

4.1 Land Use

Land use refers to how land is developed for various purposes, including residential, commercial, parks and recreation, agricultural, and industrial uses. It also refers to the preservation or protection of land for natural uses. Development projects, such as the proposed project, must be compatible with surrounding land uses and comply with all state and local regulations and policies governing land use.

This section describes land use and zoning in the study areas, and the consistency of the On-Site Alternative and Off-Site Alternative with land use plans and public policies. It then describes potential impacts on land use from construction and operation of the proposed export terminal.

4.1.1 Regulatory Setting

Laws and regulations relevant to land use are summarized in Table 4.1-1.

Table 4.1-1. Regulations, Statutes, and Guidelines for Land Use

Regulation, Statute, Guideline	Description
State	
Washington State Growth Management Act (WAC 365-196, RCW 36.70A)	Requires state and local governments to manage Washington's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, and preparing comprehensive plans and implementing them through capital investments and development regulations. Cowlitz County is required to designate and protect critical areas under the GMA, but is otherwise not required to fully plan under GMA.
Washington State Shoreline Management Act (WAC 173.27 <i>et seq.</i> , RCW 90.58)	Governs the use and development of "shoreslines of the state." Requires local jurisdictions with "shoreslines of the state" to develop and adopt a shoreline master program to carry out the policies of the SMA.
Washington State Harbor Improvement Plans (RCW 53.20)	Requires port commissions to develop and adopt a comprehensive scheme of harbor improvements and to make harbor improvements substantially in accordance with the adopted plan.
State Water Pollution Control Law (RCW 90.48)	Provides Ecology with the jurisdiction to control and prevent the pollution of streams, lakes, rivers, ponds, inland water, salt waters, watercourses, and other surface and groundwater in the state.
Local	
Cowlitz County Shorelines Management Regulations (CCC 19.20)	Adopted in 1977 in accordance with requirements of the SMA and Cowlitz County shoreline management regulations. Defines goals, policies, and objectives for development within shoreline areas of Cowlitz County. A draft update is currently in public review; adoption is expected in fall 2016.

Regulation, Statute, Guideline	Description
Cowlitz County Critical Areas Regulations (CCC 19.15)	Designates critical areas within Cowlitz County and adopts development regulations to preserve them, in accordance with the requirements of GMA.
Cowlitz County Land Use Ordinance (CCC 18.10)	Establishes official land use controls (including zoning regulations) for unincorporated areas of Cowlitz County. The zoning regulations are the principal tool for implementing the goals and policies of the Cowlitz County Comprehensive Plan.
Cowlitz County Comprehensive Plan (Cowlitz County 1976)	Adopted in 1976 and amended in 1981 to manage Cowlitz County growth. A draft update is currently in public review and is subject to change. Adoption of the updated comprehensive plan is expected in late 2016.
City of Longview Comprehensive Plan	Comprehensive plan adopted in 2006 to manage the City of Longview's growth. This comprehensive plan applies only to the Off-Site Alternative.
Port of Longview Comprehensive Scheme of Harbor Improvements	Describes the Port's existing facilities and defines plans for future investment, operation, and development of Port properties. Applicable in portions of the study areas only; does not apply to the project area. This plan applies only to the Off-Site Alternative.
Port of Longview Port Master Plan Report	Provides guidance for the future development of Port properties. This plan applies only to the Off-Site Alternative.
City of Longview Shoreline Master Program	Update to City of Longview Shoreline Master Program; approved by Ecology on July 27, 2015, and became effective August 10, 2015 (Washington State Department of Ecology 2015). This regulation applies only to the Off-Site Alternative.
City of Longview Zoning Ordinance (LMC 19)	Establishes zoning regulations for the City of Longview. This regulation applies only to the Off-Site Alternative.
City of Longview Critical Areas Regulations (LMC 17.10 and 17.12)	Provides protection for designated critical areas within the City of Longview. This regulation applies only to the Off-Site Alternative.
Notes: WAC = Washington Administrative Code; RCW = Revised Code of Washington; GMA = Growth Management Act; SMA = Shoreline Management Act; Ecology = Washington State Department of Ecology; CCC = Cowlitz County Code; LMC = Longview Municipal Code	

4.1.2 Study Area

The land use analysis encompasses three built environment elements: land use, parks and recreation facilities, and agricultural land. Each of these elements has its own study area based on the Corps' Memorandum for Record, dated February 14, 2014. These study areas were adjusted to reflect the specific community elements near the project areas. The following identifies the study areas used for this analysis, which are also depicted in Figure 4.1-1.

4.1.2.1 Land Use

For direct impacts, the study area for land use includes all areas within 500 feet of the project area, including the Columbia River. For indirect impacts, the study area is the project area and the surrounding Longview-Kelso urban area and nearby unincorporated areas of Cowlitz County.¹

4.1.2.2 Parks and Recreation Facilities

For direct and indirect impacts, the study area for parks and recreation facilities is the project area and the area within 0.5 mile of the project area. The study area also includes the nearby Willow Grove boat launch in Washington and the Rainier Riverfront Park boat launch in Oregon. These boat launches are more than 0.5 mile from the project area but provide public boating access to the Columbia River near the project area.

4.1.2.3 Agricultural Land

For direct impacts, the study area for agricultural land is the project area. For indirect impacts, the study area is the project area and the area within 500 feet of the project area.

4.1.3 Methods

This section discusses the information sources and impact analysis methods used in this analysis.

