

## 3.2 Social and Community Resources

The social and community resources of an area include the public services in a community that bring people together and create cohesion. These resources include population characteristics, economic activity, and utility services. Changes to social and community resources occur when a project affects any of these elements. This section evaluates the potential adverse impacts on social and community resources resulting from construction and operation of the Proposed Action and No-Action Alternative. Social and community resources addressed in this section include social and community cohesion, public services, and utilities.

Potential impacts on minority and low-income populations are also evaluated in this section, in an environmental justice analysis.<sup>1</sup> The environmental justice analysis addresses potential disproportionately high and adverse effects on minority and low-income populations. This analysis describes the minority and low-income populations in the study area. It then describes impacts on these populations that could result from construction and operation of the Proposed Action and No-Action Alternative, and assesses whether these impacts would be disproportionately high and adverse.

This section also presents the measures identified to mitigate impacts resulting from the Proposed Action and any remaining unavoidable and significant adverse impacts.

### 3.2.1 Regulatory Setting

Laws and regulations relevant to social and community resources are summarized in Table 3.2-1. As shown, these laws and regulations pertain to the assessment of minority and low-income populations.

**Table 3.2-1. Regulations, Statutes, and Guidelines for Minority and Low-Income Populations**

Regulation, Statute, Guideline	Description
<b>Federal</b>	
Title VI of the Civil Rights Act of 1964 (42 USC 2000d) as amended by the Civil Rights Restoration Act of 1987 (P.L. 100-209)	Prohibits discrimination based on race, color, sex, and national origin in the provision of benefits and services resulting from federally assisted programs and activities.
Americans with Disabilities Act, 42 USC 126 § 12101, <i>et seq.</i> (as amended)	Prohibits discrimination based on disability.
Presidential Executive Order 12898, Environmental Justice	Promotes nondiscrimination in federal programs substantially affecting human health and the environment and provides minority and low-income community access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.
Notes: USC = United States Code; P.L. = Public Law	

<sup>1</sup> The U.S. Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”

## 3.2.2 Study Area

The study area for direct and indirect impacts on social and community resources include study areas for each element of the social and community resource analysis: social and community cohesion and public services, utilities, and minority and low-income populations. The study areas for each element are listed below.

- **Social and Community Cohesion and Public Services.** For direct impacts, the study area is the project area and the area within 0.5 mile of the project area. For indirect impacts, the study area is the area within 0.5 mile of the affected rail lines in Cowlitz County (Reynolds Lead, BNSF Railway Company [BNSF] Spur, and BNSF main line). Figure 3.2-1 illustrates these study areas.
- **Utilities.** For direct impacts, the study area is the project area and the area within 0.5 mile of the project area. This study area only relates to construction and operation of the Proposed Action. For indirect impacts, the study area is the area within 0.5 mile of the project area.
- **Minority and Low-Income Populations.** For direct impacts, the study area is the project area and the area within approximately 1 mile of the project area (Figure 3.2-2). This study area only relates to construction and operation of the Proposed Action. For indirect impacts, the study area is the area within 0.5 mile of the affected rail lines in Cowlitz County.

## 3.2.3 Methods

This section describes the sources of information and methods used to evaluate the potential impacts on social and community resources associated with the construction and operation of the Proposed Action and No-Action Alternative.

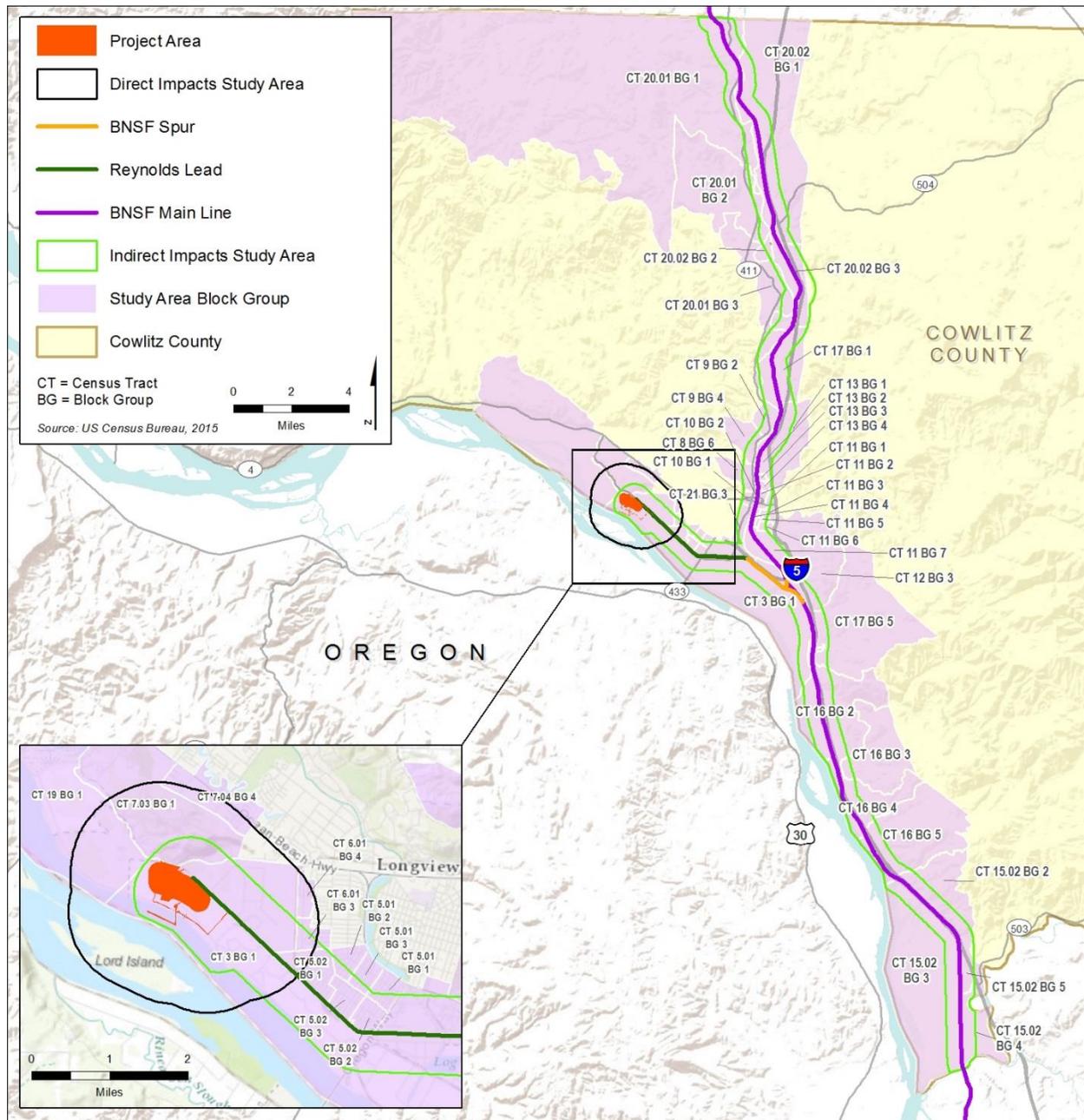
### 3.2.3.1 Information Sources

The following sources of information were used to define the existing conditions relevant to social and community resources, and identify the potential impacts of the Proposed Action and No-Action Alternative on social and community resources.

- U.S. Census Bureau, Census 2000 and 2010 data (U.S. Census Bureau 2000 and 2010) and 2009–2013 American Community Survey (ACS) data (U.S. Census Bureau 2013a) available on American FactFinder
- State of Washington Office of Financial Management data
- Cowlitz-Wahkiakum Council of Governments data
- Various websites to inventory public service facilities in the study areas, including Google Maps and websites for Cowlitz County and the Cities of Castle Rock, Kelso, Woodland, and Longview.



**Figure 3.2-2. Minority and Low-Income Populations Study Area**



### 3.2.3.2 Impact Analysis

The following methods were used to evaluate the potential impacts of the Proposed Action and No Action Alternative on social and community resources.

#### **Social and Community Cohesion and Public Services**

This analysis describes existing social and community cohesion in terms of the area's population characteristics, the various public services and social institutions that serve the community and create cohesion (such as parks, schools, and places of religious worship), and the access and linkages between the community and those services. Demographic data were compiled based on the U.S. Census Bureau (census) block group boundaries within the social and community cohesion study area: Census Tract 3 Block Group 1, Census Tract 7.03 Block Group 1, and Census Tract 19 Block Group 1 (Figure 3.2-3).

