

## 15. ENVIRONMENTAL JUSTICE

This chapter analyzes the potential impacts from the proposed action and alternatives on minority and low-income populations. Section 15.1 describes the regulatory setting, Section 15.2 describes the study area, Section 15.3 describes the analysis methodology, Section 15.4 describes the affected environment, and Section 15.5 describes the environmental consequences.

### 15.1 Regulatory Setting

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, directs Federal agencies to:

[P]romote nondiscrimination in Federal programs substantially affecting human health and the environment, and provide minority and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.

EO 12898 also directs agencies to identify and consider “disproportionately high and adverse” human health or environmental effects of their actions on minority and low-income communities, and provide opportunities for community input in the National Environmental Policy Act (NEPA) process, including input on potential effects.

After the issuance of EO 12898, the Council on Environmental Quality (CEQ) prepared *Environmental Justice Guidance Under the National Environmental Policy Act* to assist Federal agencies in meeting their environmental justice commitments under NEPA (CEQ, 1997). This guidance provides the following definitions of the terms “minority” and “low-income community” in the context of environmental justice analysis. Minority individuals are members of the following population groups: American Indian or Alaska Native, Asian or Pacific Islander, Black, and Hispanic. A low-income community is one found to be below the poverty thresholds from the Bureau of the Census. CEQ has oversight for the Federal Government’s compliance with EO 12898 and NEPA process, with the U.S. Environmental Protection Agency (USEPA) serving as the lead agency responsible for implementation of the EO.

The Surface Transportation Board (STB or the Board) has not issued rules or guidance specifically addressing environmental justice. While EO 12898 applies to agencies such as the Federal Railroad Administration (FRA), it does not apply to independent agencies like the Board. Nonetheless, the Section on Environmental Analysis (SEA) has evaluated the potential for high and adverse impacts to determine if they would be borne disproportionately by minority or low-income communities.

### 15.2 Study Area

The region of influence for environmental justice encompasses the regions of influence for the other resource areas that could potentially affect minority and low-income populations. The administrative areas that contain these populations are Census blocks within the Matanuska-Susitna Borough (MSB), and more specifically the communities along the proposed rail

alternatives (see Figure 15-1 for a visual representation of communities within the region of influence).

### **15.3 Analysis Methodology**

To evaluate environmental justice impacts, SEA used the following five-step analytical methodology. Some of these steps were not triggered because the conditions for further analysis were not met.

- Step 1: SEA would characterize the potentially affected minority or low-income populations.
- Step 2: If high and adverse health and environmental impacts were identified, SEA would identify the environmental justice populations located in the affected environment. Following CEQ guidance, these locations containing environmental populations would be defined as those areas where: a) the percentage presence of a minority or low-income group in the population is more than 50 percent; or b) the percentage presence of the minority or low-income group in the population is considerably higher than the percentage of the population in the MSB and in the State of Alaska.
- Step 3: SEA would assess whether the high and adverse health and environmental impacts would affect environmental justice populations.
- Step 4: If high and adverse health and environmental impacts would occur on environmental justice populations, SEA would define the spatial distribution of these populations relative to the area of effect for the identified impact.
- Step 5: SEA would assess impacts on environmental justice populations relative to the impacts on the affected environment more generally to determine whether the high and adverse impacts identified would be disproportionately borne by environmental justice populations. SEA would analyze the geographic dispersion of the impacts as well as differentiated patterns of consumption of natural resources among minority and low-income populations.

### **15.4 Affected Environment**

This section characterizes minority and low-income populations within the study area. Alaska is home to a specific minority group, the Alaska Native, that represented 15.6 percent of the state population in 2000 (U.S. Census), and subsistence consumption is an aspect of distinct importance in Alaska, as recognized by separate Federal and state regulations. Poverty levels in the MSB in 2000 were slightly above the state average.

To identify minority and low-income populations, SEA used data available from the 2000 U.S. Census. Information on minority populations is available for Census blocks, and information on low-income populations is available for Census block groups. Census blocks are typically individual city blocks bounded by streets, but can be many square miles in rural areas. A block group is a collection of blocks. Both are subdivisions of Census tracts, areas that are relatively homogenous in population characteristics with an average of about 4,000 inhabitants.

