

3.5 ENVIRONMENTAL JUSTICE

This section addresses potential impacts from the Proposed Route and Route Alternatives during construction, operations, and decommissioning. This section analyzes the potential for Project activities to have disproportionately high or adverse human health or environmental effects on minority and/or low income populations in accordance with EO 12898.

3.5.1 Affected Environment

This section discusses those aspects of the environment that could be impacted by the Project. It starts with a discussion of the Analysis Area considered, identifies the issues that have driven the analysis, and characterizes the existing conditions along the Proposed Route and Route Alternatives in Wyoming, Idaho, and Nevada.

3.5.1.1 Analysis Area

The Analysis Area for environmental justice is the counties crossed or potentially affected by the proposed transmission line and alternatives and associated facilities. These counties are identified in Section 3.4 – Socioeconomics (Tables 3.4-1 through 3.4-3).

3.5.1.2 Issues to be Analyzed

The following environmental justice–related issues were brought up by the public during public scoping (Tetra Tech 2009a), were raised by federal and state agencies during scoping and agency discussions, or are issues that must be considered as stipulated in law or regulation:

- What the effects would be on minority populations or communities;
- What the effects would be on low income populations or communities, and
- What the effects would be on Tribes.

3.5.1.3 Regulatory Framework

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires each federal agency to make the achievement of environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. The EO further stipulates that the agencies conduct their programs and activities in a manner that does not have the effect of excluding persons from participation in them, denying persons the benefits of them, or subjecting persons to discrimination because of their race, color, or national origin.

3.5.1.4 Methods

Identifying whether disproportionately high and adverse impacts on minority and/or low-income populations would occur typically involves two steps: first, identifying whether minority and/or low-income communities are present, and, then, if these types of communities are present, evaluating whether high and adverse human health or

environmental effects would disproportionately affect the identified community or communities.

Data from the U.S. Census Bureau are used to identify minority and/or low-income communities that could be affected by the proposed Project. The results of other resource-specific analyses conducted for this Project are used to evaluate the potential for adverse or human health effects.

3.5.1.5 Existing Conditions

Guidelines provided by the CEQ (1997a) and USEPA (1998) indicate that a minority community may be defined as either: 1) where the minority population comprises more than 50 percent of the total population, or 2) where the minority population is meaningfully greater than the minority population in the general population of an appropriate benchmark region used for comparison. Minority communities may consist of a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals who experience common conditions of environmental effect. Further, a minority population exists if there is “more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds” (CEQ 1997a).

The CEQ and USEPA guidelines indicate that low income populations should be identified based on the annual statistical poverty thresholds established by the U.S. Census Bureau. Like minority populations, low income communities may consist of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals who would be similarly affected by the proposed action or program. The U.S. Census Bureau defines a poverty area as a census tract or other area where at least 20 percent of residents are below the poverty level (U.S. Census Bureau 2008b).

The potentially affected counties range from approximately 600 square miles to more than 10,000 square miles (see Table 3.4-4 in the Section 3.4 – Socioeconomics). Larger and more populated geographic areas may have the effect of “masking” or “diluting” the presence of concentrations of minority and/or low income populations (CEQ 1997a; USEPA 1998). Data were, therefore, also reviewed at the census block group level to identify the potential existence of minority and/or low income communities. A census block group is a subdivision of a census tract and typically contains between 600 and 3,000 people.

The Proposed Route and Route Alternatives cross 67 census block groups, which range from approximately 4 square miles to 4,367 square miles. Approximately 80 percent (52) of these block groups are less than 1,000 square miles. The large areas included in some of these census block groups reflect the lightly populated and undeveloped nature of much of the Analysis Area. Slightly more than half of the affected block groups (34 out of 67) had less than 1,000 residents in 2000 (the most recent data available at this geographic scale) and just two had more than 2,000 residents (U.S. Census Bureau 2000c).