The analysis then evaluates if the Proposed Action could affect social and community cohesion by altering population characteristics, dividing or isolating a neighborhood, or separating residents from public services by changing travel patterns. This evaluation considers the location of public services in the study areas relative to characteristics of the Proposed Action. Impacts on social and community cohesion occur when an action does one of the following.

- Divides or isolates part of a neighborhood.
- Displaces or alters a public service facility, such as an educational facility, library, public park, or recreational facility.
- Generates substantial new development or changes property values leading to the displacement of substantial portions of the existing community.

Impacts on public services occur when an action introduces a new population or service demand that affects the services delivered by a public service facility, or if an action separates residents from public services by changing travel patterns or access to the service.

#### **Utilities**

The assessment of utilities focuses on water utilities, including potable water and wastewater service, and electrical utilities. Electricity and natural gas consumption are addressed in Chapter 4, Section 4.9, *Energy and Natural Resources*. This evaluation assesses whether the Proposed Action would have the potential to affect utility service directly by altering the water supply or wastewater conveyance system or electrical utilities. The evaluation also assesses the potential for indirect impacts from new demands on water supply capacity and/or wastewater treatment capacity.



## Minority and Low-Income Populations

The assessment of minority and low-income populations used guidance published by the Council on Environmental Quality (CEQ) (1997), which involved the following six steps.

1. Identify the area where the Proposed Action could cause adverse effects either during construction or operation (i.e., the study area, described in Section 3.2.2, *Study Area*).
2. Compile minority and low-income data for the census block groups in the study area and identify minority and low-income populations.
3. Identify the Proposed Action's potential adverse effects on minority and low-income populations.
4. Evaluate the Proposed Action's potential adverse effects on minority and low-income communities relative to the effects on the overall population to determine if potential adverse effects on those communities would be disproportionately high and adverse.
5. Discuss proposed mitigation measures for any identified disproportionate adverse effects.
6. Describe the public outreach and participation process for effectively engaging minority and low-income populations in the decision-making process.

### Identification of Minority and Low-Income Populations

Census block groups were selected as the geographic unit for analysis to avoid artificially diluting or inflating the affected populations, consistent with CEQ guidance. As shown in Figure 3.2-2, the study area for direct and indirect effects includes 46 census block groups.

Data on race, ethnicity, and poverty status were gathered from the U.S. Census Bureau's 2009–2013 ACS for the census block groups in the study area. For comparison purposes, data for the City of Longview and Cowlitz County were also compiled. Based on census data and CEQ guidance, potential minority and low-income populations were identified as follows.

- **Minority populations.** CEQ guidance defines minorities to include American Indians or Alaskan Natives, Asian and Pacific Islanders, African Americans or Black persons, and Hispanic persons. This analysis also considers minority populations to include persons who identified themselves as being either "some other race" or "two or more races" in the 2009–2013 ACS. Following CEQ guidance, minority populations were identified where either 1) the minority population of the affected area exceeds 50%; or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate comparison unit of geographic analysis (Council on Environmental Quality 1997). For the purposes of this analysis, *meaningfully greater* is interpreted as *at least 50% greater*. This analysis used Cowlitz County as the primary comparison area. In Cowlitz County, the minority population in the 2009–2013 ACS was 14.6% of the total population. Therefore, this analysis considers any study area block group with a minority population of greater than 21.9% to be a minority community.
- **Low-income populations.** This study defines low-income populations as the percent of individuals living below the poverty level in each census block group, as presented in the 2009–2013 ACS. CEQ guidance does not specify a threshold for identifying clusters of low-income populations. Therefore, for this analysis, any census block group with a percentage of low-income population at least 50% greater than the percentage in Cowlitz County as a whole was

considered a low-income community. In Cowlitz County, the low-income population (the population with incomes below the poverty level) is approximately 17.6% of the total population. Therefore, this assessment identifies low-income communities as those in which the census block group population living below the poverty level exceeds 26.4%.

### **Identification of Potential Disproportionately High and Adverse Effects**

The determination of the Proposed Action's potential to result in disproportionately high and adverse effects involved the following considerations.

- If the adverse project impact is considered significant.
- If the impacts on minority or low-income populations would appreciably exceed, or would be likely to appreciably exceed, the risk or rate to the general population.
- If the minority or low-income population would be affected by cumulative or multiple adverse exposures from environmental hazards.<sup>2</sup>

In making this determination following CEQ guidance, it was recognized that effects on minority or low-income populations may be different from effects on the general population (e.g., due to a community's distinct cultural practices, such as a pattern of living that relies on subsistence fish, vegetation, or wildlife consumption). The determination of disproportionately high and adverse effects also involved consideration of proposed mitigation measures and offsetting benefits.

All resource sections in Chapters 3, 4, and 5 present the impacts resulting from construction and operation of the Proposed Action. These impacts were evaluated for their potential to result in disproportionately high and adverse effects on minority and low-income communities in the *SEPA Social and Community Resources Technical Report* (ICF and BergerABAM 2017). A summary of the evaluation is provided in Section 3.2.5, *Impacts*.

As discussed in the *SEPA Social and Community Resources Technical Report*, the assessment of disproportionately high and adverse effects on minority and low-income communities focused on potential impacts that could affect minority and low-income populations, including impacts related to aesthetics, light, and glare; air quality; cultural resources; tribal resources; fish; geology and soils; groundwater; noise and vibration; and vehicle transportation. In other resource areas, the Proposed Action would not result in adverse impacts or would result in low or minor impacts that would be avoided or minimized with standard best management practices or other mitigation measures. In certain resource areas (e.g., climate change and greenhouse gas emissions), the Proposed Action would result in impacts that occur within a global context. Based on the analysis presented in the *SEPA Social and Community Resources Technical Report*, the Proposed Action would not have the potential to result in disproportionately high and adverse effects on minority and low-income populations in these resource areas.

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<sup>2</sup> According to CEQ guidance, the term "environmental hazard" means a chemical, biological, physical, or radiological agent, situation, or source that has the potential for deleterious effects to the environment and/or human health.

## 3.2.4 Existing Conditions

This section describes the existing environmental conditions related to social and community resources that could be affected by the construction and operation of the Proposed Action and the No-Action Alternative.

### 3.2.4.1 Social and Community Cohesion and Public Services

This section describes social and community cohesion in terms of population, the various public services and social institutions that serve the community, and the access and linkages between the community and those services.

The direct impacts study area (project area and within 0.5 mile of the project area) is characterized by predominantly industrial and transportation/utility land uses, along with limited residential uses to the north of Mount Solo Road. The area east of the project area is part of a wide corridor of industrial land uses along the Columbia River. Notable uses include the Weyerhaeuser Company lumber products manufacturing site/North Pacific Paper Corporation (NORPAC) facility and Mint Farm Industrial Park. The area west of the project area is Barlow Point, which includes an undeveloped parcel owned by the Port of Longview, the closed Mount Solo Landfill, and large-lot residential and agricultural land uses south of Industrial Way. Neighborhoods in the direct impacts study area include Barlow Point, Memorial Park, and Mint Farm (City of Longview 2007).

The indirect impacts study area along the Reynolds Lead and BNSF Spur (within 0.5 mile of these rail lines) includes the Highlands neighborhood and the Industrial and California Way neighborhood in Longview. The Highlands neighborhood is predominantly residential. The Industrial Way and California Way neighborhood includes a mix of commercial and industrial uses. On the BNSF main line, the indirect impacts study area (within 0.5 mile of the rail line) includes undeveloped and low-density rural land uses, and urban areas, including Castle Rock, Kelso, Kalama, and Woodland.

#### Population Characteristics

Key population characteristics, including local population and population projections, are summarized below. The *SEPA Social and Community Resources Technical Report* provides a full discussion of population characteristics, including local population, population projections, age distribution, households, family composition, race and ethnicity, limited English proficiency, disability status, median household income and poverty status, and housing characteristics.

Table 3.2-2 presents the population for the direct impacts study area, Longview, and Cowlitz County in 2000, 2010, and 2013. The population of the study area has declined by approximately 3% since 2000. In comparison, the populations of both Longview and Cowlitz County grew from 2000 to 2010 and remained flat from 2010 to 2013. Census Tract and Block Groups are shown in Figure 3.2-3.

