

Chapter 4

Built Environment: Affected Environment and Project Impacts

4.0 Introduction

For the purposes of this Draft Environmental Impact Statement (Draft EIS), environmental resource areas have been divided into three categories: the Built Environment, the Natural Environment, and Operations (Chapters 4, 5, and 6, respectively). The purpose of this chapter is to discuss the built environment resource areas assessed for the Millennium Bulk Terminals—Longview project (proposed export terminal).

Information contained in this Draft EIS was drawn from technical reports located in Volume III of this Draft EIS and incorporated by reference. The technical reports include more detailed discussion on methods used for analysis, the affected environment, and potential impacts of the proposed export terminal.

4.0.1 Built Environment Resource Areas

Chapter 4, *Built Environment: Affected Environment and Project Impacts*, evaluates the communities, cultural past, and use of land relevant to the proposed export terminal. The resource areas in this analysis include land use, social and community resources, aesthetics, cultural resources, tribal treaty rights and trust responsibilities, hazardous materials, and energy (Table 4.0-1). Additional detailed information about these resources can also be found in the corresponding technical reports in Volume III of this Draft EIS.

Chapter 8, *Minimization and Mitigation*, presents measures to mitigate potential impacts of the proposed export terminal identified in this chapter.

Table 4.0-1. Built Environment Resource Areas and Corresponding Draft EIS Sections

Chapter	Section Number	Environmental Resource Area
Chapter 4, Built Environment: Affected Environment and Project Impacts	4.1	Land Use
	4.2	Social and Community Resources
	4.3	Aesthetics
	4.4	Cultural Resources
	4.5	Tribal Treaty Rights and Trust Responsibilities
	4.6	Hazardous Materials
	4.7	Energy

4.0.2 Alternatives and Timeframe for Analysis

This chapter analyzes impacts that would likely occur as a result of construction and operation of the proposed export terminal. The analysis assumes construction beginning in 2018 and full operations¹ occurring by 2028. Throughout this chapter, the location of the proposed export terminal for both the On-Site Alternative and Off-Site Alternative is referred to as the *project area*.

This chapter also analyzes impacts that could occur under the No-Action Alternative. Chapter 3, *Alternatives*, of this Draft EIS provides a description of the On-Site Alternative, Off-Site Alternative, and No-Action Alternative.

4.0.3 Study Areas and Type of Impacts Analyzed

As discussed in Chapter 1, *Introduction*, the NEPA scope of analysis includes the activities requiring a Department of the Army permit from the Corps, plus those activities outside the permit area over which the Corps has sufficient control and responsibility. Therefore, the Corps' scope of analysis for this Draft EIS includes the project area, the area that would be dredged, any dredged material disposal sites, any off-site area that might be used for compensatory mitigation, and any other area in or adjacent to the Columbia River that would be affected by, and integral to, the proposed export terminal.

Within the overall NEPA scope of analysis, study areas have been defined for each resource. The size and location of each study area depends, in part, on physical and/or biological characteristics of the resource, logistics, nature and extent of potential impacts, and how the resource is regulated. Separate study areas are normally identified for direct impacts and indirect impacts. Table 4.0-2 explains the general differences between direct and indirect impact study areas.

Table 4.0-2. Types of Impacts and Impact Examples

Type of Impact	Description	Example of Impacts
Direct	An impact resulting from construction or operation of the proposed export terminal at the On-Site Alternative or Off-Site Alternative location. Direct impacts are caused by the action and occur at the same time and place (40 CFR 1508.8).	<ul style="list-style-type: none"> • Construction: Temporary impacts within the project area that are resolved or mitigated by the end of construction, or permanent changes to the project area due to construction of the proposed export terminal. • Operation: Impacts occurring in the project area resulting from rail unloading, coal storage, machinery operations, equipment, vessel loading, etc.

¹ Full operation means the proposed export terminal would have a maximum throughput of up to 44 million metric tons of coal per year, as described in Chapter 3, *Alternatives*.

Type of Impact	Description	Example of Impacts
Indirect	An impact resulting from construction or operation of the proposed export terminal that occurs outside the project area or later in time. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8).	<ul style="list-style-type: none"> • Construction: Impacts that occur outside the project area, such as vehicle and rail traffic that support construction activities. • Operation: Impacts from activities that occur outside the project area, such as rail, vehicle and vessel traffic that support operational activities, or that occur within the project area later in time.

Table 4.0-3 provides a summary of the direct impacts and indirect impacts study areas for built environment resources. These study areas were developed based on the Corps Memorandum for Record (MFR) entitled *Scope of Analysis and Extent of Impact Evaluation for National Environmental Policy Act Environmental Impact Statement* (2014). The study areas contained in this Draft EIS typically conform with the MFR. In some cases, study areas were adjusted to reflect the characteristics and specific elements for each resource area.

Table 4.0-3. Direct Impact Study Areas and Indirect Impact Study Areas by Resource

Resource	Direct Impacts Study Area	Indirect Impacts Study Area
Section 4.1, Land Use	<ul style="list-style-type: none"> • Land Use: Project area for the On-Site Alternative and Off-Site Alternative, and the area within 500 feet of the project areas • Parks and Recreational Facilities: The project areas and the area within 0.5 mile of the project areas, and the Willow Grove and Rainier Riverfront Park boat launches • Agricultural Land: Project area for the On-Site Alternative and Off-Site Alternative 	<ul style="list-style-type: none"> • Land Use: Longview-Kelso urban area and nearby unincorporated areas of Cowlitz County • Parks and Recreational Facilities: Same as direct impacts study area • Agricultural Land: Project areas and the area within 500 feet of the project areas
Section 4.2, Social and Community Resources	<ul style="list-style-type: none"> • Social and Community Cohesion and Public Services: Project area for the On-Site Alternative and Off-Site Alternative, and the area within 0.5 mile of the project areas • Local Economy: Cities of Kelso and Longview • Utilities: The project areas and the area within 0.5 mile of the project areas • Environmental Justice: Project areas and area within approximately 1 mile of the project area 	<ul style="list-style-type: none"> • Social and Community Cohesion and Public Services: The project areas and the area within 0.5 mile of the Reynolds Lead and BNSF Spur rail corridor • Local Economy: Cowlitz County • Utilities: The project areas and the area within 0.5 mile of the project areas • Environmental Justice: The project areas and the area within 0.5 mile of the Reynolds Lead and BNSF Spur rail corridor
Section 4.3, Aesthetics	The area within a 3-mile radius of the project areas	The area within a 3-mile radius of the project areas

Resource	Direct Impacts Study Area	Indirect Impacts Study Area
Section 4.4, Cultural Resources	Project area for the On-Site Alternative and Off-Site Alternative, areas of Columbia River affected by overwater structures and dredging, surrounding areas affected by construction, and vantage points along U.S. Route 30 in Oregon	Same as the direct impacts study area
Section 4.5, Tribal Treaty Rights and Trust Responsibilities	The compilation of study areas defined for the areas of concern (i.e., fish, vegetation, wildlife, and vessel transportation)	Same as direct impacts (direct and indirect impacts were not differentiated for the analysis)
Section 4.6, Hazardous Materials	Project area for the On-Site Alternative and Off-Site Alternative	Project areas and the area within 1 mile of the project areas
Section 4.7, Energy	Project area for the On-Site Alternative and Off-Site Alternative	Project areas and the area within 0.25 mile of the project areas