4.1.3.1 Information Sources

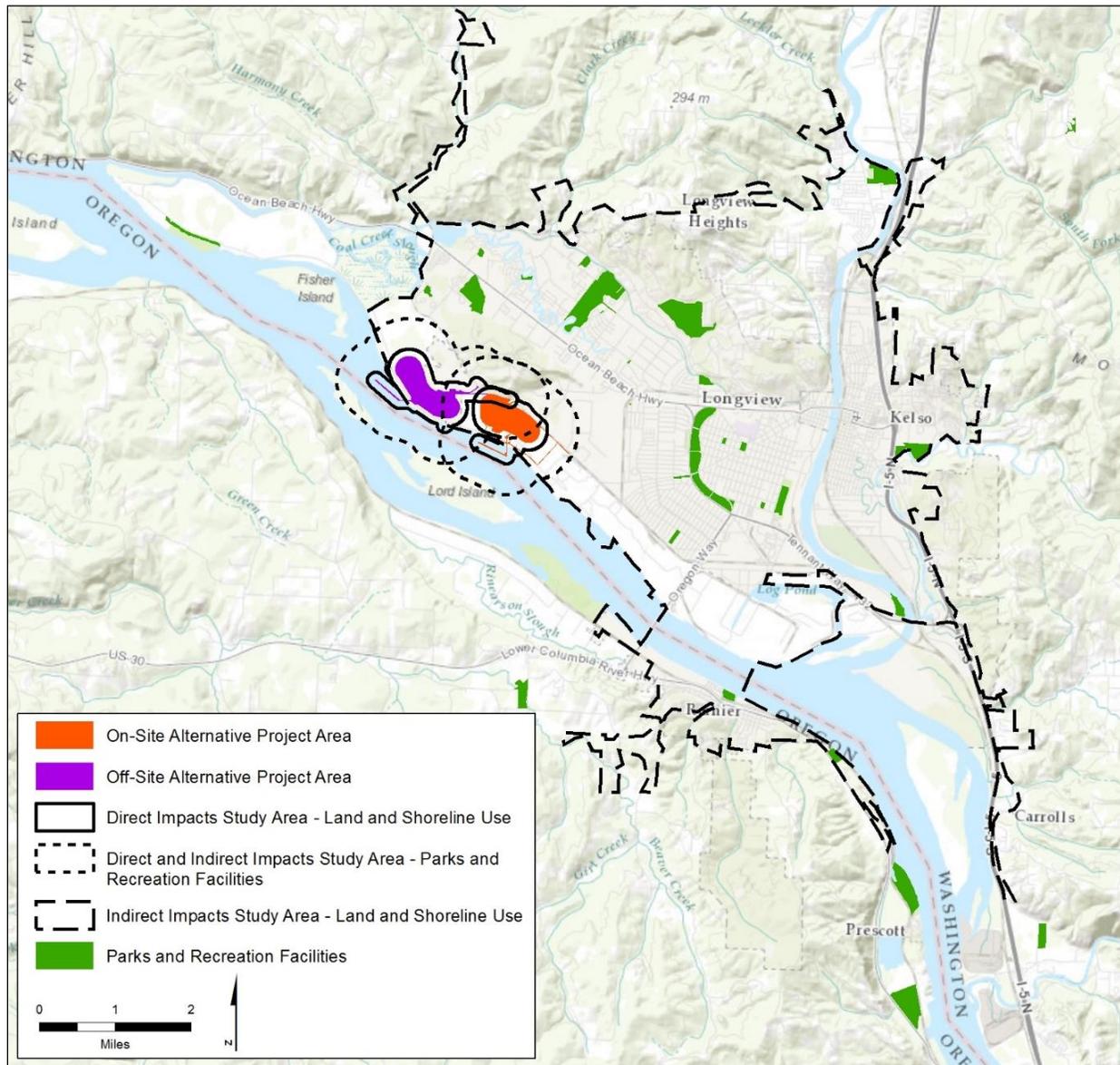
The following sources of information were used to identify potential impacts of the proposed export terminal and No-Action Alternative on land use in the study areas.

- *Cowlitz County Comprehensive Plan (1976)* and *City of Longview Comprehensive Plan (2006)*
- *Shorelines Management Master Program (Cowlitz County 1977)*
- Cowlitz County Code (CCC), including the Land Use Ordinance (Chapter 18.10), Environmental Policy (Chapter 19.11), Critical Areas Protection Ordinance (Chapter 19.15), and Shoreline Management (Chapter 19.20), and Longview Municipal Code (LMC)
- Cowlitz County NetMaps and geographic information system (GIS) data
- Field surveys conducted September 15 and October 29, 2014

The *NEPA Land Use Technical Report* (ICF International 2016) includes a detailed list of sources used in this analysis.

¹ This broader land use study area is the Longview-Kelso urban area as defined in the 2010 U.S. Census and adjusted to include the unincorporated areas of Cowlitz County adjacent to the project area, which are not part of the Census-defined urban area.

Figure 4.1-1. Land Use Study Areas



4.1.3.2 Impact Analysis

The impact analysis assesses whether the changes to land use in the project area would be compatible with surrounding land uses and with applicable land use plans and policies, zoning ordinances, and shoreline regulations. In general, the assessment of the compatibility of land use is based on the types of uses, their intensities, and their proximity to one another.

4.1.4 Affected Environment

This section describes the existing environment in the study areas related to land use potentially affected by construction and operation of the proposed export terminal under the On-Site Alternative, Off-Site Alternative, and No-Action Alternative.

4.1.4.1 On-Site Alternative

Land Use Plans and Public Policies

Land use in the study areas is guided by a variety of land use plans and public policies, which include comprehensive plans, shoreline master programs (SMPs), transportation plans, critical area regulations, and other plans. The applicable land use plans and public policies are discussed in detail in the *NEPA Land Use Technical Report*. The *Cowlitz County Comprehensive Plan* (Comprehensive Plan) (Cowlitz County 1976) and *Shorelines Management Master Program for Cowlitz County, Washington* (SMP) (Cowlitz County 1977) are summarized below.

Cowlitz County Comprehensive Plan

The Comprehensive Plan designates the project area as Heavy Industrial (Cowlitz County 1976). The plan states the purpose of the industrial classification is to “assure the presence of adequate amounts of land for industrial growth in Cowlitz County.” Appropriate uses in the Heavy Industrial designation include lumber and plywood mills, metal manufacturing, sand and gravel operations, foundry or iron works, quarries, agriculture, nonresidential commercial, and forest management and processing (Cowlitz County 1976). The *NEPA Land Use Technical Report* includes the applicable Comprehensive Plan map for the project area. The technical report also summarizes the eight goals in the Comprehensive Plan relating to the Heavy Industrial designation. Cowlitz County is currently updating its comprehensive plan; this update is also discussed in the technical report.

Cowlitz County Shoreline Management Master Program

The Shoreline Management Act (SMA) applies to all counties and cities with “shorelines of the state,” as defined in RCW 90.58.030. The County’s current SMP, approved in 1977, designates the shoreline environment at the project area as urban, making it suitable for intensive recreation, residential, industrial, and commercial development (Cowlitz County 1977). The objective of the urban designation is to identify those defined areas currently in and potentially capable of such use to satisfy the socioeconomic needs of the present and future populations of Cowlitz County. A discussion of the County’s SMP, including its use regulations, planning goals, and current update process, is provided in the *NEPA Land Use Technical Report*.

Land Use

The following section presents the characteristics of the existing environment related to land use by study area.

