PO Box 973, St. Helens, Oregon 97051 Tom Fuller, 1140 SW Eleventh Avenue, Suite 500, Portland, OR 97205

APPENDIX 3

INVENTORY OF RECENT PORT WESTWARD SITE INQUIRIES AND ECONOMIC DEVELOPMENT LEADS

Port Westward Prospects 2007-present									
Type of Business	Acreage		Investment \$	No. Jobs					
Biomass	20	\$	120,000,000	25					
Bioenergy	100	\$	300,000,000	60					
Energy	50								
Methanol	140	\$	1,500,000,000	140					
Power Plant	25								
Waste to Energy	50								
Fertilizer	100	\$	1,300,000,000	250					
Wood Chips	10								
Bio Refinery	2	\$	10,000,000						
Iron Ore/Coal	50								
Ethanol/Crude Oil	50								
Ethanol & Co-Products	10	\$	127,000						
Fertilizer	50	\$	550,000,000	120					
Bulk Wood Products	100			75					
Pellets	20	\$	40,000,000	24					
Automobile	193	\$	200,000,000	200-300					
Grain	50								
Biodiesel	50								
LPG	25								
Ethanol	50								
Coal	300	\$	500,000,000	200					
Dry Bulk	40								
Metals Recycling	20								
Power Plant	80								
Ethanol/Crude Oil	50								
Power Plant	50	\$	300,000,000	44					
Ethanol/Crude Oil	25	\$	25,000,000	25					
Biodiesel	25	\$	91,000,000	30					
Synthetic Biodiesel	10								
Solar Panels	40	\$	500,000,000	500					
Solar Farm	20								
Solar	200								
Power Plant	124	\$	1,500,000,000						
Grain	10								
Coal	200								
Renewables									
Automobile	200	\$	200,000,000	200					
Ethanol & Co-Products	80			72					
Pellets	20								
Coal	150	\$	100,000,000	100					
	2,789	\$	7,236,127,000	1,865					

OREGON PORT CHARACTERISTICS

APPENDIX 4

Appendix 4: Oregon Port Characteristics

		Columbia	Deepwater		Urban or
Port	Location	River Access	Port Access	Rail Access	Rural ¹
Port of Alsea	Waldport	No	No	No	Urban
Port of Arlington	Arlington	Yes	No	Yes	Urban
Port of Astoria	Astoria	Yes	Yes	Yes	Urban
Port of Bandon	Bandon	No	No	No	Urban
Port of Brookings					
Harbor	Brookings	No	No	No	Urban
Port of Cascade Locks	Cascade Locks	Yes	No	Yes	Urban
Oregon International					Urban &
Port of Coos Bay	Coos Bay	No	Yes	Yes	Rural
Port of Coquille River	Myrtle Point	No	No	No	Urban
Port of Garibaldi	Garibaldi	No	No	No	Urban
Port of Gold Beach	Gold Beach	No	No	No	Urban
Port of Hood River	Hood River	Yes	No	No	Urban
Port of Morrow	Boardman	Yes	No	Yes	Urban
Port of Nehalem	Nehalem	No	No	No	Urban
Port of Newport	Newport	No	Yes	No	Urban
Port of Port Orford	Port Orford	No	No	No	Urban
Port of Portland	Portland	Yes	Yes	Yes	Urban
Port of Siuslaw	Florence	No	No	No	Urban
Port of St. Helens					
(Port Westward site)	Columbia County	Yes	Yes	Yes	Rural
Port of The Dalles	The Dalles	Yes	No	Yes	Urban
Port of Tillamook Bay ²	Tillamook	No	No	Yes	Rural
Port of Toledo	Toledo	No	No	Yes	Urban
Port of Umatilla	Umatilla	Yes	No	Yes	Urban
Port of Umpqua	Reedsport	No	No	No	Urban
Notes:					

1. "Urban" means the port is in city limits or in an urban growth boundary, while "rural" means the port is outside an urban growth boundary.

2. The Port of Tillamook Bay does not have marine facilities.

APPENDIX 5

LETTER FROM PORT OF PORTLAND TO CITY OF PORTLAND REGARDING WEST HAYDEN ISLAND Mission: To enhance the region's economy and quality of life by providing efficient cargo and air passenger access to national and global markets.