**Table 3.2-2. Population Estimates for Years 2000, 2010, and 2013**

Area	Population 2000	Population 2010	Percent (%) Change 2000-2010	Population 2013	Percent (%) Change 2010-2013
<b>Direct Impacts Study Area (Project Area and within 0.5 mile of the Project Area)</b>					
Census Tract 3 Block Group 1 <sup>a</sup>	868	509	-41.4	570	12.0
Census Tract 7.03 Block Group 1 <sup>b</sup>	1,367	1,601	--	1,373	-14.2
Census Tract 19 Block Group 1	827	956	15.6	1,021	6.8
	<b>3,062</b>	<b>3,066</b>	<b>0.1</b>	<b>2,964</b>	<b>-3.3</b>
<b>Longview</b>	<b>34,660</b>	<b>36,648</b>	<b>5.7</b>	<b>36,656</b>	<b>0.0</b>
<b>Cowlitz County</b>	<b>92,948</b>	<b>102,410</b>	<b>10.2</b>	<b>102,110</b>	<b>-0.3</b>

Notes:

<sup>a</sup> The drop in population in this census tract is largely due to the displacement of mobile home units from 2000 to 2010. In particular, the 166-space River City RV and Mobile Home Park, located near the corner of California Way and 7th Avenue, closed in 2009 for the development of a Super Walmart.

<sup>b</sup> Census Tract 7.03 Block Group 1 applies to demographic data for 2010 and 2013. In the 2000 Census, this area is closely approximated by Census Tract 7.01 Block Group 4. The 2000 Census data are presented for informational purposes, but a percent change is not presented because the geographic areas are not identical.

Source: U.S. Census Bureau 2000; U.S. Census Bureau 2010; U.S. Census Bureau 2013a.

Table 3.2-3 shows Cowlitz County population projections to 2040 (Washington State Office of Financial Management 2012). The population of Cowlitz County is projected to grow by approximately 6% from 2010 to 2020. Lower growth rates are estimated from 2020 to 2040. Over the coming decades, it is projected that the age distribution in Cowlitz County will shift, with an increase in the elderly population (age 65 and over) and a decrease in the school-age population (age 0 to 17) (Cowlitz County 2015). It is also expected that the proportion of the population with a disability will increase as the share of elderly population increases.

**Table 3.2-3. Cowlitz County Population Projections to 2040**

Area	Population 2010	Population 2020	Population 2030	Population 2040	Percent (%) Change 2010-2040
Cowlitz County	102,410	108,588	114,158	116,897	14.1
Percent Change over Previous 10 Years	--	6.0	5.1	2.4	--

Notes:

Source: Washington State Office of Financial Management 2012.

## Public Services

For the purposes of this assessment, public services include educational facilities, religious institutions, social institutions, medical facilities, fire protection and emergency medical services, police services, cemeteries, public park and recreation facilities, and other notable public services and government institutions.

There are no public service facilities in the direct impacts study area (project area and within 0.5 mile of the project area). Table 3.2-4 illustrates the public service facilities in the indirect impacts study area (within 0.5 mile of the Reynolds Lead, BNSF Spur, and BNSF main line).

**Table 3.2-4. Public Service Facilities in the Indirect Impacts Study Area**

Type of Facility	Area					
	Longview	Kelso	Kalama	Castle Rock	Woodland	Unincorporated Cowlitz County
Educational Facility	2	3	2	3	4	1
Religious Institution	4	11	2	6	3	6
Social Institution	1	4	1	3	3	0
Medical Facility	2	2	0	1	2	0
Fire Protection	1	2	1	1	1	2
Police Facility	1	3	1	1	1	0
Cemetery	0	0	0	0	0	3
Library	0	1	0	1	1	0
Parks and Recreation Facility	3	10	1	4	3	1
Other	7	14	2	2	2	1
<b>Total</b>	<b>21</b>	<b>50</b>	<b>10</b>	<b>22</b>	<b>20</b>	<b>14</b>

### Access and Linkages

A variety of roadway, pedestrian, transit, and bicycle transportation facilities provide access to and among the various public service facilities. Local roadways, Interstate 5, and state highways provide access to public service facilities and between the urban areas within Cowlitz County. In general, pedestrian access is better in the downtown urban areas located along the rail line, such as in Longview and Kelso, than in more rural, suburban, and industrial areas.

River Cities Transit provides public transit throughout the Longview/Kelso area. The closest transit route to the project area is Route 31, which runs along 32nd Avenue, Washington Way, and Alabama Street into downtown Longview. The nearest portion of Route 31 is approximately 1 mile from the project area. Route 33 and Route 44 both run along Ocean Beach Highway and are approximately 1 to 2 miles from the project area. No fixed transit routes directly serve the project area, nor do any routes cross the Reynolds Lead. Frequent and comprehensive transit service is a critical support service to residents with no access to a vehicle, especially those who are low-income, homeless, and/or reliant on public transit (River Cities Transit 2015).

Within Cowlitz County, there are various bicycle trails in parks and along certain waterfront areas and in the indirect impacts study area. Several bicycle trails are located along the Columbia and Cowlitz rivers; however, there are no designated bicycle trails within the direct impacts study area (0.5 mile from the project area). The Highlands Trail is a 2-mile trail that runs along Industrial Way from Oregon Way to 32nd Avenue and Washington Way. Bicycle trails that may provide access to public services are discussed in more detail in the *SEPA Social and Community Resources Technical Report*.

### **Fire Protection and Emergency Medical Services**

The Cowlitz 2 Fire & Rescue District and American Medical Response (AMR) provide emergency medical services and fire protection for the project area. A brief description of each of these service providers is below; additional information on the stations, facilities, and apparatus of each is provided in the *SEPA Social and Community Resources Technical Report*.

Cowlitz 2 Fire & Rescue provides fire protection services, and serves approximately 34,000 citizens in the City of Kelso and unincorporated Cowlitz County, responding to approximately 4,100 calls per year (Cowlitz 2 Fire & Rescue 2015). The district is staffed by approximately 120 full-time and volunteer members in five active fire stations, two of which are staffed with full-time EMT and paramedic firefighters. Volunteer firefighter EMTs also respond on an on-call basis.

AMR is a private ambulance company that provides emergency and non-emergency medical transport service. AMR includes approximately 35 paramedics and EMTs, and handles an average of 7,500 calls annually (American Medical Response 2015). The medical transport vehicles are based out of the facility near the Cowlitz Way intersection with Long Avenue.

#### **3.2.4.2 Utilities**

This section describes existing utility services provided to the project area. This assessment focuses on water utilities, including potable water and wastewater service, and electrical utilities. Electricity and natural gas consumption are addressed in Chapter 4, Section 4.9, *Energy and Natural Resources*. For direct impacts on utilities, the study area is the project area and the area within 0.5 mile of the project area. For indirect impacts on utilities, the study area is the area within 0.5 mile of the project area.

An existing on-site industrial wastewater treatment facility and stormwater/wastewater collection and treatment system provides wastewater treatment. The Applicant replaced pre-existing sanitary sewer collection and treatment systems with a new collection system and connection to the Longview sewer system (URS Corporation 2014). With the new connection, project area sewage flows are conveyed to the Three Rivers Regional Treatment Plant. This wastewater treatment plant has a design capacity of 26.0 million gallons per day (Washington State Department of Ecology 2012). From 2001 to 2009, the plant received an average wet-weather (typically the highest rate) flow of 3.04 million gallons per day (City of Kelso 2011).

The Mint Farm Regional Water Treatment Plant supplies drinking water to more than 45,000 people in the Longview area. Groundwater is tapped from wells in the Mint Farm Industrial Park, and the water plant consists of four high-capacity (4,000 gallons per minute) groundwater wells. The project area receives potable water from Longview through a connection on Industrial Way. This water is for domestic usage such as sinks and toilets in existing facilities (URS Corporation 2014).

For stormwater, the project area also includes on-site stormwater ponds that provide water for dust control and other production needs. The stormwater ponds are supplemented with groundwater well withdrawals during dry periods (URS Corporation 2014).

As noted in Chapter 4, Section 4.9, *Energy and Natural Resources*, the Cowlitz Public Utility District provides electricity service to the project area. The project area also includes two Bonneville Power Administration (BPA) parcels. One parcel includes high-power transmission lines and the second parcel includes a power substation with an access road.