Direct Impacts Study Area

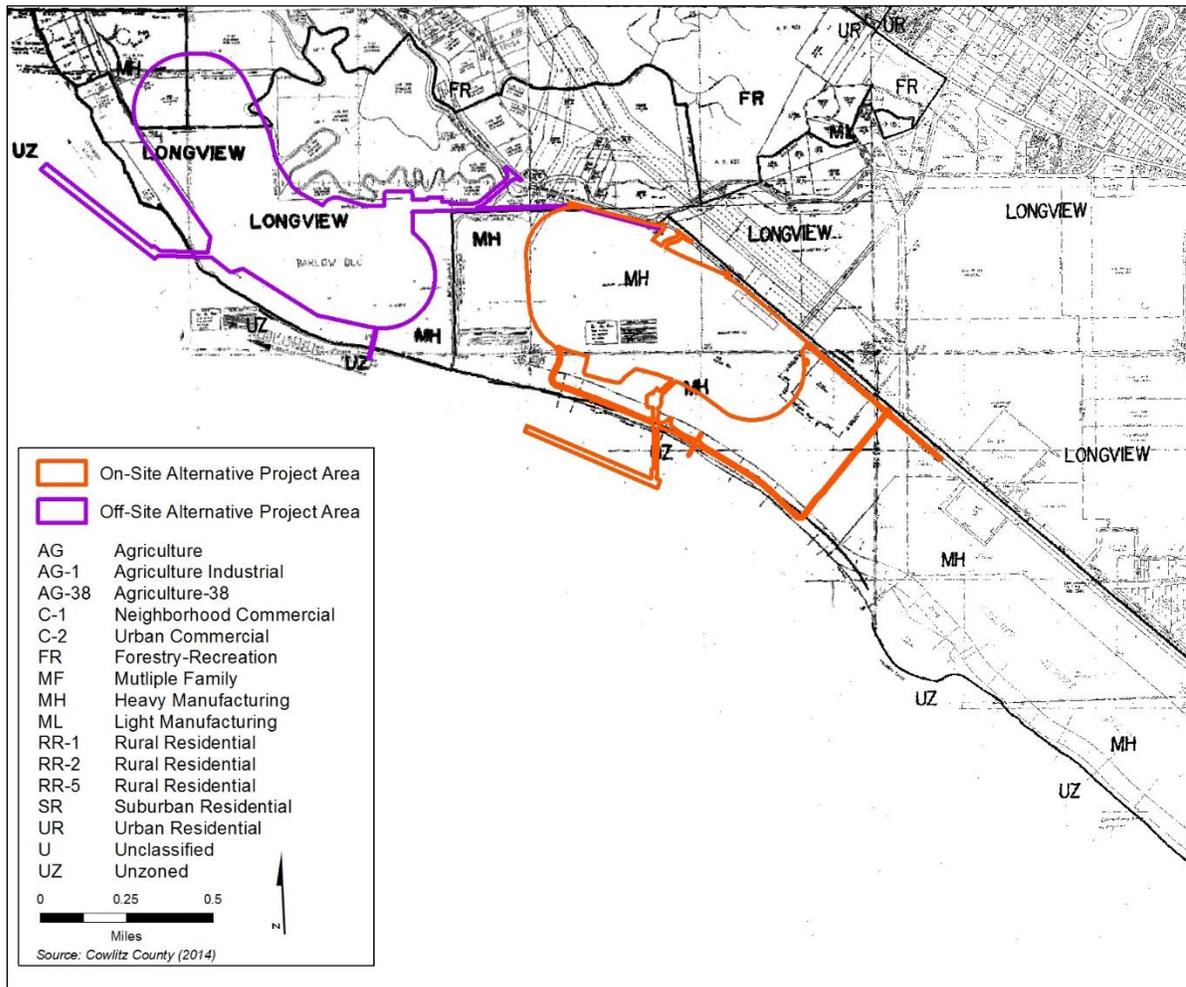
The direct impacts study area includes portions of unincorporated Cowlitz County and the City of Longview. Unincorporated areas of Cowlitz County, which includes the project area, are subject to the CCC. County zoning regulations are established in the Land Use Ordinance (CCC 18.10). The zoning regulations establish permitted uses, various building and lot dimension standards, and other requirements for development in Cowlitz County. The zoning regulations are the principal tool for implementing the goals and policies of the Comprehensive Plan (Cowlitz County 1976).

The project area is zoned Heavy Manufacturing, as shown in Figure 4.1-2. The permitted uses in the Heavy Manufacturing zone are identified in CCC 18.10.236 and include “[s]torage and distribution of

petroleum, propane, liquefied gas, coal, and wood.” Minimum standards regarding lot area, setbacks, and lot coverage have not been established for Heavy Manufacturing zones, except for rear and side yard setback requirements for buildings exceeding 35 feet in height.

Portions of the direct impacts study area in Longview are subject to the zoning established by Title 19 of the LMC. The parcels in the City of Longview are within the Heavy Industrial and Mixed Use – Commercial/Industrial zones (City of Longview 2014).

Figure 4.1-2. Cowlitz County Zoning



The project area is an approximate 190-acre site primarily within the Applicant’s leased area, as well as the area where two proposed docks would be constructed in the Columbia River. The project area consists of all or portions of eight Cowlitz County tax parcels (619530400, 61950, 61953, 6195303, 61954, 61951, 61948, and WI3100003). These parcels are owned by Northwest Alloys, BNSF Railway Company (BNSF), and the Bonneville Power Administration (BPA) (Cowlitz County 2014). The project area also includes portions of the Columbia River owned by the Washington State Department of Natural Resources and subject to an aquatic lands lease (Lease No. 20-B09222).

The Applicant's leased area has been in industrial use since 1941. Reynolds Metals Company constructed and operated an aluminum smelter and aluminum casting facility within the project area from 1941 until 2000. Northwest Alloys purchased the site in May 2000, and remains the owner. The Applicant now operates the existing facility on a ground lease with Northwest Alloys (Washington State Department of Ecology 2014). The Reynolds Metals Company facility was an intensive industrial use and, at the time of its closure in 2001, it employed approximately 800 workers and operated 24 hours per day, 7 days per week. In December 2004, Chinook Ventures purchased the facility assets and obtained a ground lease to store and transport fly ash, petroleum coke, alumina, and cement from 2004 to 2010. The Applicant purchased the facility assets from Chinook Ventures in January 2011, and now operates on a ground lease with Northwest Alloys. Today, portions of the project area are used for industrial purposes,² but overall the project area is underused, with industrial activities occurring at a much lower intensity than historical levels. The project area also includes two parcels currently owned by BPA and parcels owned by BNSF. The BPA parcels contain BPA facilities, including an access road and substation along Industrial Way. The parcels owned by BNSF contain portions of the Reynolds Lead rail line.