January 8, 2014

The Honorable Charlie Hales, Mayor City of Portland 1221 SW 4th Avenue Portland, OR 97204

Dear Mayor Hales:

Thank you for taking the time to meet with me on December 20, 2013 to discuss West Hayden Island and potential annexation into the City of Portland. The Port of Portland (Port) Commission has been clear about the principles to which we must adhere if we are to proceed with annexation. In essence, those principles require agreements which would actually enable development of 300 acres of West Hayden Island as a marine terminal. As explained in my October 7, 2013 letter to you, the Planning and Sustainability Commission (PSC) has recommended annexation, but on terms that render the development of the 300 acre marine terminal parcel impossible.

From our conversation, I understand that you believe the Council is unwilling to take action on a modified proposal. Based upon your assessment that the Council's policy choice is to not bring forward a package that is viable in the market, the Port will not continue with the annexation process at this time and withdraws its consent to annexation. We will continue to manage WHI as we have for decades, for uses supporting our strategic objectives, including the eventual development of marine terminal facilities. The city, unfortunately, will now have to deal with the consequences of a severe shortfall in industrial land.

We have been clear throughout this lengthy and expensive process that we can and will support an annexation package that addresses reasonable city mitigation over and above state and federal requirements, so long as they are proportional to the impact from development and not unique to this plan district. The fact that we agreed to consider development on only 300 of the 800 available acres clearly reflects that commitment. We were within range of an agreement in November of 2012, but additional demands by the PSC eliminated regulatory certainty and expanded mitigation well beyond anything proportional to expected impacts. Through the PSC process, we were required to stand by and watch as the PSC invented new forms of mitigation for application to this site alone.

> 7200 NE Airport Way Portland OR 97218 Box 3529 Portland OR 97208 503 415 6000

The Port is enterprise funded: only 4 percent of our revenues come from taxes. Any development at WHI must meet basic, sustainable market requirements. The PSC recommendations put the development cost of the property at about double its value in the market.

Furthermore, the PSC recommendations exceed what is required by Goal 5 by obligating us to go back at the time of development for further review for any docks or other in water development that would be integral to the development of a water dependent use (on top of the lengthy and contentious, federal and state permitting processes). This type of approach does not give us any assurance that we'll have the opportunity to actually develop the property once annexation occurs. In order to capture the opportunities available at West Hayden Island – both environmental and commercial – the Port needs the city as a willing partner.

We are, of course, very disappointed that the process has ended in this way. We are also concerned about its implications for the city, region and state. The city is significantly short of industrial land; the region has counted 422 acres of West Hayden Island in their UGB inventory, and there is great opportunity for industrial marine development on the Columbia, as witnessed

by the nearly \$1 billion of maritime investment over the course of the last few years (\$200 million of that by our own tenants) with significant benefit to the small and medium sized businesses in the city and the market access interests of the state.

The loss of this industrial land expansion opportunity for the city and the region will be difficult to contend with, and frankly calls into question the role of land use planning here. It would suggest that some of the land use goals apply and others do not. That's unfortunate.

The potential opportunities lost from this decision include the following:

- 900+ direct family wage jobs and associated \$45-65 million in wages from the three terminals plus value-added activities from the development.
- 2000+ indirect and induced jobs and \$200-300 million in wages for residents associated with the development – largely from small and medium sized business in the city
- Annual state and local tax revenue of \$18-30 million
- A future location for Portland harbor grain elevators looking to expand in the community they grew up in
- 500 acres of recreation and improved habitat an area larger than the Zoo, Hoyt Arboretum and Washington Park combined in a park-deficient area of the City of Portland.
- The chance to set the standard (again) for a world class sustainable port facility complex
- More than \$100 million in investment by the Port for land readiness and habitat improvement, and up to half a billion by the terminal developers.
- A substantial contribution to the industrial land shortfall in meeting the Goal 9 and comprehensive plan requirements.
- Ensuring land supply to meet a range of employment opportunities for family wage jobs per your adopted Economic Opportunities Analysis.
- A constrained Urban Growth Boundary, which will now need to be modified by the 422 acres of industrial assumed on West Hayden Island.

We take a long view at the Port. One of the benefits we bring to the region is an ability to acquire and hold land in the public interest with an eye toward developing it to its best and highest use in terms of jobs, the environment and recreational opportunity. Case in point: some of our recent work in Troutdale that brought new recreational amenities and hundreds of new industrial jobs to that city, bolstering their tax base and providing living wages to local residents.

We'll find a way to move forward at our property on West Hayden Island. It is part of our mission and our promise to the public, as it has been for nearly 125 years, so let's keep the door open to future conversation and the creative solutions for which Portland is known.

Sincerely,

Bill Wyatt Executive Director

cc: Commissioner Nick Fish Commissioner Amanda Fritz Commissioner Steve Novick Commissioner Dan Saltzman