### 3.2.4.3 Minority and Low-Income Populations

This section describes the existing minority and low-income populations in the study areas that could be affected by the construction and operation of the Proposed Action and the No-Action Alternative. For direct impacts on minority and low-income populations, the study area is the project area and the area within approximately 1 mile of the project area. The study area for indirect impacts is the area within 0.5 mile of the affected rail lines in Cowlitz County.

Race, ethnicity, and poverty characteristics were compiled for the study area's block groups, Longview, and Cowlitz County as a whole. Table 3.2-5 provides the population, percent minority, and percent low-income for each block group in the study areas. Of the 46 census block groups within the study area, 16 have minority populations that exceed the 21.9% threshold, ranging from 23.7 to 42.4%. In addition, 18 of the census block groups have low-income populations that exceed the 26.4% threshold, ranging from 26.6 to 57.6%. The *SEPA Social and Community Resources Technical Report* provides detailed data on race, ethnicity, and poverty status for the study area. Overall, 21 of the study area's 46 block groups are considered minority and/or low-income communities for the purposes of this analysis. The remaining 25 block groups are not considered minority or low-income communities. Figure 3.2-4 shows the location of minority and low-income communities within the study area.

**Table 3.2-5. Minority and Low-Income Status by Block Group**

Census Block Group	2013 Total Population	Percent Minority <sup>a</sup>	Percent Low-Income <sup>a</sup>
<b>Direct Impacts Study Area Census Block Groups (Project Area and Area within 1 Mile of the Project Area)</b>			
Census Tract 3, Block Group 1	570	35.4	44.7
Census Tract 6.01, Block Group 3	1,025	42.4	32.0
Census Tract 6.01, Block Group 4	881	20.0	31.4
Census Tract 7.03, Block Group 1	1,373	15.1	23.7
Census Tract 7.04, Block Group 4	1,912	11.9	18.8
Census Tract 19, Block Group 1	1,021	2.0	23.5
<b>Direct Impacts Study Area Census Block Groups<sup>b</sup></b>	<b>6,782</b>	<b>18.7</b>	<b>26.3</b>
<b>Indirect Impacts Study Area Census Block Groups (Within 0.5 Mile of the Reynolds Lead, BNSF Spur, and BNSF Main Line)</b>			
Census Tract 5.01, Block Group 1	846	24.3	24.7
Census Tract 5.01, Block Group 2	1,047	23.7	21.2
Census Tract 5.01, Block Group 3	952	8.3	18.8
Census Tract 5.02, Block Group 1	1,587	33.1	39.6
Census Tract 5.02, Block Group 2	1,841	28.1	57.6
Census Tract 5.02, Block Group 3	1,454	26.4	44.8
Census Tract 8, Block Group 6	1,203	5.2	7.7
Census Tract 9, Block Group 2	2,980	21.9	5.5
Census Tract 9, Block Group 4	1,891	11.3	8.7
Census Tract 10, Block Group 1	899	35.2	41.6
Census Tract 10, Block Group 2	288	2.1	28.5
Census Tract 11, Block Group 1	717	9.6	24.1

<b>Census Block Group</b>	<b>2013 Total Population</b>	<b>Percent Minority<sup>a</sup></b>	<b>Percent Low-Income<sup>a</sup></b>
Census Tract 11, Block Group 2	506	25.1	46.6
Census Tract 11, Block Group 3	704	30.5	39.2
Census Tract 11, Block Group 4	579	13.5	27.8
Census Tract 11, Block Group 5	1,361	35.9	37.5
Census Tract 11, Block Group 6	716	12.7	24.7
Census Tract 11, Block Group 7	714	16.8	33.8
Census Tract 12, Block Group 3	1,338	11.0	17.8
Census Tract 13, Block Group 1	977	3.6	21.5
Census Tract 13, Block Group 2	899	29.1	26.7
Census Tract 13, Block Group 3	752	19.9	11.7
Census Tract 13, Block Group 4	983	26.6	47.8
Census Tract 15.02, Block Group 2	934	13.8	6.2
Census Tract 15.02, Block Group 3	599	23.7	57.8
Census Tract 15.02, Block Group 4	1,602	32.8	14.0
Census Tract 15.02, Block Group 5	504	26.8	38.5
Census Tract 16, Block Group 2	881	5.3	7.7
Census Tract 16, Block Group 3	1,510	1.8	4.2
Census Tract 16, Block Group 4	1,470	17.9	11.4
Census Tract 16, Block Group 5	2,233	7.5	11.2
Census Tract 17, Block Group 1	535	0.0	10.8
Census Tract 17, Block Group 5	1,900	12.9	4.8
Census Tract 20.01, Block Group 1	847	17.7	26.6
Census Tract 20.01, Block Group 2	1,172	5.6	1.2
Census Tract 20.01, Block Group 3	1,083	4.5	3.4
Census Tract 20.02, Block Group 1	1,378	11.7	12.1
Census Tract 20.02, Block Group 2	1,294	16.1	12.1
Census Tract 20.02, Block Group 3	1,031	0.0	3.4
Census Tract 21, Block Group 3	1,164	18.0	17.7
<b>Indirect Impacts Study Area Census Block Groups<sup>c</sup></b>	<b>45,371</b>	<b>17.1</b>	<b>20.4</b>
<b>Longview</b>	<b>36,656</b>	<b>18.4</b>	<b>22.6</b>
<b>Cowlitz County</b>	<b>102,110</b>	<b>14.6</b>	<b>17.6</b>

Notes:

Shading indicates a minority and/or low-income community. The threshold for a minority community was a percent minority of at least 21.9%. The threshold for a low-income community was a percent low-income of at least 26.4%.

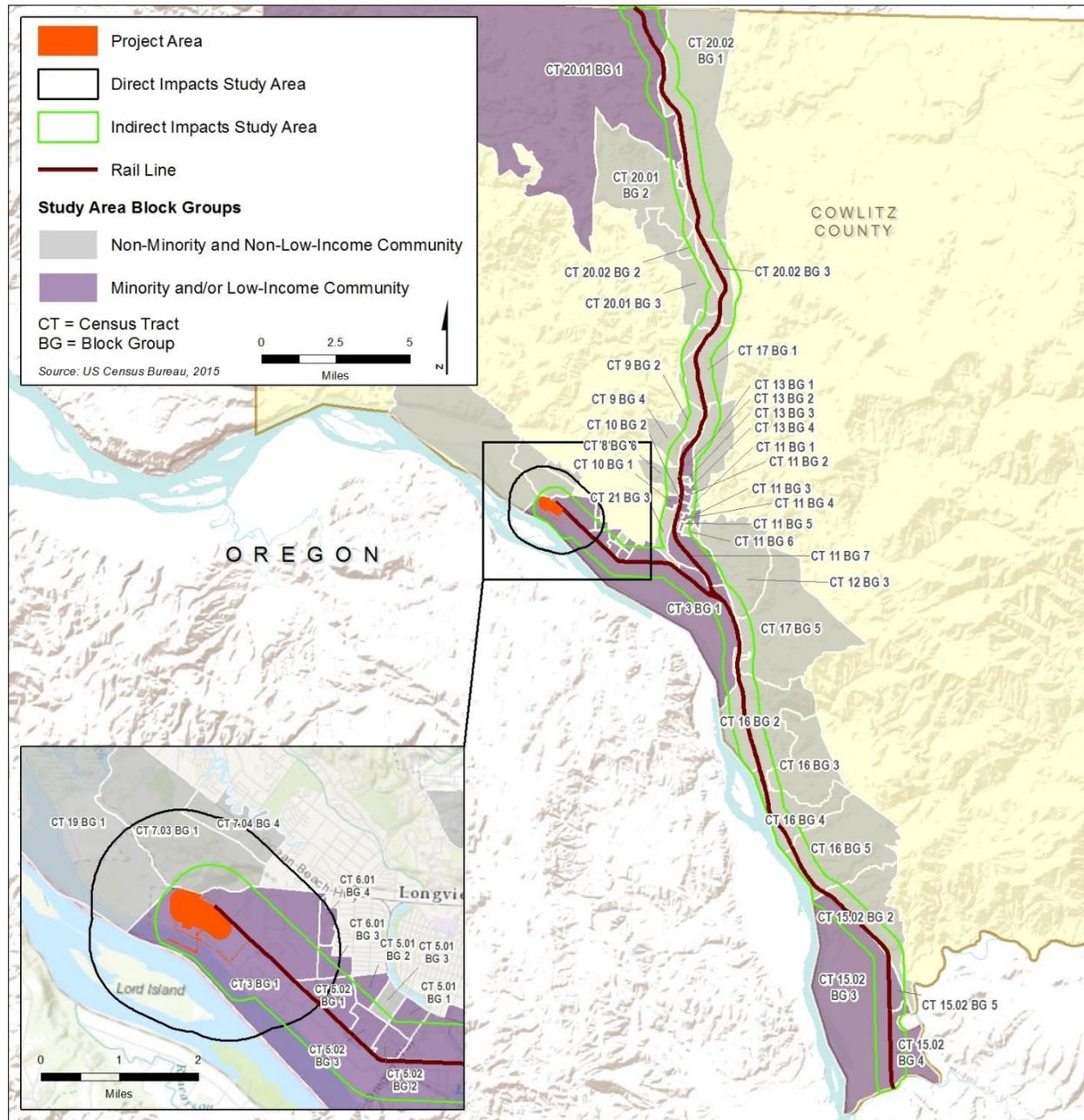
<sup>a</sup> Minority status includes individuals defined in the census as any race or ethnicity other than white alone and not Hispanic or Latino. Percent low-income is based on the population for whom the Census Bureau can determine poverty status. For some block groups, the population for whom poverty status is determined is slightly smaller than the total population.