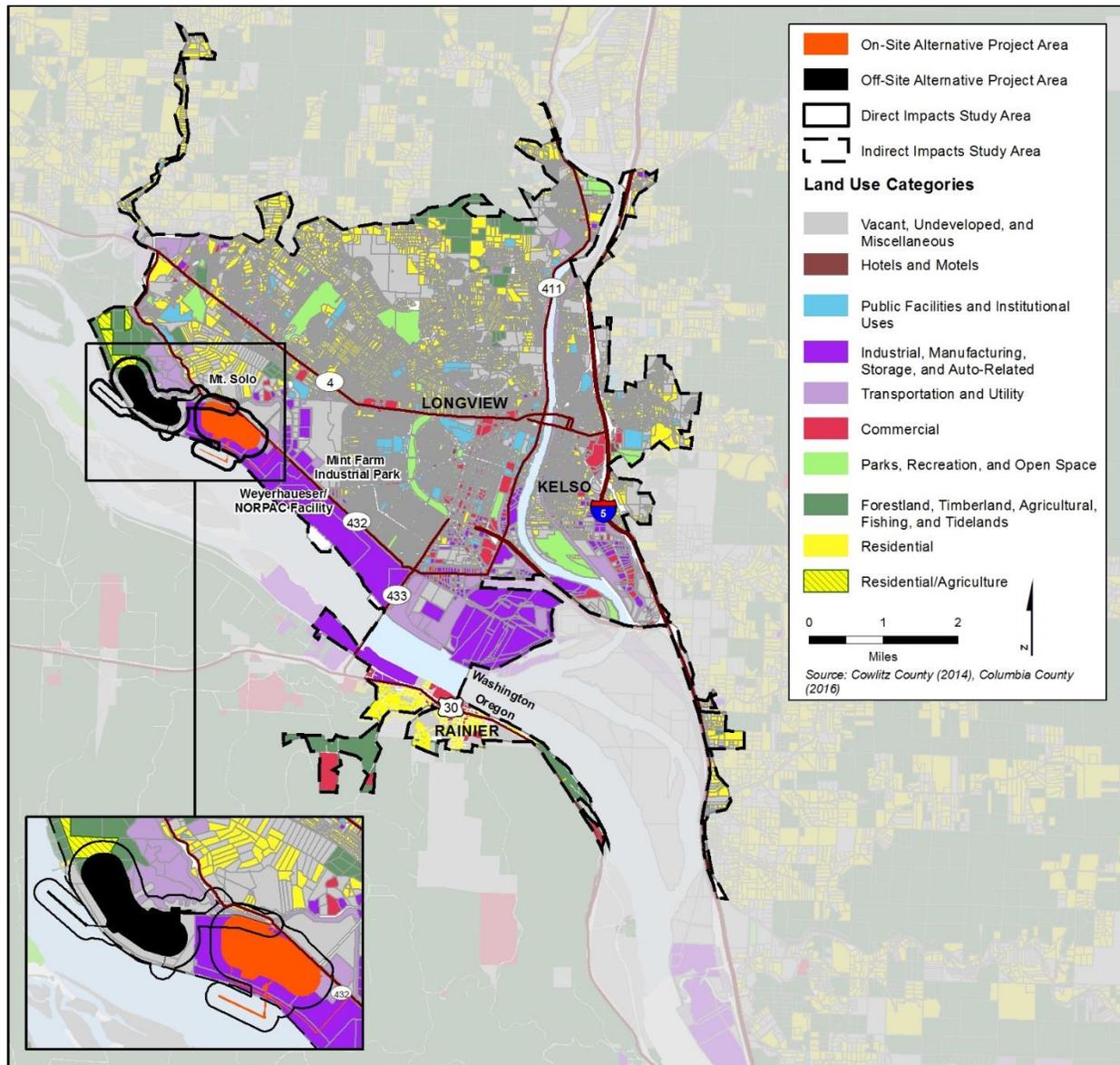
While most of the project area is developed, its undeveloped western portion consists of open areas of grass and wetlands, and there is an approximate 6-acre forested wetland in the northwest corner of the property. An extensive levee system along the Columbia River is maintained by the Consolidated Diking Improvement District (CDID) #1. Figure 4.1-3 shows the existing land uses in the vicinity of the project area; land uses in the indirect impacts study area are discussed further in this section.

The portions of the direct impacts study area within 500 feet of the project area contain predominantly industrial and transportation/utility land uses, along with two single-family residences. A portion of the direct impacts study area is occupied by an existing bulk product terminal within the Applicant's leased area, which includes upland facilities, a dock on the Columbia River capable of receiving Panamax-sized vessels, and rail and road connections. The bulk product terminal is used by the Applicant to import, store, and transfer bulk alumina and coal. Trains on the Reynolds Lead deliver and ship alumina and coal from the existing bulk product terminal. The area east of Industrial Way from the project area is also part of the Applicant's leased area and contains open land with overhead electrical wires and towers and a vacant building (formerly the Reynolds Longview Federal Credit Union) on the corner of Industrial Way and 38th Avenue.

Two single-family residences are across Industrial Way/Mt. Solo Road from the project area and are the only residential uses in the direct impacts study area. These houses are on wooded lots set back from the road.

² A full list of existing uses in the project area and the Applicant's leased area is provided in the *NEPA Land Use Technical Report* (ICF International and BergerABAM 2016).

Figure 4.1-3. Existing Land Use



While no formally designated recreation areas or activities occur in the upland portion of the direct impacts study area, the Columbia River is used for boating, fishing, and other forms of water recreation. In addition, the 146-mile Lower Columbia River Water Trail on the Columbia River passes by the project area (Lower Columbia Estuary Partnership 2014). No agricultural land or activities occur in the direct impacts study area.

The *NEPA Land Use Technical Report* lists the parcels and associated land uses located in the direct impacts study area.

Indirect Impacts Study Area

The indirect impacts study area is the Longview-Kelso urban area as defined in the 2010 U.S. Census and the unincorporated areas of Cowlitz County adjacent to the project area (which are not part of

the Census-defined urban area). The Cities of Longview and Kelso, Washington; and Rainier, Oregon, are in this study area (Figure 4.1-1).

The indirect impacts study area includes a range of industrial, residential, commercial, recreation, and public facility land uses. Development patterns throughout the study area generally consist of areas dominated by a single land use (e.g., residential neighborhoods, commercial shopping centers), except for limited mixed-use development in downtown Longview and Kelso.