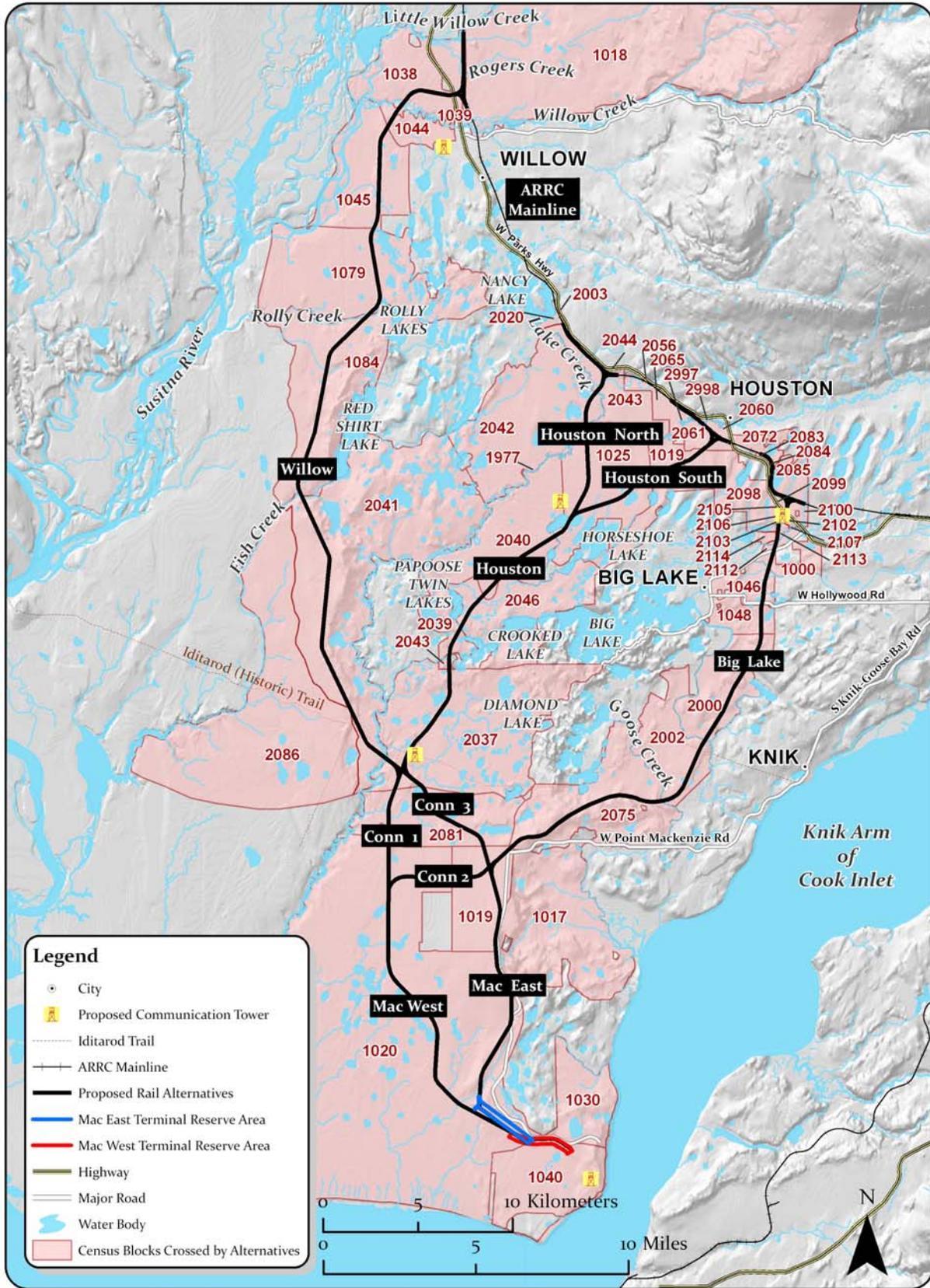


Figure 15-1. Census Blocks Crossed by the Alternatives

The presence of minority populations in the study area can be characterized using information available for Census blocks crossed by the 200-foot right-of-way for the various alternatives. Figure 15-1 shows the Census blocks potentially affected by the various rail line alternatives. Table 15-1 provides 2000 demographic data for the State of Alaska, MSB, and various rail line segments and segment combinations.