<sup>b</sup> Census Block Groups within 1 mile of the project areas.

<sup>c</sup> Census Block Groups within 0.5 mile of affected rail lines in Cowlitz County.

Source: U.S. Census Bureau 2013a.

**Figure 3.2-4. Minority and Low-Income Communities**



Within the direct impacts study area, three of six block groups are identified as minority or low income communities. These block groups are located to the east of the project area. These block groups contain industrial uses in the areas nearest the project area, and residential uses are located approximately 1 mile or more from the project area. The nearest residences to the project area (those located north of State Route 432) are not located within a minority and/or low-income community.

Within the indirect impacts study area, 18 of 40 block groups are identified as minority or low income communities. These block groups are located along the Reynolds Lead and BNSF Spur in Longview and along the BNSF main line primarily in Longview, Kelso, and Woodland.

During interviews conducted for the Proposed Action's public involvement plan, stakeholders expressed that the Highlands neighborhood in the City of Longview warranted environmental justice consideration under Executive Order 12898. Consistent with that recommendation, this analysis identifies the Highlands neighborhood in the City of Longview as a minority and low income community. The Highlands neighborhood corresponds with Census Tract 5.02, Block Groups 1, 2, and 3, which are shown in Figure 3.2-4.

### 3.2.5 Impacts

This section describes the potential direct and indirect impacts related to social and community resources that would result from construction and operation of the Proposed Action and the No-Action Alternative.

The study areas for direct and indirect impacts for each element of this social and community resources are listed below.

- **Social and Community Cohesion and Public Services.** For direct impacts, the study area is the project area and the area within 0.5 mile of the project area. For indirect impacts, the study area is the area within 0.5 mile of the affected rail lines in Cowlitz County.
- **Utilities.** For direct impacts, the study area is the project area and the area within 0.5 mile of the project area. For indirect impacts, the study area is the area within 0.5 mile of the project area.
- **Minority and Low-Income Populations.** For direct impacts, the study area is the project area and the area within approximately 1 mile of the project area. For indirect impacts, the study area is the area within 0.5 mile of the affected rail lines in Cowlitz County.

#### 3.2.5.1 Proposed Action

This section describes potential impacts that could occur in the study areas as a result of construction and operation of the Proposed Action.

##### Construction—Direct Impacts

Construction-related activities associated with the Proposed Action would result in direct impacts as described below.

### **Social and Community Cohesion and Public Services**

Construction of the Proposed Action would not directly affect social and community cohesion or public services because construction activities would be limited to the project area and there are no public service facilities in the direct impacts study area.

### **Utilities**

Construction of the Proposed Action is not anticipated to result in direct impacts on water and sewer service. Construction activities would use groundwater for dust suppression and would not affect water utility service. Construction practices would ensure that the water supply and sewer connections are not disrupted for surrounding users.

### **Affect BPA-Owned Parcels**

As described in *Chapter 2, Project Objectives, Proposed Action, and Alternatives*, if the Applicant obtains easements from BPA, construction of the Proposed Action would affect two BPA-owned parcels in the project area.<sup>3</sup> The Applicant would coordinate with BPA on potential impacts on BPA infrastructure to minimize adverse impacts.

### **Minority and Low-Income Populations**

Direct impacts resulting from construction of the Proposed Action would be temporary and limited to the project area and the immediate vicinity (for example, construction noise directly affecting nearby residences). As discussed above, the nearest residences in minority or low-income communities in the direct impacts study area are located approximately 1 mile from the project area. Because of the distance between the project area and identified minority and low-income communities, the direct construction impacts of the Proposed Action would not affect minority or low-income communities at a rate that would appreciably exceed the rate to the general population. Therefore, the analysis concluded that the direct impacts resulting from construction of the Proposed Action would not have a disproportionately high and adverse effect on minority and low-income communities.

### **Construction—Indirect Impacts**

Construction-related activities associated with the Proposed Action would result in indirect impacts as described below.

### **Social and Community Cohesion and Public Services**

As described in Chapter 2, *Project Objectives, Proposed Action, and Alternatives*, construction materials would be delivered to the project area by truck or rail (truck delivery and rail delivery scenarios). As described in Chapter 5, Section 5.3, *Vehicle Transportation*, construction activities would not adversely affect vehicle delay at at-grade crossings on the Reynolds Lead, BNSF Spur, and BNSF main line because average vehicle delay would not substantially change during construction, except during the peak traffic hour at two public at-grade crossings on the Reynolds Lead under the rail delivery scenario. This vehicle delay impact would only occur if a Proposed Action-related construction train (average of 1.3 train trips per day) passes during the peak traffic hour. If a public

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<sup>3</sup> This impact would occur if BPA grants an easement to the Applicant prior to construction of the Proposed Action. The impact would not occur if BPA sells the land to the Applicant prior to construction.

service vehicle arrives at the same time as a Proposed Action-related train along the Reynolds Lead, it would experience an approximate 9-minute delay. Therefore, vehicle delay during construction of the Proposed Action would have negligible impacts on social and community cohesion and access to public services.

Construction of the Proposed Action under the rail delivery scenario would increase delay for pedestrians and bicyclists as described below.

### **Affect Pedestrian and Bicyclist Travel**

Proposed Action-related construction trains under the rail delivery scenario would cause pedestrian and bicyclist delay at at-grade crossings if pedestrians or bicyclists are blocked by a Proposed Action-related construction train. Alternative routes would require out-of-direction travel. The amount of delay would depend on when a pedestrian or bicyclist arrives at the crossing. If a pedestrian or bicyclist arrives at the same time as a Proposed Action-related construction train, they could experience approximately 9 minutes of delay at the public at-grade crossings along the Reynolds Lead. Pedestrians and bicyclists could also be affected by motor vehicle congestion and queuing at intersections adjacent to the at-grade crossings. Vehicle queuing at at-grade crossings could spill into the adjacent intersections and reduce or block sight distance for pedestrians and bicyclists. There would be no change in delay to pedestrian and bicycle travel at at-grade crossings on the Reynolds Lead if construction materials are delivered by truck (truck delivery scenario).

### **Utilities**

Demand for water and sewer utility services during construction of the Proposed Action would be confined to activities in the project area. Construction of the Proposed Action would not result in new indirect demands on water supply, sewer utility services, or wastewater treatment. Therefore, construction of the Proposed Action would not result in indirect impacts on utilities.

### **Minority and Low-Income Populations**

As noted above, the assessment of disproportionately high and adverse effects on minority and low-income communities focused on potential impacts related to aesthetics, light, and glare; air quality; tribal resources; cultural resources; fish; geology and soils; groundwater; noise and vibration; and vehicle transportation. The Proposed Action would not result in indirect construction impacts in any of these resource areas except vehicle transportation. As described in Chapter 5, Section 5.3, *Vehicle Transportation*, construction of the Proposed Action would result in an indirect impact related to increased vehicle delay from construction rail traffic during the peak traffic hour at two public at-grade crossings on the Reynolds Lead under the rail delivery scenario. The vehicle delay impacts would only occur if a Proposed Action-related construction train (average of 1.3 train trips per day) travels during the peak traffic hour and would be temporary (limited to the peak traffic hour during the construction period). Therefore, the analysis concluded that the indirect impacts resulting from construction of the Proposed Action would not have a disproportionately high and adverse effect on minority and low-income populations.