Race and Ethnicity

Counties

The populations of Wyoming and Idaho are predominantly White, with White persons comprising 86 percent and 84 percent of the estimated populations in these states in 2010, compared to 64 percent in the United States as a whole. Persons identified as White alone accounted for 54 percent of the total population in Nevada in 2010 (Table 3.5-1). In the potentially affected Wyoming counties, the percent of the population identified as White in 2010 ranged from 80 percent in Carbon County to 94 percent in Lincoln County. In the Idaho counties, the percent of the population identified as White ranged from 66 percent in Power County to 95 percent in Bear Lake and Oneida Counties. An estimated 69 percent of the population in Elko County, Nevada, was White in 2008 (Table 3.5-1).

Table 3.5-1. Race and Ethnicity by County, 2010

Geographic Area	Total Population	Percent of Total Population				
		White ^{1/}	Hispanic or Latino	American Indian and Alaska Native ^{1/}	Other Race ^{1/,2/}	Two or More Races ^{1/}
Wyoming	563,626	85.9	8.9	2.1	1.7	1.5
Albany	36,299	84.8	8.8	0.5	4.0	1.8
Carbon	15,885	79.8	16.8	0.8	1.5	1.1
Converse	13,833	91.3	6.3	0.6	0.6	1.1
Lincoln	18,106	93.5	4.3	0.7	0.6	0.9
Natrona	75,450	89.1	6.9	0.8	1.6	1.6
Sweetwater	43,806	80.9	15.3	0.7	1.8	1.3
Idaho	1,567,582	84.0	11.2	1.1	2.0	1.7
Ada	392,365	86.5	7.1	0.5	3.8	2.1
Bannock	82,839	86.4	6.7	2.8	2.3	1.8
Bear Lake	5,986	94.7	3.6	0.4	0.6	0.7
Canyon	188,923	72.3	23.9	0.7	1.5	1.7
Cassia	22,952	72.9	24.9	0.5	0.8	0.9
Elmore	27,038	75.1	15.2	0.8	5.9	2.9
Franklin	12,786	91.8	6.6	0.3	0.4	0.9
Gooding	15,464	69.6	28.1	0.6	0.6	1.2
Jerome	22,374	66.9	31.0	0.7	0.6	0.9
Lincoln	5,208	69.3	28.3	0.6	0.8	1.0
Oneida	4,286	95.0	2.9	0.5	0.7	0.8
Owyhee	11,526	68.3	25.8	3.7	0.8	1.4
Power	7,817	66.1	29.8	2.1	0.7	1.4
Twin Falls	77,230	82.7	13.7	0.6	1.7	1.4
Nevada	2,700,551	54.1	26.5	0.9	15.5	2.9
Elko	48,818	69.1	22.9	4.7	1.8	1.6
United States	308,745,538	63.7	16.3	0.7	17.2	1.9

1/ Non-Hispanic only. The federal government considers race and Hispanic/Latino origin to be two separate and distinct concepts. People identifying Hispanic or Latino origin may be of any race. The data summarized in this table present Hispanic/Latino as a separate category.

2/ The "Other Race" category presented here includes census respondents identifying as "Black or African American," "Asian," "Native Hawaiian and Other Pacific Islander," or "Some Other Race." The relative high percentage of the populations of the U.S. and Nevada in this category (17.2 percent and 15.5 percent, respectively) reflects the inclusion of the Black or African American population, which comprised 12.2 percent of the national population and 7.7 percent of Nevada in 2010, but just 0.8 percent and 0.6 percent in Wyoming and Idaho, respectively.

Source: U.S. Census Bureau 2011a

Persons of Hispanic or Latino origin are the largest minority group in Wyoming, Idaho, and Nevada, and all of the potentially affected counties. Hispanic or Latino populations comprised more than 20 percent of the total population in seven of the counties in Idaho in 2010 (Table 3.5-1). Persons of Hispanic or Latino origin also comprised more than 20 percent of the total population in Elko County, Nevada.