There is a wide corridor of industrial and transportation/utility land uses along the Columbia River in the indirect impacts study area. This corridor includes the project area; the 550-acre Weyerhaeuser Company lumber products manufacturing site/North Pacific Paper Corporation facility along the Columbia River; the Port of Longview's 478-acre Port Industrial Marine property, which includes eight marine terminals; and the Mint Farm Industrial Park, a partially developed 445-acre industrial site operated as a public-private partnership between the City of Longview and the Weyerhaeuser Real Estate Development Company. The Barlow Point property, an undeveloped area immediately downstream (west) of the project area along the Columbia River and within the City of Longview, was recently purchased by the Port for future development (Port of Longview 2011).

Aside from the two residences located across Industrial Way/Mt. Solo Road from the project area, nearby residential uses include several single-family residences on Mount Solo, a steep hill approximately 0.5 mile north of the project area. More densely developed residential areas are located at least 1 mile away from the project area to the north and east in Longview and across the Cowlitz River in the City of Kelso. Commercial uses in the indirect impacts study area include retail, office, and storage uses concentrated along Ocean Beach Highway and in downtown Longview and Kelso.

The Lewis and Clark Bridge (State Route 433) spans the Columbia River upriver from the project area and provides access to Rainier, Oregon. This portion of the study area is approximately 2 to 5 miles from the project area; it is characterized by industrial and open-storage uses along the Columbia River, low-density residential and commercial development within Rainier, agricultural uses, and undeveloped and forested land.

A variety of public facilities serve the indirect impacts study area, including schools, police and fire facilities, libraries, community centers, health care facilities, and government facilities. The *NEPA Land Use Technical Report* identifies the locations of the major public facilities in the indirect impacts study area.

Nearby Parks and Recreation Facilities

There are no parks or recreation facilities in the study area. However, the Columbia River is used for boating, fishing, and other forms of water-related recreation. The 146-mile-long Lower Columbia River Water Trail, which extends from Bonneville Dam to the mouth of the Columbia River, passes by the project area. Recreational boaters must share the river with commercial vessels, including oceangoing cargo ships. The nearest parks are Roy Morse Park, located 1 mile north of the project area, Mint Valley Golf Course, located 1 mile northeast of the project area, and a primitive campsite (i.e., campsite with no support facilities) on Lord Island 0.8 mile south of the project area (Lower Columbia Estuary Partnership 2014). The nearest boat launches are located at Rainier Riverfront Park, across the Columbia River in Rainier, Oregon, approximately 4 miles upstream of the project area, and at Willow Grove Boat Launch in Washington, approximately 4 miles downstream of the

project area. The *NEPA Land Use Technical Report* includes a map of these nearby park and recreation uses.

Agricultural Land

As defined previously, the study area for agricultural land uses is the project area and the area within 500 feet of the project area. There is no agricultural zoned land or agricultural land use in the study area.

4.1.4.2 Off-Site Alternative

Land Use Plans and Public Policies

Land use in the study areas for the Off-Site Alternative are guided by a variety of land use plans and public policies, which include comprehensive plans, shoreline master programs (SMPs), critical area regulations, and other plans. The Off-Site Alternative project area is located in Longview and unincorporated Cowlitz County. The applicable land use plans and public policies for each jurisdiction are discussed in detail in the *NEPA Land Use Technical Report*. The *Cowlitz County Comprehensive Plan* (Cowlitz County 1976), *City of Longview Comprehensive Plan* (City of Longview 2006), and *City of Longview Shoreline Master Program* (City of Longview 2015b) are summarized below.

City of Longview and Cowlitz County Comprehensive Plans

The City of Longview comprehensive plan designates the southern portion of the Off-Site Alternative project area as Heavy Industrial and the northern portion as Mixed-Use Residential/Commercial. Appropriate uses within the Heavy Industrial designation include manufacturing and fabrication, warehousing and storage, wholesale distribution, product processing and packaging, energy production, and shipping (City of Longview 2014).

The *City of Longview Comprehensive Plan* states the Mixed-Use Residential/Commercial designation “is intended to encourage an integration of residential, village style commercial, waterfront commercial, and office uses under a planned development process, which encourages creativity in site planning by allowing flexibility in lot and building arrangements and a mix of uses.” The Port of Longview has filed an application to change the Mixed-Use Residential/Commercial designation within the Off-Site Alternative project area to a Heavy Industrial designation. In late 2015, the City of Longview City Council postponed the public hearing on this application until the City of Longview Planning Commission could complete its update of the city’s comprehensive plan (City of Longview 2015c).

The County’s comprehensive plan designates the portion of the project area within the County as Heavy Industrial. The purpose and goals of the industrial classification are discussed above in Section 4.1.4.1, *On-Site Alternative, Cowlitz County Comprehensive Plan*.

City of Longview Shoreline Master Program

The City of Longview Shoreline Master Program designates the shoreline environment adjacent to the project area as High Intensity (City of Longview 2015a). As stated in the City of Longview Shoreline Master Program, “the purpose of the High Intensity environment is to provide for high intensity water-oriented commercial, transportation, and industrial uses while protecting existing

shoreline ecological functions and restoring ecological functions in areas that have been previously degraded” (City of Longview 2015b).

The in-water activities associated with the project area would fall within the Aquatic shoreline designation. The purpose of the Aquatic designation “is to protect, restore, and manage the unique characteristics and resources of the area waterward of the OHWM.” The Aquatic designation at this location may permit dredging activities in support of a water-dependent use, if the City of Longview finds the need is demonstrated, and it permits new mooring structures for water-dependent uses or public access.

A discussion of the City of Longview Shoreline Master Program, including its policy goals and objectives, is provided in the *NEPA Land Use Technical Report*.

Land Use

The following section presents the characteristics of the existing environment related to land use for the Off-Site Alternative project area and study areas.

Direct Impacts Study Area

The direct impacts study area for the Off-Site Alternative contains a mix of residential, agricultural, light industrial, transportation, and utility uses.

The project area for the Off-Site Alternative is approximately 220 acres in an area referred to locally as Barlow Point. Most of the project area is located within Longview city limits and owned by the Port of Longview, although a small portion of the project area extends onto privately owned property in unincorporated Cowlitz County.

The portion of the project area within the City of Longview is zoned Heavy Industrial per LMC 19, which is described in the previous section. The City of Longview Heavy Industrial zoning designation of the project area is inconsistent with the Mixed-Use Residential/Commercial comprehensive plan designation in the northern portion of the project area. As noted above, there is a pending application before the City of Longview to change the comprehensive plan designation from Mixed-Use Residential/Commercial to Heavy Industrial. If adopted, this application would address the inconsistency between the comprehensive plan and the zoning ordinance.