### **Operations—Direct Impacts**

Operation of the Proposed Action would result in the following direct impacts. Operations-related activities are described in Chapter 2, *Project Objectives, Proposed Action, and Alternatives*.

## **Social and Community Cohesion and Public Services**

Operation of the Proposed Action would not divide or isolate neighborhoods because operations would be confined to the project area, nor would it lead to the displacement of substantial portions of the existing community. Operations also would not physically displace or alter any public service facility, but it would place new demands on fire protection services, as discussed below.

### **Place New Demands on Fire Protection Services**

The Proposed Action would place new demands on Cowlitz 2 Fire & Rescue protection services. Required fire and life safety systems would be installed in the project area according to fire code standards. These systems would be regularly inspected and maintained. The Applicant would also maintain a surface water storage pond with a reserve of 0.36 million gallons for fire suppression.

## **Utilities**

The Proposed Action would directly affect water and sewer utilities and electrical utilities. Operation of the Proposed Action would result in the following direct impacts.

### **Affect BPA-Owned Parcels**

As described in *Chapter 2, Project Objectives, Proposed Action, and Alternatives*, if the Applicant obtains an easement from BPA, operation of the Proposed Action would be located on two BPA-owned parcels within the project area. The Applicant would coordinate with BPA to minimize adverse impacts.<sup>4</sup>

### **Create New Sanitary Sewage Flows**

As described in Section 3.2.4.3, *Utilities*, the project area and the Applicant's leased area are served by a sanitary sewer collection system and connection to the Longview sewer system. A new sanitary sewer conveyance system and connection to the Longview sewer system would be developed under the Proposed Action. New sanitary sewer flows from the Proposed Action would be small. The Three Rivers Wastewater Treatment Plant has sufficient capacity to treat additional wastewater flows generated by the Proposed Action. The Applicant would be required to obtain a permit to discharge wastewater, as described in Section 3.2.6, *Required Permits*.

The Proposed Action would not convey industrial process wastewater to the Longview sewer system or the Three Rivers Wastewater Treatment Plant. Industrial process wastewater would be treated in the on-site water treatment facility, used on site, and would not add new demands to public sewer and wastewater utilities.

### **Create New Water Demand**

The Proposed Action would use potable municipal water supplies for domestic uses such as drinking, sinks, and toilets. The Proposed Action would not use potable water supplies for

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<sup>4</sup> This impact would occur if BPA grants an easement to the Applicant prior to construction of the Proposed Action. The impact would not occur if BPA sells the land to the Applicant prior to construction.

industrial needs. Therefore, the Proposed Action would result in a small increase in demand for potable water.

Non-potable water would be used for industrial processes such as dust control, stockpile sprays, wash down, clean up, and fire protection. This water would be supplied by treated water from the proposed water management system and storage ponds and supplemented by wells during dry seasons. Therefore, the industrial water use would not place new demands on the Longview water supply.

### **Minority and Low-Income Populations**

Direct impacts resulting from operation of the Proposed Action would be limited to the project area and the immediate vicinity (for example, operational noise directly affecting adjacent residences). As discussed above, the nearest residences in minority or low-income communities within the direct impacts study area are located approximately 1 mile from the project area. Because of the distance between the project area and identified minority and low-income communities, the direct impacts of the Proposed Action during operations would not likely have the potential to affect minority or low-income communities at a rate that would appreciably exceed the rate to the general population. Therefore, the analysis concluded that the direct impacts resulting from operation of the Proposed Action would not likely have a disproportionately high and adverse effect on minority and low-income populations.

### **Operations—Indirect Impacts**

Operation of the Proposed Action would result in the following indirect impacts.

#### **Social and Community Cohesion and Public Services**

Operation of the Proposed Action would result in the following indirect impacts on social and community cohesion, and public services.

#### **Affect Accessibility to Community Resources and Public Services**

As described in Chapter 5, Section 5.3, *Vehicle Transportation*, Proposed Action-related trains would not adversely impact daily average vehicle delay at public at-grade crossings on the Reynolds Lead, BNSF Spur, and BNSF main line because average vehicle delay would not change substantially. Peak traffic hour vehicle delay would also not be adversely affected if track improvements are made to the Reynolds Lead and BNSF Lead (as described in Chapter 5, Section 5.1, *Rail Transportation*)<sup>5</sup> and only one Proposed Action-related train travels during the peak traffic hour. Therefore, under these scenarios, accessibility to social and community resources and public services would not change substantially under the Proposed Action.

However, if two Proposed-Action trains travel during the peak traffic hour, or infrastructure improvements are not made to the Reynolds Lead and BNSF Spur (as described in Chapter 5, Section 5.1, *Rail Transportation*), vehicle delay would substantially change at six public at-grade

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<sup>5</sup> The owner of the Reynolds Lead and BNSF Spur has indicated that track improvements would be made, but these plans have not been submitted or permitted.

crossings along the Reynolds Lead and BNSF main line during the peak traffic hour.<sup>6</sup> These vehicle delay impacts would be temporary (limited to the peak traffic hour), and the probability for two trains to pass during the peak vehicle traffic hour would be low. Under these scenarios, Proposed Action-related trains would adversely affect the accessibility to community resources and public services at selected public at-grade crossings on the Reynolds Lead, BNSF Spur, and BNSF main line.

### **Affect Pedestrian and Bicyclist Travel**

Proposed Action-related trains would cause pedestrian and bicyclist delay at at-grade crossings if pedestrians or bicyclists are blocked by a Proposed Action-related train. Alternative routes would require out-of-direction travel. The amount of delay would depend on when a pedestrian or bicyclist arrives at the crossing. If a pedestrian or bicyclist arrives at the same time as a Proposed Action-related train, they could experience approximately 10 minutes of delay at the public at-grade crossings along the Reynolds Lead with current track infrastructure. Pedestrians and bicyclists could also be affected by motor vehicle congestion and queuing at intersections adjacent to the at-grade crossings. Vehicle queuing at at-grade crossings could spill into the adjacent intersections and reduce or block sight distance for pedestrians and bicyclists.

### **Increase Noise Levels in Archie Anderson Park, Highlands Trail, and Gerhart Gardens Park**

Proposed Action-related trains would increase rail traffic-related noise levels in Archie Anderson Park, along the Highlands Trail, and in Gerhart Gardens Park, all of which are located within 1,000 feet of the Reynolds Lead or BNSF Spur. The increased noise levels could reduce the attractiveness of the features in these parks that are more sensitive to increased noise levels, such as picnic facilities and sitting areas. Archie Anderson Park, the Highlands Trail, and Gerhart Gardens also include features that are not particularly sensitive to increased noise levels (e.g., facilities that are used for sports, exercise, or active play), such as walking and running trails, baseball fields, and basketball courts.

Increased noise levels would occur because Proposed Action-related trains would be required to sound their horns for public safety at at-grade crossings per Federal Railroad Administration (FRA) regulations.

### **Utilities**

Operation of the Proposed Action would not result in indirect impacts on water and sewer utilities because demand for these utilities would be limited to the project area.

### **Minority and Low-Income Populations**

The Proposed Action's indirect impacts during operations were evaluated for their potential to result in disproportionately high and adverse effects on minority and low-income communities in the *SEPA Social and Community Resources Technical Report*. The assessment concluded the indirect impacts related to noise, vehicle delay along the Reynolds Lead, and diesel particulate matter

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<sup>6</sup> The public at-grade crossings are Industrial Way, Oregon Way, California Way, and 3rd Avenue on the Reynolds Lead, and Mill Street and S River Road on the BNSF main line. See Chapter 5, Section 5.3, *Vehicle Transportation*, for additional information.

inhalation risk would affect minority or low-income communities at a rate that would appreciably exceed the rate to the general population. Each of these potential disproportionate impacts is discussed below.