American Indians and Alaska Natives comprised less than 1 percent of total population in the affected Wyoming counties in 2008. There are no Indian Reservations located in these counties. In Idaho, American Indians and Alaska Natives comprised less than 1 percent of the population in most of the potentially affected counties; the exceptions were Owyhee (3.7 percent), Bannock (2.8 percent), and Power (2.1 percent) Counties. American Indians and Alaska Natives accounted for 4.6 percent of the population in Elko County, Nevada, in 2008. The relatively high percentages in these four counties reflect the presence of the Fort Hall Indian Reservation, part of which is in Power and Bannock Counties; and the Duck Valley Indian Reservation, partially located in Owyhee County, Idaho, and Elko County, Nevada. The Proposed Route would not cross either of these reservations and would be located more than 60 miles north of the Duck Valley Indian Reservation. Alternative 5C would cross the Fort Hall Indian Reservation in Power County and this is reflected in the census block group data discussed below.

Census Block Groups

Race and ethnicity data from the 2010 Census are available at the census block group level. The percent of the population identifying as White alone in the 2010 Census exceeded 50 percent in all but one of the potentially affected census block groups, with shares ranging from 55 percent to 97 percent, and, as a result, the population in these census block groups did not meet the definition of a minority community based on the criteria that the minority population comprises more than 50 percent of the total population. The block group that would be crossed in Elko County, Nevada, is the one exception, with 42 percent of the total population identifying as White in the 2000 Census and a minority population that exceeds 50 percent of the total (Table 3.5-2).

The minority population in each census block group was also compared with its respective county average in 2010 to identify areas where the minority population is potentially “meaningfully greater” than the minority population in the general population. This comparison identified ten census block groups (including the one in Elko County) where the Hispanic or Latino share of the population was more than 10 percent higher than the county average. In addition, the American Indian and Alaska Native share of the population of one of the census block groups in Power County was 15 percent, compared to a county average of 2 percent (Table 3.5-2).

Table 3.5-2. Race and Ethnicity Census Block Group Comparison

County/Block Group	Percent of Total Population 2000					
	Total Population 2010 ^{1/}	White ^{2/}	Hispanic or Latino	American Indian and Alaska Native ^{2/}	Other Race ^{2/,3/}	Two or More Races ^{2/}
Cassia County, Idaho	22,952	72.9	24.9	0.5	0.8	0.9
Block Group 1, Census Tract 9501	680	61.5	36.2	2.2	–	0.1
Block Group 1, Census Tract 9506	1,024	59.6	38.4	0.3	0.6	1.2
Elmore County, Idaho	27,038	75.1	15.2	0.8	5.9	2.9
Block Group 2, Census Tract 9601	1,164	69.3	27.2	1.0	0.7	1.7
Block Group 2, Census Tract 9604	1,316	68.5	25.5	1.3	2.7	1.9
Gooding County, Idaho	15,464	69.6	28.1	0.6	0.6	1.2
Block Group 3, Census Tract 9602	1,699	59.4	38.3	0.8	0.5	1.1
Block Group 7, Census Tract 9602	1,037	59.5	38.5	0.6	0.4	1.1
Power County, Idaho	7,817	66.1	29.8	2.1	0.7	1.4
Block Group 2, Census Tract 9601	820	68.9	11.3	15.0	1.2	3.5
Twin Falls County, Idaho	77,230	82.7	13.7	0.6	1.7	1.4
Block Group 1, Census Tract 3	909	73.5	24.9	0.4	0.9	0.3
Block Group 1, Census Tract 14	1,159	55.2	43.6	0.1	0.7	0.4
Elko County, Nevada	48,818	69.1	22.9	4.7	1.8	1.6
Block Group 3, Census Tract 9517	1,220	41.6	55.2	0.7	1.6	0.9

1/ Data are for 2010.

2/ Non-Hispanic only. The federal government considers race and Hispanic/Latino origin to be two separate and distinct concepts. People identifying Hispanic or Latino origin may be of any race. The data summarized in this table present Hispanic/Latino as a separate category.

3/ The "Other Race" category presented here includes census respondents identifying as "Black or African American," "Asian," "Native Hawaiian and Other Pacific Islander," or "Some Other Race."

Source: U.S. Census Bureau 2011b

Income and Poverty

Counties

Median household income in Wyoming, Idaho, and Nevada was equivalent to 108 percent, 89 percent, and 106 percent, respectively, of the national median in 2009 (Table 3.5-3). Median household income in the potentially affected counties in Wyoming ranged from 75 percent to 127 percent of the state median. Median household income was below the state median in all the Idaho counties, with the exceptions of Ada, Franklin, and Lincoln Counties. Median household income in Elko County was 16 percent higher than the Nevada state median (Table 3.5-3).

