

3.15 Environmental Justice

The study area and CESA for direct and indirect impacts to environmental justice includes Lander and Humboldt counties, Nevada, with emphasis on the Town of Battle Mountain community (**Figure 3.13-1**), which is the closest population center to the proposed project, and where over half of the project employees are expected to reside.

3.15.1 Affected Environment

Executive Order No. 12898, “Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations” (59 FR 7629), is “intended to promote nondiscrimination in federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for participation in, matters relating to human health and the environment.” It requires each federal agency to achieve environmental justice as part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects, including social and economic effects, of its programs, policies, and activities on minority and low-income populations. Currently, the BLM relies on the Environmental Justice Guidance under NEPA prepared by the CEQ (Guidance) (USEPA CEQ 1998), in implementing EO 12898 for NEPA documents.

Environmental justice concerns are usually directly associated with impacts on the natural and physical environment, but these impacts are likely to be interrelated with social and economic impacts as well. Native American access to cultural and religious sites may fall under the umbrella of environmental justice concerns if the sites are on tribal lands or a treaty right has granted access to a specific location.

USEPA guidelines (USEPA CEQ 1998) for evaluating potential adverse environmental effects of projects require specific identification of minority populations when either: 1) a minority population exceeds 50 percent of the population of the affected area; or 2) a minority population represents a meaningfully greater increment of the affected population than of the population of some other appropriate geographic unit, such as the State of Nevada, as a whole.

The data presented below are based on information obtained from the U.S. Census Bureau 2000 census and the Nevada State Demographer’s Office (U.S. Census Bureau 2000; Nevada State Demographer 2006). Data obtained from the U.S. Census Bureau website was compiled and released in 2000. This data was used as the basis for the analysis because it is the most reliable and consistent data available. The state demographer’s estimates are included to provide a more recent point of reference, although this dataset is not as complete as the census data.

3.15.1.1 Minority Populations

For the purpose of this analysis, the minority populations residing in the communities of Battle Mountain and Winnemucca in Lander and Humboldt counties, respectively, were compared to the minority populations in the State of Nevada. **Table 3.15-1** summarizes the ethnic composition of the study area and the State of Nevada. As indicated in the table, there are higher percentages of American Indian, Eskimo, or Aleut residing in the study area compared to the State of Nevada. For Nevada, the American Indian, Eskimo, or Aleut population constituted slightly over 1 percent of the total population in both 2000 and 2009. The Lander County and the community of Battle Mountain percentages were 4.0 percent and 2.5 percent, respectively, in 2000, with Lander County increasing to an estimated 4.6 percent by 2009. Humboldt County and the community of Winnemucca had similar percentages at 4.0 percent and 2.2 percent, respectively, in 2000. Humboldt County increased to an estimated 4.3 percent by 2009. American Indians made up essentially all of the population in the category in the study area.

Table 3.15-1 Ethnic Composition of Populations, 2000 and 2009

Location	Total Population	White		Black		American Indian, Eskimo, or Aleut		Asian or Pacific Islander		Other Race		Two or More Races		Hispanic or Latino of Any Race	
		Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
2000 Counts¹															
Lander County	5,794	4,891	84.4	12	0.2	231	4.0	20	0.3	502	8.7	136	2.3	1,073	18.5
Battle Mountain	2,871	2,334	81.3	4	0.1	73	2.5	15	0.5	339	11.8	106	3.7	677	23.6
Humboldt County	16,106	13,401	83.2	82	0.5	647	4.0	103	0.7	1,375	8.5	498	3.1	3,040	18.9
Winnemucca	7,174	5,984	83.4	23	0.3	160	2.2	66	0.9	689	9.6	252	3.5	1,488	20.7
State of Nevada	1,998,257	1,501,886	75.2	135,477	6.8	26,420	1.3	98,692	4.9	159,354	8.0	76,428	3.8	393,970	19.7
2009 Estimates^{2,3}															
Lander County	6,003	4,364	72.7	18	0.3	276	4.6	42	0.7	NA	NA	NA	NA	1,303	21.7
Battle Mountain	2,967	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Humboldt County	17,690	13,038	73.7	106	0.6	761	4.3	142	0.8	NA	NA	NA	NA	3,644	20.6
Winnemucca	7,593	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
State of Nevada	2,711,205	1,605,033	59.2	187,073	6.9	35,246	1.3	187,073	6.9	NA	NA	NA	NA	696,780	25.7

¹ U.S. Census Bureau 2000.² Nevada State Demographer 2009, 2006.³ Percentages based on 2009 population estimates.

In accordance with the CEQ guidance (USEPA CEQ 1998), minority populations should be identified when either:

- The minority population of the affected area exceeds 50 percent; or
- The minority population of the affected area is meaningfully greater than or 1.5 times, the minority population percentage in the general population or other appropriate unit of geographical analysis.

The population of American Indians does not exceed 50 percent; however, the population of American Indians occurring in portions of the study area is “meaningfully greater” than the minority population in the general population, in this case, the State of Nevada. Therefore, for the purpose of identifying environmental justice concerns, a minority population, as defined in the guidance, exists in the study area.

Other minority populations in the study area are not “meaningfully greater” than the minority population in the general population.

3.15.1.2 Low Income Populations

PCPI in Lander County lag behind the state level. U.S. BEA data from 2000 indicated a state average of \$30,986 (BEA 2007). The Lander County average was \$26,250, 84.7 percent of the state level, and a Humboldt County average was \$25,244, 81.5 percent of the state level (BEA 2007). **Table 3.15-2** shows census data for 1999/2000, which is presented for consistency in the analysis. Although the numbers vary, the relationships remain similar. By 2008, estimated per capita personal income had risen substantially and Lander County’s level had exceeded the state’s level; Humboldt County still trailed at 81.2 percent of the state level. Estimates for 2008 were \$40,936 for the state level, \$41,812 for Lander County, and \$33,249 for Humboldt County.