Two locations within the affected environment have minority populations that are higher than that of both the State of Alaska and the MSB. The Mac West-Connector 1 Segment Combination and the Mac East- 3 Connector Segment Combination both cross the same area just north of the Point MacKenzie Agricultural Project where the Alaska Native portion of the population is higher than that in the MSB and the State of Alaska. The other location is Big Lake Segment where the portion of the population that is classified by the 2000 Census as being of “Two or More Races” (e.g., Alaska Native and White) is higher than that of the Borough and Alaska which would indicate a population higher in minorities. These two locations are also the only areas within the affected environment where the total minority share of the population is larger than the minority share of the population in the MSB.

The presence of low-income populations in the study area can be characterized using U.S. Census Bureau Current Population Reports, Series P-60 on Income and Poverty, as suggested by CEQ guidance. These data are based on the American Community Survey conducted annually through a representative household sample. American Community Survey data are not available for relevant areas smaller than and within the MSB. Instead, the 2000 U.S. Census collected poverty information from a sample of the households and this information is available only at the Census block group level. Figure 15-2 shows Census block groups potentially affected by the alternatives.

Although Census block groups do not allow for distinguishing rigorously among alternatives, Table 15-2 provides information on the presence of low-income groups within the State of Alaska, MSB, and each Census block group. As indicated by the table, poverty levels in the project area in 1999 were generally higher than those for the Borough and for the State of Alaska, with the highest poverty levels being found around the Willow Segment.

## **15.5 Environmental Consequences**

### **15.5.1 Proposed Action**

For Step 1, SEA assessed whether any high and adverse health or environmental impacts to human populations would occur as a result of the proposed action. Chapters 3 through 14 describe the potential health and environmental impacts to resource areas, and Chapter 19 describes mitigation measures to adverse impacts. Based on the analysis presented in those chapters, SEA expects no high and adverse human health or environmental effects from construction or operation of the Port MacKenzie Rail Extension.

As a result of this absence of high and adverse human health or environmental effects, Steps 2 through 5 of SEA’s impact assessment methodology were not conducted.

**Table 15-1  
Demographics in the Project Area by Segment<sup>a</sup>**

	Percent of Total Population									
	Total Population	White	Black or African American	Alaska Native or American Indian	Asian	Native Hawaiian & Other Pacific Islander	Some Other Race	Two or More Races	Hispanic or Latino <sup>b</sup>	Minority Population <sup>c</sup>
Alaska	626,932	69.3	3.5	15.6	4.0	0.5	1.6	5.6	4.1	32.4
Matanuska Susitna Borough	59,322	87.6	0.7	5.5	0.7	0.1	0.9	4.6	2.5	13.7
Mac West - Connector 1	271	74.9	1.8	18.8	0.0	0.0	0.4	4.1	1.8	26.2
Mac West - Connector 2	73	97.3	0.0	0.0	2.7	0.0	0.0	0.0	0.0	2.7
Mac East - Connector 3	268	71.6	2.2	20.1	1.5	0.0	0.4	4.1	1.9	29.5
Willow	309	93.5	0.0	1.6	0.3	0.0	0.0	4.5	0.6	6.8
Big Lake	703	79.4	0.6	8.5	0.4	0.0	0.9	10.2	2.1	21.1
Houston - Houston North	250	94.4	0.0	2.8	0.0	0.0	0.0	2.8	3.6	8.8
Houston - Houston South	381	90.8	0.0	3.9	0.5	0.0	0.0	4.7	3.1	11.5

<sup>a</sup> Source: U.S. Census Bureau, 2000.

<sup>b</sup> Individuals who identify as Hispanic, Latino, or Spanish may be of any race; the sum of the other percentages under the "Percent of Total Population" columns plus the "Hispanic or Latino" column therefore do not equal 100 percent.

<sup>c</sup> Minority population, for the purposes of this analysis, is the total population for the U.S. Census designated place minus the non-Latino/Spanish/Hispanic White population.