Table 3.5-3. Income and Poverty by State and Affected County

State/County	2009 Median Household Income		2009 Poverty All Ages (Percent) ^{2/}
	2009 (\$)	Percent of U.S./State Median ^{1/}	
Wyoming	54,400	108	10.2
Albany	40,772	75	18.7
Carbon	50,353	93	11.7
Converse	58,658	108	8.9
Lincoln	59,160	109	8.0
Natrona	55,179	101	9.5

Table 3.5-3. Income and Poverty by State and Affected County (continued)

State/County	2009 Median Household Income		2009 Poverty All Ages (Percent) ^{2/}
	2009 (\$)	Percent of U.S./State Median ^{1/}	
Sweetwater	69,297	127	7.3
Idaho	44,644	89	14.4
Ada	53,828	121	11.8
Bannock	44,451	100	14.5
Bear Lake	42,199	95	13.0
Canyon	39,457	88	18.2
Cassia	40,389	90	16.3
Elmore	41,922	94	13.8
Franklin	45,404	102	10.6
Gooding	36,298	81	16.5
Jerome	39,636	89	15.4
Lincoln	46,100	103	12.2
Oneida	43,057	96	12.8
Owyhee	33,753	76	17.4
Power	38,509	86	16.6
Twin Falls	41,194	92	12.5
Nevada	53,310	106	12.4
Elko	62,091	116	8.2
United States	50,221	NA	14.3

1/ Statewide median household incomes are presented as a percent of the national median; county medians are shown as a percentage of their respective state medians.

2/ This represents the percentage of the population of all ages below the poverty level.

Sources: U.S. Census Bureau 2010m

The percent of the population below the poverty level in Wyoming in 2009 was lower than the national average (10.2 percent versus 14.3 percent). The percent of population below the poverty rate in the Wyoming Analysis Area counties ranged from 7.3 percent in Sweetwater County to 18.7 percent in Albany County (Table 3.5-3).

The percent of the population below the poverty level in Idaho in 2008 was very similar to the national average (14.4 percent versus 14.3 percent) (Table 3.5-3). Poverty rates were higher than the state average in 7 of the 14 potentially affected Idaho counties, with the highest rates occurring in Canyon (18.2 percent) and Owyhee (17.4 percent) Counties (Table 3.5-3).

Census Block Groups

The most recent year that income and poverty data are available at the census block group level is 1999. Two of the affected census block groups had more than 20 percent of their population below the poverty level in 1999. Four others had between 19.5 percent and 20 percent of their population below the poverty level (Table 3.5-4). The U.S. Census Bureau defines a poverty area as a census tract or other area where at least 20 percent of residents are below the poverty level (U.S. Census Bureau 2008b).

The 1999 per capita income in each census block group was also compared with its respective county average in 1999 to identify areas where income was more than 20 percent lower than the county average. Four census block groups met this criterion. In two of these cases, block groups in Elmore and Twin Falls Counties, more than 20

percent of the population was below the poverty level (Table 3.5-4). The other two census block groups, in Ada and Elko Counties, had relatively low poverty rates in 1999, 12.5 percent and 9.4 percent, respectively (U.S. Census Bureau 2000d).

Table 3.5-4. Poverty Census Block Comparison

County/Block Group	Total Population	Income in 1999 Below Poverty Level	Percent below Poverty Level
Carbon County, Wyoming	14,595	1,879	12.9
Block Group 3, Census Tract 9681	575	114	19.8
Bear Lake County, Idaho	6,355	610	9.6
Block Group 1, Census Tract 9501	872	170	19.5
Elmore County, Idaho	25,148	2,814	11.2
Block Group 2, Census Tract 9804	976	232	23.8
Twin Falls County, Idaho	63,123	8,038	12.7
Block Group 1, Census Tract 9802	1,024	201	19.6
Block Group 1, Census Tract 9814	1,230	285	23.2
Block Group 5, Census Tract 9803	877	173	19.7