The portion of the project area within unincorporated Cowlitz County is located in the Heavy Manufacturing zone and the Forestry-Recreation zone. As discussed above, the purpose of the Heavy Manufacturing zoning classification is to allow heavy industrial uses. Per CCC 18.10.255, the purpose of the Forestry-Recreation zone is “to provide for the maintenance of a stable commercial forest land base...”

The project area is currently undeveloped and contains open land and vegetated areas (Figure 4.1-3). The project area is adjacent to an existing corridor of industrial and utility/transportation land uses along the Columbia River to the southeast.

There are two single-family residential structures in the direct impacts study area along Barlow Point Road. Agricultural land uses occur in the direct impacts study area, north of the project area on parcels within unincorporated Cowlitz County. The closest other residential areas are approximately 0.25 mile north of the project area along Barlow Point Road. There are also two

residential land uses on the north side of Mt. Solo Road near the proposed entrance and rail access to the project area.

While no formally designated recreation sites or activities occur in the upland portion of the direct impacts study area, the Columbia River is used for boating, fishing, and other forms of water recreation. In addition, the 146-mile-long Lower Columbia River Water Trail, which extends from Bonneville Dam to the mouth of the Columbia River, passes by the project area (Lower Columbia Estuary Partnership 2014).

The *NEPA Land Use Technical Report* lists the parcels and associated land uses located in the direct impacts study area.

Indirect Impacts Study Area

The indirect impacts study area for the Off-Site Alternative is the same as the indirect impacts study area for the On-Site Alternative.

Nearby Parks and Recreation Facilities

There are no parks and recreation facilities in the project area for the Off-Site Alternative or within 0.5 mile of the project area. As with the On-Site Alternative, the Lower Columbia River Water Trail passes by the project area. Primitive campsites are located on Lord and Walker Islands, approximately 0.5 to 1 mile from the project area. Roy Morse Park is approximately 1 mile north of the project area.

Agricultural Land

According to Ecology farm soil maps, the entire project area and surrounding area within 500 feet of the project area, except for the levees along the Columbia River, consist of soils designated as “prime farmland if drained” and “prime farmland if irrigated” (Washington State Department of Ecology 2008). The northern portion of the project area extends onto parcels containing agricultural uses. Adjacent parcels within 500 feet to the north also contain agricultural uses.

4.1.5 Impacts

This section describes the potential direct and indirect impacts related to land use from construction and operation of the proposed export terminal.

4.1.5.1 On-Site Alternative

This section describes the potential impacts in the study areas from construction and operation of the proposed export terminal at the On-Site Alternative location.

Construction—Direct Impacts

Chapter 3, *Alternatives*, describes construction-related activities in the project area. Construction would not result in direct impacts on land use because the project area is currently an industrial use and would remain an industrial use upon completion of construction activities.

Construction—Indirect Impacts

Construction would not result in indirect impacts on land use because it would be limited to the project area and construction activities would not affect land use outside the project area.

Operations—Direct Impacts

Operations would result in direct impacts. Operations-related activities are described in detail in Chapter 3, *Alternatives*.

Land Use

Direct impacts on land use from operations would include the following.

Existing Land Uses

The On-Site Alternative would modify existing land use in the project area by replacing the existing low-intensity industrial uses with a new export terminal. The terminal would include a rail loop system and rail unloading facilities, coal handling and stockpile areas, shiploading facilities (including the two new docks in the Columbia River), and associated rail and coal handling facilities. The On-Site Alternative would be a more intensive industrial use of the project area than under existing conditions. However, because the project area and surrounding area already contain industrial uses, the On-Site Alternative would not change the land use of the project area substantially.

New Industrial Use

The On-Site Alternative would introduce a new, intensive industrial use near two single-family residences north of the project area in the direct impacts study area. These residences currently coexist with industrial uses in the project area and nearby. Therefore, the On-Site Alternative would not directly affect these uses with respect to land use compatibility.

Parks and Recreation Facilities

The On-Site Alternative would not directly affect the continued use of the Columbia River for recreation purposes, nor would it have any impact on the Willow Grove and Rainier Riverfront Park boat launches. There are no other parks or recreation facilities in the study area. The On-Site Alternative would not result in any direct impacts on parks and recreation facilities.

Agricultural Land

There is no land zoned for agriculture nor any ongoing agricultural uses in the study area. Therefore, the On-Site Alternative would not result in any direct impacts on agricultural land uses.

Operations—Indirect Impacts

Operation of the proposed export terminal at the On-Site Alternative location would result in the following indirect impacts. Operations-related activities are described in Chapter 3, *Alternatives*.

Land Use

Operation of the terminal would be compatible with land use conditions in the indirect impacts study area and with the existing industrial land uses along the Columbia River, in particular the Weyerhaeuser and Port facilities immediately upriver from the project area.

Operation of the terminal would also not change land use patterns in the remainder of the indirect impacts study area. Most land uses outside the corridor of industrial and transportation/utility uses along the Columbia River are located at least 1 mile from the project area. Residential areas on Mount Solo are approximately 0.5 mile north of the project area. Other residential neighborhoods to the north are buffered from the project area by Mount Solo. Land uses in the Rainier, Oregon portion of the study area would continue to be separated from the project area by the Columbia River. Thus, the On-Site Alternative would not affect land use conditions in the Rainier area.

Increased rail traffic would use existing rail infrastructure and would not affect current land use. The On-Site Alternative would increase commercial ship traffic along the Columbia River. However, the Columbia River is currently used for marine transportation. The additional vessel traffic would not change this ongoing use.

Overall, constructing and operating the proposed export terminal at the On-Site Alternative location would not change land use in the indirect impacts study area.

Parks and Recreation Facilities and Agricultural Land

Operating the terminal at full capacity would introduce approximately 70 additional ships per month (840 per year) to the Columbia River. Although the On-Site Alternative would increase commercial vessel traffic in the river, recreational users (such as those using the river for fishing or boating) currently must take account of commercial vessels, including large oceangoing ships. With the additional vessels, the On-Site Alternative would result in an approximate 46% increase over current river vessel traffic.³ While this would be a substantial increase, project-related vessels would operate in the navigation channel except when arriving or departing the proposed docks under the assistance of tugs, and operations would be similar to current vessel traffic. Recreational boats are smaller and are not limited to using the navigation channel, and the Willow Grove and Rainier Riverfront Park boat launches are distant from the project area. Therefore recreational boaters would likely not be substantially affected by vessels and tugs using the proposed docks. The On-Site Alternative would not result in indirect impacts on parks and recreation facilities or on agricultural land.