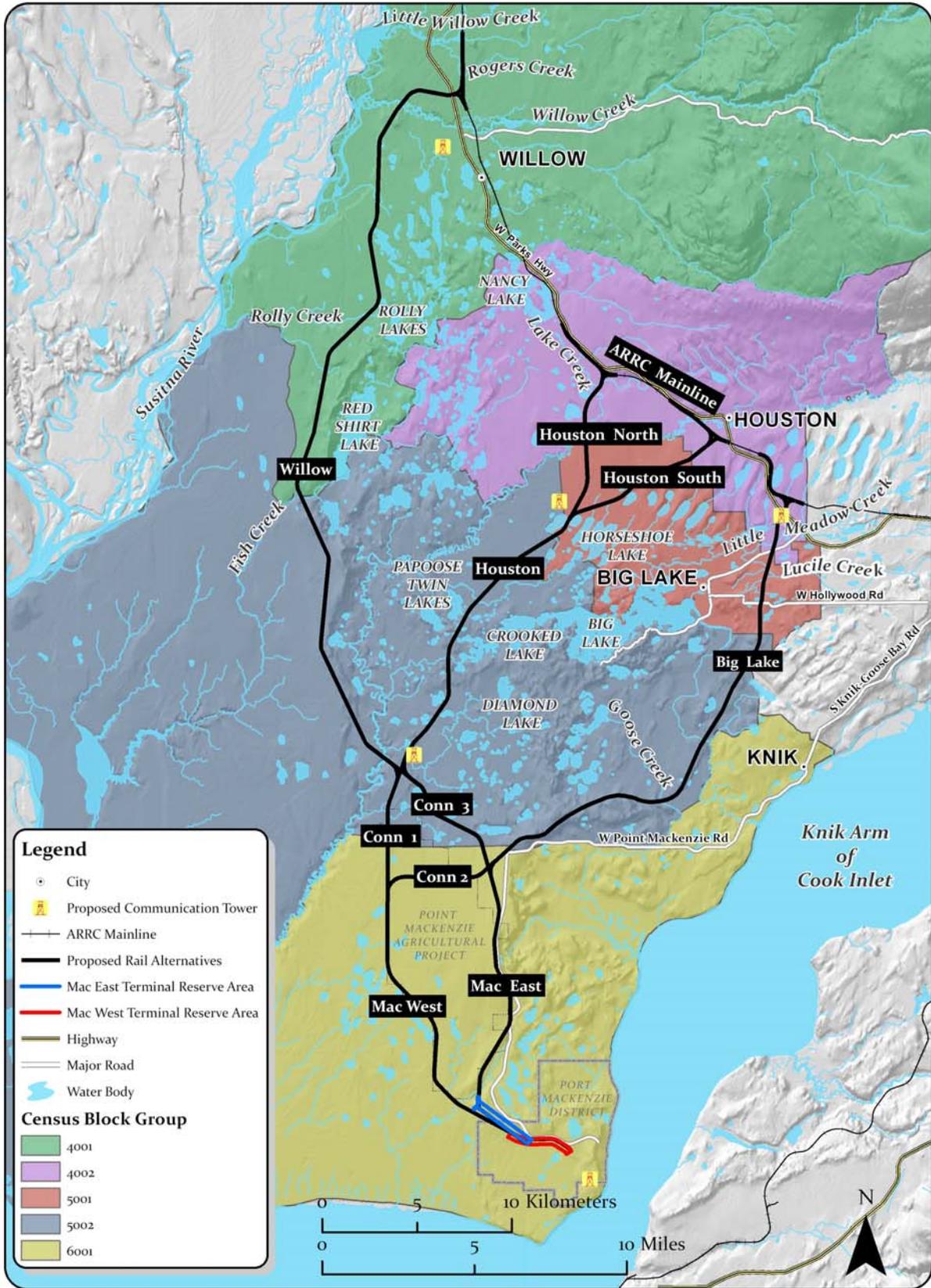


Figure 15-2. Census Block Groups Crossed by the Proposed Action and Alternatives

**Table 15-2  
Individuals and Families below the Poverty Level in the Project Area:  
Number and Percentage of Population by Location, 1999<sup>a</sup>**

		Families		Individuals	
		Number in Poverty	Percentage of Total Families	Number in Poverty	Percentage of Total Population
Alaska		10,270	6.7	57,602	9.4
Matanuska Susitna Borough		1,175	7.8	6,419	11.0
Block Grp					
4001	Willow	68	16.5	340	23.9
4002	Houston to South of Willow	43	12.0	223	16.0
5001	North of Big Lake to Parks Hwy	46	11.1	243	15.3
5002	South of Big Lake and W of the Little Susitna River	16	7.2	122	13.4
6001	Point MacKenzie	14	9.2	102	15.2

<sup>a</sup> Source: U.S. Census Bureau, 2000.

### 15.5.2 No-Action Alternative

Under the No-Action Alternative, ARRC would not construct and operate the proposed Port MacKenzie Rail Extension, and there would be no human health or environmental impacts from the project.