1/ Data are for 1999. The most recent data available at the census block group level. Data presented here for Carbon, Bear Lake, and Twin Falls counties are also from 2000.
Source: U.S. Census Bureau 2000d

3.5.2 Direct and Indirect Effects

This section is organized to present effects to environmental justice from construction, then operation, followed by decommissioning activities for the proposed Project. Route Alternatives are analyzed in detail below in Section 3.5.2.3. There is a Design Variation involving use of two single-circuit structures proposed by the Proponent for Segments 2, 3, and 4 (see Section 2.2 for details), which is analyzed below in Section 3.5.2.4 and a Structure Variation that is analyzed in Section 3.5.2.5. The Proponents have also proposed a Schedule Variation, analyzed in Section 3.5.2.6, in which one of the two single circuits to be constructed in Segments 2, 3, and 4 and a portion of Segment 1W would be built on an extended schedule with construction beginning approximately 2.5 years after completion of the initial construction.

Plan Amendments

Proposed amendments are summarized in Table 2.2-1 of Chapter 2 and detailed in Appendices F and G. Amendments are needed to permit the Project to cross various areas of BLM-managed and NFS lands. Effects described for areas requiring an amendment in order for the Project to be built would only occur if the amendment were approved. Amendments that alter land management designations could change future use of these areas. No amendments specific to environmental justice are proposed for the Project and no impacts to environmental justice resulting from approving the amendments beyond the impacts of the project are anticipated.

3.5.2.1 No Action Alternative

The Proposed Route or Route Alternatives would not be constructed under the No Action Alternative, and, therefore, this alternative would have no environmental justice impacts.

3.5.2.2 Effects Common to All Action Alternatives

Disproportionate High and Adverse Effects on Minority or Low-Income Populations

Construction

Geographic Communities

Construction of the proposed Project is not expected to have high and adverse human health or environmental effects on nearby communities. Adverse construction-related impacts would likely include increases in local traffic and noise, as well as dust, and could result in temporary delays at some highway crossings. Construction workers temporarily relocating to the Project area would increase demand for local housing resources. These impacts would be temporary and localized, and are not expected to be high. Potential impacts on public safety are discussed in Section 3.22 – Public Safety.

Construction-related activities would result in some short-term visual impacts primarily on high-sensitivity viewers with foreground and possibly middleground views. Visual impacts would likely result from the use of cranes, pulling and tensioning equipment, other construction equipment, and temporary lighting, as well as dust from clearing and grading. However, disturbance would be transient and of short duration as construction activities progress along the transmission line route. Visual impacts are discussed in more detail in Section 3.2 – Visual Resources.

Construction would also increase demand for education, health care, and municipal services, as well as potentially increase demand for police and fire protection services. However, these impacts are also expected to be temporary and would not measurably affect the quality of services currently received by local communities and residents.

Local construction expenditures for materials and supplies and spending by workers directly employed by the Project are expected to benefit local economies. Construction would also generate state and local tax revenues (see Section 3.4 – Socioeconomics).

Communities of Shared Interest

The term community of shared interest is used here to refer to geographically dispersed individuals who could experience common conditions of environmental effect. The National Agricultural Workers Survey for fiscal years 2001 and 2002 (the most recent available) found that 83 percent of crop workers in the United States identified themselves as members of a Hispanic group, and 78 percent of crop workers were born outside the United States, primarily in Mexico (75 percent of all crop workers) (U.S. Department of Labor 2005). This survey also found that 30 percent of all farm workers had total family incomes below federal poverty guidelines.

The potential effects of construction on agricultural production are addressed in Section 3.18 – Agriculture. Potential effects to the agricultural sector and employment are discussed in Section 3.4 – Socioeconomics. Viewed in terms of agricultural operations in the potentially affected counties, total estimated construction disturbance represents a very small share of the 17 million acres of land in farms in the 21 potentially affected counties and is unlikely to noticeably affect overall agricultural production and employment in the affected counties. In addition, the impacts to agricultural production that would

occur are not expected to have adverse human health or environmental effects on farm workers.