Consistency with Zoning

The On-Site Alternative would be consistent with the existing Heavy Manufacturing zoning designation and comply with currently permitted uses and associated development standards and requirements. Per CCC 18.10.236, the proposed export terminal would be a permitted use. Furthermore, minimum standards regarding lot area, setbacks, and lot coverage have not been established for Heavy Manufacturing zones, except for rear and side yard setback requirements for buildings exceeding 35 feet in height (CCC 18.10.501). The On-Site Alternative would comply with

³ Based on 2014 large commercial vessel traffic in the Columbia River according to Bar Pilots records, which was 3,638 transits or 1,819 vessels. See Chapter 6, Section 6.4, *Vessel Transportation*, Table 6.4-7.

the limited rear and side yard setback requirements for any proposed structures exceeding 35 feet in height. Overall, the On-Site Alternative would be consistent with existing zoning regulations.

Consistency with Land Use Plans and Public Policies

The On-Site Alternative's consistency with the Cowlitz County Comprehensive Plan and SMP are summarized below. A full discussion of the On-Site Alternative's consistency with all applicable land use plans and public policies is provided in the *NEPA Land Use Technical Report*.

Cowlitz County Comprehensive Plan

As discussed above, the current Comprehensive Plan designates the project area as Heavy Industrial. The On-Site Alternative would maintain the industrial use of the project area consistent with the Comprehensive Plan designation. Furthermore, the Comprehensive Plan articulates several goals regarding industrial development applicable to the On-Site Alternative. The On-Site Alternative would be consistent with these goals, as analyzed in the *NEPA Land Use Technical Report*.

Cowlitz County Shoreline Management Master Program

The On-Site Alternative would result in development within the shoreline area regulated by the County's SMP. It designates the shoreline environment at the project area as urban, which includes areas suitable for intensive recreation and residential, industrial, and commercial development. The On-Site Alternative would be consistent with the objective of the urban designation. Ports and water-related industries, such as the proposed export terminal, are permitted uses on urban shorelines per the SMP.

Newly proposed dredging is a conditional use on urban shorelines. Therefore, new development in the project area would require a Shoreline Substantial Development Permit for any new structures within the shoreline jurisdiction and a Conditional Use Permit for proposed dredging activities.

4.1.5.2 Off-Site Alternative

This section describes the potential impacts in the study areas from construction and operation of the proposed export terminal at the Off-Site Alternative location.

Construction—Direct Impacts

Construction of the proposed export terminal at the Off-Site Alternative location would result in the following direct impacts. Construction-related activities are described in Chapter 3, *Alternatives*.

Existing Land Uses

Construction would change the land use of the project area from undeveloped to industrial. Construction activities would be close to the two single-family residences in the direct impacts study area. Construction activities would be temporary and would not change land use patterns outside the project area during construction.

Construction—Indirect Impacts

Construction of the proposed export terminal at the Off-Site Alternative location would not result in indirect impacts on land use because construction activities would be limited to the project area and would not affect land use outside the project area.

Operations—Direct Impacts

Land Use

Existing Land Uses

The Off-Site Alternative would develop the project area with a terminal that includes a rail loop system and rail unloading facilities, coal handling and stockpile areas, shiploading facilities (including the two new docks in the Columbia River), and associated rail and coal handling facilities. This would convert an undeveloped agricultural area to a heavy industrial use.

New Industrial Use

The Off-Site Alternative would introduce a new industrial use near two existing single-family residential structures with agricultural uses located north of the project area. While the existing land use of these parcels are single-family residential and agricultural, the Cowlitz County Comprehensive Plan designates these parcels for heavy industrial use. Given the intensity of the terminal use, its proximity to the residential uses, and the lack of buffers (e.g., hills, rivers) between the uses, the Off-Site Alternative would not be compatible with the adjacent residential/agricultural uses to the north.

Two residential uses on the north side of Mt. Solo Road would also be in the direct impacts study area. As discussed above, these residences currently coexist with industrial uses nearby (e.g., in the On-Site Alternative project area). These residences would be within 500 feet of the entrance to the Off-Site Alternative project area and rail access, but not within 500 feet of the stockpiles, rail loop, and other facilities. Therefore, the Off-Site Alternative would not directly affect these uses with respect to land use compatibility.

Parks and Recreation Facilities

The Off-Site Alternative would not directly affect the continued use of the Columbia River for recreation purposes, nor would it have any impact on the Willow Grove and Rainier Riverfront Park boat launches. There are no other parks or recreation facilities in the study area. The Off-Site Alternative would not result in direct impacts on parks and recreation facilities.

Operations—Indirect Impacts

Land Use

The Off-Site Alternative would be compatible with land use in the indirect impacts study area, including the existing bulk product terminal operated by the Applicant, Weyerhaeuser, and other Port of Longview facilities.

Residential neighborhoods northeast of the project area would be buffered from project impacts by Mount Solo. Land uses within the Rainier, Oregon portion of the study area would continue to be

separated from the project area by the Columbia River and would not be affected by the proposed export terminal.

The *Cowlitz County Comprehensive Plan* designates the land north and south of the Off-Site Alternative project area for industrial use. Therefore, construction and operation of the terminal would not likely affect land uses near the Barlow Point area.

Increased rail traffic from the Off-Site Alternative would use existing rail infrastructure in the indirect impacts study area and would not affect current land use. The Off-Site Alternative would increase commercial vessel traffic along the Columbia River. However, the Columbia River is currently used for marine transportation. The additional vessel traffic would not change this ongoing use.

Overall, the Off-Site Alternative would not change land use in the indirect impacts study area.

Parks and Recreation Facilities and Agricultural Land

The Off-Site Alternative would introduce the same amount of vessel traffic as the On-Site Alternative. As with the On-Site Alternative, it is not expected that recreational boaters would be substantially affected by vessels and tugs serving a terminal at the Off-Site Alternative location. The Off-Site Alternative would not result in indirect impacts on park and recreation facilities or agricultural land.

Consistency with Zoning

The portion of the Off-Site Alternative within Longview would be consistent with the zoning designation of Heavy Industrial and would comply with the permitted uses and associated development standards and requirements. The Off-Site Alternative within unincorporated Cowlitz County would be consistent with the stated purpose of the Cowlitz County Heavy Manufacturing zoning designation and would comply with the permitted uses and associated development standards and requirements.