In contrast to PCPI, estimated median household incomes in CESA counties are slightly above statewide household incomes. The median household income for the state for 2008 was estimated at \$56,432, compared with \$61,938 for Lander County (109.8 percent of the state level), and \$58,005 for Humboldt County (102.8 percent of the state level) (U.S. Census Bureau 2009a).

Table 3.15-2 1999 Income Level of the Study Area Compared to the State of Nevada based on a Sample

Location	Average Poverty Threshold ¹	Per Capita Income	Median Income	
			Household ²	Family ²
Lander County	\$13,290	\$26,250	\$46,067	\$51,538
Humboldt County	\$13,290	\$25,244	\$42,981	\$50,995
State of Nevada	\$13,290	\$30,986	\$44,581	\$50,849

¹ The dollar amount shown is the 2000 weighted average threshold for a three-person family, which is the average household size for each county and community.

² A “household” includes all the persons who occupy a housing unit. A “family” consists of a householder living with one or more persons related to him or her by birth, marriage, or adoption.

Source: U.S. Census Bureau 2000.

Although per capita personal incomes for Lander County were lower than for the state, poverty rates in the county also were lower than for the state as a whole. An estimated 11.2 percent of Nevada’s population was considered to be living in poverty in 2008 according to U.S. Census Bureau (2009a) estimates. Both Lander County (9.9 percent) and Humboldt County (10.2 percent) had smaller

percentages of their populations living in poverty. The rates for children and youth under 18 living in poverty followed a similar pattern with both Lander County (12.5 percent) and Humboldt County (13.6 percent) being lower than Nevada's estimated 15.0 percent rate (U.S. Census Bureau 2009a).

3.15.2 Environmental Consequences

USEPA's Guidance for Incorporating Environmental Justice Concerns in USEPA's NEPA Compliance Analyses (USEPA CEQ 1998) suggests a screening process to identify environmental justice concerns. This two-step process defines the significance criteria for this issue; if either of the criteria is unmet, there would be little likelihood of environmental justice effects occurring. The two-step process is as follows:

1. Does the potentially affected community include minority and low-income populations?
2. Are the environmental impacts likely to fall disproportionately on minority and low-income members of the community and a tribal resource?

If the two-step process indicates that there exists a potential for environmental justice effects to occur, the following are considered in the analysis:

- Whether there exists a potential for disproportionate risk of high and adverse human health or environmental effects;
- Whether communities have been sufficiently involved in the decision-making process; and
- Whether communities currently suffer, or have historically suffered, from environmental and health risks and hazards.

If the two-step process above indicates that a potential for environmental justice effects exists, additional analyses under the significance criteria then are applied to determine if the adverse effects would be considered significant impacts if the Proposed Action or an alternative to the Proposed Action were implemented.

3.15.2.1 Proposed Action

The analysis indicates that the potential effects of the Proposed Action would not be expected to disproportionately affect any particular population. The proposed project is in a relatively remote area; the nearest residence is a ranch approximately 4 miles southeast of the project area. The Town of Battle Mountain, the nearest concentrated residential area, is approximately 12 miles northeast of the project area. Although the Town of Battle Mountain does have a higher percentage of American Indians than the state reference population, there is no indication that they would suffer disproportionate effects of the Proposed Action. Potential environmental effects that may occur at a greater distance would affect the Town of Battle Mountain's population equally, without regard to minority status or income level.

A second provision of the criteria requires consideration of "impacts that may affect a cultural, historical, or protected resource of value to an Indian tribe or a minority population, even when the population is not concentrated in the vicinity." No such resources have been identified near the project area based on ongoing cultural resource inventory and tribal consultation of the proposed disturbance area (Sections 3.8 and 3.9, respectively).

3.15.2.2 Reona Copper Heap Leach Facility Elimination Alternative

The Reona Copper Heap Leach Facility Elimination Alternative would be the same as the Proposed Action, except that the proposed Reona Copper HLF and associated infrastructure (i.e., solution pipelines) would not be developed. Under this alternative, potential effects on minority and low income populations are expected to be the same as the Proposed Action.

3.15.2.3 No Action Alternative

Under the No Action Alternative, the proposed project would not be developed, and the associated effects would not occur. The existing Phoenix Project would continue to operate under existing authorizations. Potential impacts to environmental justice previously were discussed and analyzed in the Phoenix Project Final EIS (BLM 2002a). The analysis of environmental justice concerns did not identify any disproportionate effects to minority or low-income populations in the study area.

3.15.3 Cumulative Impacts

The CESA for environmental justice is shown in **Figure 3.13-1**. Past and present actions and RFFAs are identified in **Table 2.8-1**; their locations are shown in **Figure 2.8-1**.

The environmental justice effects of past and present actions are reflected in the affected environment information presented in Section 3.15.1, Affected Environment. The environmental justice analysis did not identify any disproportionate adverse effects to minority or low-income populations in the study area. Consequently, no cumulative impacts to these populations would occur as a result of the Proposed Action.

3.15.4 Monitoring and Mitigation Measures

No significant environmental justice effects were identified; therefore, no additional monitoring and mitigation measures are recommended.

3.15.5 Residual Adverse Effects

No residual adverse effects to environmental justice would be anticipated as a result of the proposed project.