The Proposed Route and Route Alternatives would benefit service industry occupations that are typically relatively low paid, particularly those associated with accommodation and food service. These benefits would result from increased demand and spending by construction workers temporarily relocating to the Project region, and would be short-term.

Operations

Geographic Communities

Operation of the proposed Project is not expected to have high and adverse human health or environmental effects on nearby communities. Long-term visual impacts would result from the long-term presence of the transmission line structures and overhead conductors. Other long-term visual impacts could include land scarring from grading and other construction activities in semi-arid environments where vegetation recruitment and growth are slow. Vegetation would also remain cleared or partially cleared along some portions of the ROW for the operational life of the Project (see Section 3.2 – Visual Resources).

Local operation expenditures for materials and supplies and spending by workers would, however, have beneficial effects on the local economy, and the Project would generate state and local tax revenues (see Section 3.4 – Socioeconomics).

Communities of Shared Interest

Operation of the Proposed Route and Route Alternatives has the potential to negatively affect minority and low-income farm workers. However, as noted above with respect to construction, operation-related impacts to agricultural operations are not expected to noticeably affect overall agricultural production and employment in the affected counties or have adverse human health or environmental effects on farm workers. Potential effects on agricultural production are addressed in Section 3.18 – Agriculture and potential effects to the agricultural sector and employment are discussed in Section 3.4 – Socioeconomics.

Decommissioning

Overall impacts associated with decommissioning the proposed Project are expected to be similar to those that would occur under construction. Decommissioning would not be expected to result in high and adverse human health or environmental effects on nearby communities, workers employed in decommissioning activities, or agricultural workers and these activities would, therefore, have no potential to disproportionately affect minority and low income communities. There would be residual visual impacts resulting from the long-term presence of the ROW after the Project has been decommissioned and the structures removed. These impacts would primarily be related to ground disturbance and primarily visible at ground level, and would be expected to diminish over time.

Public Participation

Construction and Operations

The BLM has considered all input from persons or groups regardless of race, income status, or other social and economic characteristics. Public scoping efforts are described in Chapter 4.

Native American Consultation

Potentially affected minority populations include American Indian Tribes with an interest in the federal lands that could be affected by the Project. The BLM initiated government-to-government consultation with seven Native American Tribes in the Project area in April 2008. The consultation was conducted to inform the various Tribes of the proposed undertaking and solicit their concerns and/or comments regarding the possible presence of TCPs or places of cultural, traditional, or religious importance to the Tribes in the proposed Project area. The following Tribes have been contacted:

- Northern Arapaho
- Northern Cheyenne
- Eastern Shoshone
- Shoshone-Bannock
- Ute Indian Tribe
- Shoshone-Paiute
- Northwest Shoshone Band
- Southern Arapaho
- Southern Cheyenne
- Oglala Sioux

This is discussed further in Section 3.3 – Cultural Resources and a summary of the status of the Native American consultation process is presented in Table 3.3-2.

Decommissioning

Decommissioning would be conducted in a manner that would not exclude minority and low income groups from participation or subject persons to discrimination because of their race, color, or national origin.

3.5.2.3 Proposed Route and Alternatives by Segment

The analysis of minority and low income populations by Census Block Group presented in the preceding Affected Environment section suggests the potential presence of minority and low income communities in the vicinity of the Proposed Route and Route Alternatives. This analysis identified 10 potential minority Census Block Groups. These block groups and the Proposed Route and Route Alternatives that would cross them are identified in Table 3.5-5.

Alternative 5C would cross the Fort Hall Indian Reservation in Power County. The Shoshone-Bannock Tribal Council has given permission for BLM to consider the route across the reservation.

Table 3.5-5. Potential Minority Populations by Proposed Route / Route Alternative

County/State	Census Tract	Block Group	Proposed Route / Route Alternatives	Percent Minority Population
Cassia County, Idaho	9501	1	7, 7C, 7D, 7H, 7I, 7J	39
Cassia County, Idaho	9506	1	7	40
Elmore County, Idaho ^{1/}	9601	2	8, 8A, 9, 9B	31
Elmore County, Idaho ^{1/2/}	9604	2	9D	31
Gooding County	9602	3	8A	41
Gooding County	9602	7	8A	41
Power County, Idaho	9601	2	5C	31
Twin Falls County, Idaho ^{1/2/}	3	5	9B, 9C	27
Twin Falls County, Idaho ^{1/2/}	14	1	10	45
Elko County, Nevada ^{1/}	9517	1	7I	58

1/ The number of this Census Tract changed between 1999 and 2010 (compare with Table 3.5-6)

2/ Also identified as a potential low income community, with 20 percent or more of the total population below the poverty level in 1999.