### **Noise**

The analysis concluded that horn noise from Proposed Action-related trains on the Reynolds Lead during operations would have a disproportionately high and adverse effect on minority and low-income populations. Proposed mitigation measures are discussed in the mitigation section below. Indirect noise impacts would occur because Proposed Action-related trains would be required to sound their horns for public safety at at-grade crossings per FRA regulations, and noise levels would exceed applicable criteria at adjacent land uses near four at-grade crossings on the Reynolds Lead (Chapter 5, Section 5.5, *Noise and Vibration*). Because there are minority and low-income communities adjacent to the Reynolds Lead (Figure 3.2-4),<sup>7</sup> the Proposed Action would have a disproportionately high and adverse effect on minority and low-income populations if no measures were implemented to mitigate this indirect noise impact. As described in Chapter 5, Section 5.5, *Noise and Vibration*, indirect noise impacts from Proposed Action-related trains on the BNSF main line in Cowlitz County would not be expected, and therefore, the Proposed Action would not likely have a disproportionately high and adverse effect on minority and low-income populations along the BNSF main line in Cowlitz County.

### **Vehicle Delay**

With the current track infrastructure on the Reynolds Lead, a Proposed Action-related train traveling during the peak traffic hour would result in a vehicle delay impact at four public at-grade crossings—Industrial Way, Oregon Way, California Way, and 3rd Avenue—in minority and low-income areas in 2028 (Figure 3.2-4). These vehicle delay impacts would constitute a disproportionately high and adverse effect on minority and low-income populations. The disproportionate impacts related to vehicle delay would not occur if the planned improvements to the Reynolds Lead are completed.

### **Diesel Particulate Matter Inhalation Risk**

Based on the inhalation-only health risk assessment described in Chapter 5, Section 5.6, *Air Quality*, diesel particulate matter emissions primarily from Proposed Action-related train locomotives traveling along the Reynolds Lead, BNSF Spur, and BNSF main line in Cowlitz County would result in areas of increased cancer risk. The maximum modeled cancer risk increase in the City of Longview would be 50 cancers per million in the Highlands neighborhood, a low-income and minority community. This impact would constitute a disproportionately high and adverse effect on minority and low-income populations.

## **3.2.5.2 No-Action Alternative**

Under the No-Action Alternative, the Applicant would not construct the coal export terminal. The Applicant would continue with current and future increased operations in the project area. The project area could be developed for other industrial uses including an expanded bulk product

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<sup>7</sup> There are approximately 242 residences in Census Tract 3 Block Group 1, Census Tract 5.02 Block Group 1, and Census Tract 5.02 Block Group 2. All of these census block groups have been identified as minority and/or low-income communities.

terminal or other industrial uses. The Applicant has indicated that, over the long term, it would expand the existing bulk product terminal and develop new facilities to handle more products such as calcine petroleum coke, coal tar pitch, and cement.

### **Social/Community Cohesion and Public Services**

Construction activity under the No-Action Alternative would not result in direct impacts on social and community cohesion or public services. Construction activities would be limited to the project area, and therefore, would not divide or isolate neighborhoods or disrupt community cohesion.

Operation of the No-Action Alternative would not divide or isolate neighborhoods because any new facilities would be constructed on an existing industrial site within a wide corridor of similar industrial uses, and operations would not physically displace or alter any public service facility. Therefore, operation of the No-Action Alternative would not result in direct impacts on social and community cohesion and public services.

Operation of the No-Action Alternative would not result in indirect impacts on social and community cohesion as a result of changes to property values or by generating substantial new development. The No-Action Alternative is located on an existing industrial site within a larger industrial area, and would use an existing freight rail line. Therefore, operation of the No-Action Alternative would not constitute a new land use with the potential to change property values substantially or induce new development in the surrounding area. In addition, the No-Action Alternative would not result in the introduction of a new population that could place demands on public service providers. The No-Action Alternative would not be expected to affect vehicle delay, and therefore, would not affect social and community cohesion and public services.

### **Utilities**

Construction of the No-Action Alternative is not anticipated to result in direct impacts on water and sewer service. Operation of the No-Action Alternative could result in new sanitary sewage flows and new water demand from the project area. The Three Rivers Wastewater Treatment Plant has sufficient capacity to treat additional wastewater flows, and it is expected that any new demand for potable water would be small compared to the capacity of the Longview water supply. Water used for industrial purposes, such as dust control, would continue to be drawn from stormwater ponds and supplemented with groundwater well withdrawals during dry periods.

### **Minority and Low-Income Populations**

The No-Action Alternative would increase rail operations along the Reynolds Lead as described in Chapter 2, Section 2.3, *No-Action Alternative*. Noise levels under the No-Action Alternative would be higher than under existing conditions, but would not result in noise impacts, as described in Section 5.5, *Noise and Vibration*. As described in Chapter 5, Section 5.3, *Vehicle Transportation*, and Section 5.6, *Air Quality*, the No-Action Alternative would not result in peak traffic hour vehicle delay impacts at the at-grade crossings on the Reynolds Lead, nor would it cause a substantial change in air quality or adversely affect nearby population areas. Effects on other environmental resource areas under the No-Action Alternative would generally be similar to or less than impacts under the Proposed Action. Therefore, the No-Action Alternative would not have disproportionately high and adverse effects on minority and low-income populations.

## 3.2.6 Required Permits

The Proposed Action would require the following permits.

- **Wastewater Discharge Permit—Three Rivers Regional Wastewater Authority.** This permit would be required to discharge wastewater to the Three River Regional Wastewater Treatment Plant. A survey form would be completed first to allow the Three Rivers Regional Wastewater Authority to determine whether a permit is required.
- **Utility Service Permit—City of Longview.** The project area receives potable water from the City of Longview through a connection on Industrial Way. This permit would be required to receive water service and to convey wastewater flows via the City of Longview's system.

## 3.2.7 Proposed Mitigation Measures

This section describes the proposed mitigation measures that would reduce impacts on social and community resources from the construction and operation of the Proposed Action. These mitigation measures would be implemented in addition to project design measures, best management practices, and compliance with environmental permits, plans, and authorizations that are assumed as part of the Proposed Action.

### 3.2.7.1 Voluntary Mitigation

The Applicant has committed to implementing the following measures to mitigate impacts on social and community resources.

- To reduce rail noise along the Reynolds Lead, the Applicant will work with Longview Switching Company and other stakeholders to convert the Oregon Way and Industrial Way crossings to "quiet crossings." The Applicant will fund additional electronics, barricades, and crossing gates to convert the crossings to "quiet crossings." A Quiet Zone is subject to FRA approval. If approved by FRA, this measure would reduce noise levels at Archie Anderson Park and along the Highlands Trail.
- Prior to beginning operations, the Applicant will prepare a fire response plan and submit the plan to the Cowlitz County Fire Marshal for review and approval.
- The Applicant will feed the firewater system from on-site wells, filling a 4-hour storage tank as recommended by Chapter 7 of the National Fire Protection Association 307 Standard for the Construction of Fire Protection of Marine Terminals, Piers, and Wharves.

### 3.2.7.2 Applicant Mitigation

The following proposed mitigation measures identified in Chapter 5, Sections 5.3, *Vehicle Transportation*, and 5.5, *Noise and Vibration*, to mitigate impacts on vehicle transportation and noise would also mitigate the disproportionately high and adverse noise effects on minority and low-income populations.

If approved by FRA, the following measure would reduce noise levels at Archie Anderson Park and along the Highlands Trail. It would also eliminate the disproportionately high and adverse noise effects on minority and low-income populations.

### **MM NV-2. Support Implementation of a Quiet Zone along the Reynolds Lead.**

To address moderate and severe noise impacts along the Reynolds Lead due to rail traffic, before beginning full operations, the Applicant will coordinate with the City of Longview, Cowlitz County, Longview Switching Company, and the affected community to inform interested parties on the FRA process to implement a Quiet Zone that will include the 3rd Avenue and California Avenue crossings. Public outreach on the Quiet Zone process will include low-income and minority populations. The Applicant will assist interested parties in the preparation and submission of the Quiet Zone application to FRA. If the Quiet Zone is approved, the Applicant will fund the Quiet Zone improvements, which could include electronics, barricades, and crossing gates.

If FRA does not approve the Quiet Zone for the Reynolds Lead, the Applicant will implement the following measure.

### **MM NV-3. Explore Feasibility of Reducing Sound Levels.**

If the Quiet Zone for the Reynolds Lead is not implemented, the Applicant will fund a sound reduction study to identify ways to mitigate the moderate and severe impacts from train noise from Proposed Action-related trains along the Reynolds Lead. The study methods will be discussed with Cowlitz County, Ecology, and Washington State Department of Health for approval.