A portion of the Off-Site Alternative location would lie within the Cowlitz County Forestry-Recreation zoning designation. The Off-Site Alternative would not be consistent with the stated purpose of the Forestry-Recreation zoning designation and would require an amendment to the Cowlitz County zoning map.

Consistency with Land Use Plans and Public Policies

Consistency with the City of Longview and Cowlitz County Comprehensive Plan and SMP are summarized below. A full discussion of the Off-Site Alternative's consistency with applicable land use plans and public policies is provided in the *NEPA Land Use Technical Report*.

City of Longview and Cowlitz County Comprehensive Plans

Within Longview, the southern portion of the project area is designated as Heavy Industrial and the northern portion is designated Mixed-Use Residential/Commercial. The Off-Site Alternative would be consistent with the City of Longview's Heavy Industrial comprehensive plan designation, but would not be consistent with the Mixed-Use Residential/Commercial designation. As noted above there is a pending application before the City of Longview to change the comprehensive plan designation from Mixed-Use Residential/Commercial to Heavy Industrial. If adopted, this

application would address the inconsistency between the comprehensive plan and the zoning ordinance. If this application is not adopted, this alternative would require a comprehensive plan amendment or other coordination with the City of Longview.

The portion of the project area within Cowlitz County is designated Heavy Industrial in the *Cowlitz County Comprehensive Plan*. The Off-Site Alternative would be consistent with this designation because it would expand industrial use in the project area and would be supportive of the plan's various policies related to industrial land uses.

City of Longview Shoreline Master Program

The Off-Site Alternative project area is within the High Intensity and Aquatic shoreline designations of the City of Longview Shoreline Master Program. The Off-Site Alternative would be consistent with the purpose of the High Intensity and Aquatic shoreline designations and would comply with the management policies of the designations. The Off-Site Alternative would be a permitted industrial use within the High Intensity shoreline designation. The proposed docks and dredging activities under the Off-Site Alternative may be permitted within the Aquatic designation because they would support a water-dependent use. The Off-Site Alternative would be consistent with the policies of the City of Longview Shoreline Master Program.

4.1.5.3 No-Action Alternative

Under the No-Action Alternative, the Corps would not issue a Department of the Army permit authorizing construction and operation of the proposed export terminal. As a result, impacts resulting from constructing and operating the terminal would not occur. In addition, not constructing the terminal would likely lead to expansion of the adjacent bulk product business onto the export terminal project area. The following discussion assesses the likely consequences of the No-Action Alternative related to land use.

Construction

Although the proposed export terminal would not be constructed under the No-Action Alternative, new construction, demolition, or related activities to expand the adjacent bulk product terminal could occur at the On-Site Alternative location. Expansion of the bulk product terminal facilities could involve demolition and replacement of existing buildings. However, no new docks would be built and no new dredging would occur. The No-Action Alternative would likely not result in indirect construction impacts on land use because construction would be limited to the project area and would not change land use outside the project area.

Operations

As with the On-Site Alternative, the No-Action Alternative could expand existing or introduce a new industrial use to the project area. However, because the project area and surrounding area are already designated for industrial uses, the No-Action Alternative would likely not change the land use of the project area. The No-Action Alternative would not directly affect parks and recreation land uses because of the distance between the project area and such uses, nor would it result in direct impacts on agricultural land uses.

If the No-Action Alternative resulted in expanding the bulk product terminal, it could increase rail and truck traffic. This increase in traffic would likely be compatible with existing industrial land uses along these transportation corridors. Land uses adjacent to the rail lines currently coexist with rail traffic, including the transportation of coal and other commodities. The No-Action Alternative would likely not change land uses along the rail corridors. The No-Action Alternative would likely be compatible with land use in the indirect impacts study area, including the existing concentration of industrial uses along the Columbia River. Overall, the No-Action Alternative would not be expected to result in indirect impacts on land or shoreline use.

4.1.6 Required Permits

The following required permits would be required for the proposed export terminal.

4.1.6.1 On-Site Alternative

The On-Site Alternative would require the following permits for land use.

- **Shoreline Substantial Development—Cowlitz County Department of Building and Planning.** The On-Site Alternative would result in new development in the shoreline area regulated by the County's SMP. Therefore, it would require a Shoreline Substantial Development Permit.
- **Shoreline Conditional Use Permit—Cowlitz County Department of Building and Planning/Washington State Department of Ecology.** The On-Site Alternative may require dredging activities on urban shorelines. New dredging is a conditional use on urban shorelines; the On-Site Alternative would require a Conditional Use Permit from the County. The Conditional Use Permit requires final approval from Ecology.
- **Critical Areas Permit—Cowlitz County Department of Building and Planning.** The On-Site Alternative would be constructed within designated critical areas and therefore would require a Critical Areas Permit.
- **Building and Site Development Permits—Cowlitz County Department of Building and Planning.** The On-Site Alternative would require building and site development permits, such as fill and grade permits, plumbing permits, fire permits, mechanical permits, etc., from the Cowlitz County Department of Building and Planning for any earthwork, construction of new structures, or alteration of existing structures.

4.1.6.2 Off-Site Alternative

The Off-Site Alternative would require the following permits for land use.

- **Shoreline Substantial Development—City of Longview Community Development Department.** The Off-Site Alternative would result in new development within the shoreline area regulated by the City of Longview Shoreline Master Program. Therefore, it would require an SSDP from the City of Longview.
- **Critical Areas Permit—City of Longview Community Development Department and Cowlitz County Department of Building and Planning.** The Off-Site Alternative would be constructed within designated critical areas and therefore would require critical areas permits from Cowlitz County and the City of Longview.

- **Comprehensive Plan Amendment—City of Longview Planning Commission and City Council.** The Off-Site Alternative would be inconsistent with the City of Longview’s comprehensive plan designation for the northern portion of the project area. Therefore, the Off-Site Alternative would require an amendment to the City of Longview’s comprehensive plan if the Port of Longview’s application to change the designation to Heavy Industrial is not approved.
- **Zoning Map Amendment—Cowlitz County Planning Commission.** The Off-Site Alternative would be inconsistent with the Forestry-Recreation zoning on a portion of the project area. Therefore, the Off-Site Alternative would require an amendment to the Cowlitz County zoning map.
- **Building and Site Development Permits—City of Longview Community Development Department and Cowlitz County Department of Building and Planning.** The Off-Site Alternative would require building and site development permits, such as fill and grade permits, plumbing permits, fire permits, mechanical permits, etc., from the City of Longview Community Development Department and the Cowlitz County Department of Building and Planning for any earthwork, construction of new structures, or alteration of existing structures occurring within their jurisdiction.