The following proposed mitigation measure could reduce but would not eliminate the disproportionately high and adverse vehicle delay effects on minority and low-income populations.

### **MM VT-1. Notify Local Agencies about Operations on the Reynolds Lead and BNSF Spur.**

To address vehicle delay impacts at grade crossings on the Reynolds Lead and BNSF Spur, the Applicant will notify Cowlitz County, City of Longview, Cowlitz Fire District, City of Rainier (Oregon), Port of Longview, and Cowlitz-Wahkiakum Council of Governments before each identified operational stage (Stage 1a, Stage 1b, and Stage 2) that will change average daily rail traffic on the Reynolds Lead and BNSF Spur. The Applicant will prepare a memorandum to document the changes to average daily rail traffic. The memorandum will be submitted to these agencies at least 6 months before the change in average daily rail traffic.

## **3.2.8 Unavoidable and Significant Adverse Environmental Effects**

Implementation of the voluntary and applicant mitigation measures identified above would reduce impacts on social and community resources and minority and low-income populations. There would be no unavoidable and significant adverse environmental impacts on social and community cohesion and public services or utilities (two of the three elements of the social and community resources analysis).

Implementation of the Proposed Action would increase rail traffic that would increase noise levels along the Reynolds Lead and BNSF Spur in Cowlitz County. The increased noise levels from 16 Proposed Action-related train trips per day would exceed applicable criteria for noise impacts at noise-sensitive receptors. Noise impacts would occur near at-grade crossings on the Reynolds Lead (Industrial Way, Oregon Way, California Way, and 3rd Avenue) from train horn noise intended for

public safety. These noise impacts would occur in areas with minority and low-income populations; therefore, the Proposed Action would have a disproportionately high and adverse effect on minority and low-income populations. If a Quiet Zone is implemented, it would eliminate the need for Proposed Action-related trains to sound horns as they approach the at-grade crossings, and it would eliminate the potential disproportionately high and adverse effect on minority and low-income populations. However, without approval and implementation of a Quiet Zone, the Proposed Action's disproportionately high and adverse noise effects on minority and low-income populations would be unavoidable and significant.

With the current track infrastructure on the Reynolds Lead, a Proposed Action-related train traveling during the peak traffic hour would result in a vehicle delay impact at four public at-grade crossings—Industrial Way, Oregon Way, California Way, and 3rd Avenue—in minority and low-income areas in 2028. This would constitute a disproportionately high and adverse effect on minority and low-income populations. The disproportionate impacts related to vehicle delay would not occur with planned improvements to the Reynolds Lead. Without the planned improvements to the Reynolds Lead, the Proposed Action's disproportionately high and adverse vehicle delay effects on minority and low-income populations would be unavoidable and significant.

Use of Tier 4<sup>8</sup> locomotives by BNSF and UP would reduce but not eliminate the disproportionately high and adverse effects in the Highlands neighborhood related to increased risk of greater than 10 cancers per million from diesel particulate matter inhalation. This impact would be unavoidable and significant.

### **3.2.9 Public Outreach and Participation Process**

Cowlitz County and the Washington State Department of Ecology (Ecology) engaged in a robust public outreach effort. The primary components of this effort were two formal comment periods required by the State Environmental Policy Act (SEPA): 1) the scoping phase comment period, and 2) the Draft Environmental Impact Statement (Draft EIS) comment period. A public involvement plan developed for the SEPA process guided the public outreach effort.

Population demographics regarding minority status and limited English proficiency also informed the public outreach effort. Table 3.2-6 shows the percentage of the population over age 5 with limited English proficiency in the social and community cohesion direct impacts study area, Longview, and Cowlitz County. In all three areas, a low percentage of the population over age 5 has limited English proficiency; approximately 3% of the population of the direct impacts study area, the City of Longview, and Cowlitz County have limited English proficiency.

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<sup>8</sup> Locomotives that are compliant with EPA locomotive emissions standards that went into effect in 2015.

**Table 3.2-6. 2013 Limited English Proficiency**

<b>Area</b>	<b>Population Age 5 and Over</b>	<b>Population Age 5 and Over with Limited English Proficiency<sup>a</sup></b>	<b>Percentage Population with Limited English Proficiency<sup>a</sup></b>
Social and Community Cohesion Direct Impacts Study Area <sup>b</sup>	2,754	90	3.3
Longview	34,354	1,194	3.5
Cowlitz County	95,579	2,939	3.1

Note:

<sup>a</sup> Limited English proficiency includes individuals who speak English less than very well (i.e. those identified as speaking English “well,” “not well,” or “not at all” in Census data).

<sup>b</sup> The project area and within 0.5 mile of the project area.

Source: U.S. Census Bureau 2013a.

Table 3.2-7 shows the minority percentage of the population in the minority and low-income direct and indirect impacts study areas, City of Longview, and Cowlitz County. As shown, both the direct and indirect impacts study areas and the City of Longview have higher percentages of minority population than Cowlitz County.

Prior to the scoping meeting, stakeholder interviews were conducted to guide planning for the scoping process. These interviews were conducted with stakeholders representing a diverse range of interests and demographics including city and county jurisdictions, environmental and conservation groups, landowner organizations, labor organizations, economic development and business organizations, port authorities, river pilots, and local community groups. A project website was also developed ([www.millenniumbulkeis.wa.gov](http://www.millenniumbulkeis.wa.gov)) providing information in English and Spanish. This website serves as an information hub, a public-comment portal, and a document review and download repository throughout development of the EIS. The website was promoted in news releases, ads in local media, and printed project information.

**Table 3.2-7. 2013 Minority Status**

<b>Census Block Group</b>	<b>2013 Total Population</b>	<b>Percent Minority<sup>a</sup></b>
Direct Impacts Study Area Census Block Groups <sup>b</sup>	6,782	18.7
Indirect Impacts Study Area Census Block Groups <sup>c</sup>	45,371	17.1
<b>Longview</b>	<b>36,656</b>	<b>18.4</b>
<b>Cowlitz County</b>	<b>102,110</b>	<b>14.6</b>

Notes:

<sup>a</sup> Minority status includes individuals defined in the census as any race or ethnicity other than white alone and not Hispanic or Latino.

<sup>b</sup> Census Block Groups within 1 mile of the project areas.

<sup>c</sup> Census Block Groups within 0.5 mile of affected rail lines in Cowlitz County.

Source: U.S. Census Bureau 2013a.

The public scoping meetings were announced in various publications. Notices were published in the *Federal Register* and *Washington State Register*, and the co-lead agencies also issued a press release. Display ads were placed in local newspapers where scoping meetings were held, including *The Spokane Spokesman-Review*, *The Tri-City Herald* (Pasco), *The Columbian* (Vancouver/Clark County),

*The Longview Daily News*, and *The Tacoma News-Tribune*. Announcements were also sent to a listserv group consisting of parties who have requested to be informed about project activities, and an informational flyer was mailed to 6,000 residents in neighborhoods near the project area, including the Highlands neighborhood in Longview. A Spanish translation of the informational flyer was also distributed.

Cowlitz County and Ecology held five scoping meetings to receive SEPA-related scoping comments. Scoping meetings were held on the following dates and locations.

- September 17, 2013, in Longview
- September 25, 2013, in Spokane
- October 1, 2013, in Pasco
- October 9, 2013, in Ridgefield
- October 17, 2013, in Tacoma

All meetings used an open-house format to provide process information for the Draft EIS and details about the Proposed Action, and to receive comments on the scope of the Draft EIS. In total, the co-lead agencies received over 217,500 scoping comments. Spanish-language handouts and Spanish translation services were available at each meeting. All facilities were Americans with Disabilities Act-accessible.

Cowlitz County and Ecology held three public hearings to receive comments on the Draft EIS. The public hearings were held on the following dates and locations.

- May 24, 2016, in Longview
- May 26, 2016, in Spokane
- June 2, 2016, in Pasco

Each public hearing included an open house, which allowed the public to interact with agency representatives and to access information about the SEPA EIS process as well as details about the Proposed Action. Spanish-language handouts and Spanish translation services were available at each public hearing. All facilities were Americans with Disabilities Act-accessible. In total, the co-lead agencies received approximately 267,000 comments during the Draft EIS comment period. Volume IV of this Final EIS includes responses to comments on the Draft EIS.

More information about public outreach can be found in Chapter 7, *Public Involvement and Agency Coordination*, of this Final EIS.