Source: U.S. Census Bureau 2011b

The low income analysis identified six Census Block Groups where 20 percent or more of the population were below the poverty level in 1999 (the most recent data available). These block groups and the Segment and Route Alternatives that would cross them are identified in Table 3.5-6. Three of these block groups were also identified as potential minority communities in 2010. The block groups in Carbon County, Wyoming, and Bear Lake County, Idaho, are relatively small, 11 and 12 square miles, respectively, with population densities approaching the national average.

Table 3.5-6. Potential Low Income Populations by Proposed Route / Route Alternative

County/State	Census Tract	Block Group	Proposed Route / Route Alternatives	Percent Below Poverty Level
Carbon County, Wyoming	9681	3	2	20
Bear Lake County, Idaho	9501	1	4	20
Elmore County, Idaho ^{1/,2/}	9804	2	9, 9D	24
Twin Falls County, Idaho ^{1/}	9802	1	7, 7I, 9, 9A, 9B, 9C	20
Twin Falls County, Idaho ^{1/,2/}	9803	5	9B, 9C	20
Twin Falls County, Idaho ^{1/,2/}	9814	1	10	23

1/ The number of this Census Tract changed between 1999 and 2010 (compare with Table 3.5-5).

2/ Also identified as a potential minority community.

Source: U.S. Census Bureau 2000d

As discussed above, construction of the proposed Project is not expected to have high and adverse human health or environmental effects on nearby communities. The Project would, however, have high, long-term visual impacts in some locations as discussed in detail in Section 3.2 – Visual Resources. The Census Block Groups identified in Tables 3.5-5 and 3.5-6 are, for the most part, large, sparsely populated areas. Visual impacts have the potential to be high in these areas where the structures and overhead conductors would be visible to private residences. This is, for example, the case with the portion of Alternative 5C that crosses the Fort Hall Indian Reservation. The visual resources analysis found that there would be some areas of high impact where residential areas are located in the vicinity.

While these potential impacts exist, the proposed Project overall does not appear to exhibit systematic bias toward placing the Project in minority or low income communities. The Proposed Route and Route Alternatives cross a total of 64 Census Block Groups; approximately 13 percent or 8 of these have the potential to be minority communities, and 9 percent or 6 could potentially be low income. The major factors influencing routing decisions are described by proposed segment in Chapter 2 of this EIS.

3.5.2.4 Design Variation

A Design Variation is being considered that would consist of constructing two single-circuit lines in Segments 2 through 4 instead of a single double-circuit line (which is the design assessed above). The disturbance footprint of the two single-circuit towers is greater than that of the double-circuit tower, in part because the requested ROW would be wider, but also because helicopter-assisted construction could be implemented in these areas due to the lighter weight of the towers, which would require additional fly yards. The additional ROW space and the fly yards would cause additional temporary disturbance during construction. Across Segments 2, 3, and 4, the additional disturbance of the single-circuit tower alternative ranges from 25 to 30 percent greater than the comparable portions of the double-circuit tower disturbance under the proposed design. The two single circuits require more ground disturbance, but would be designed and constructed to the same standards as the Proposed Action.

The primary potential visual benefit of this Design Variation is reduced structure height (average height of 156 feet versus 170 feet for the Proposed Action). Other benefits include reduced structure contrast in areas where the Proposed Route and Route Alternatives would parallel existing structures of a similar type. Conversely, this Design Variation would introduce more towers in the landscape than the double-circuit option. Anticipated visual impacts would be similar to those described for the Proposed Action. Impacts to minority or low-income populations would not vary by structure type or ROW configuration.

3.5.2.5 Structure Variation

The proposed guyed Structure Variation would add four guy wires about 140 feet long from a point about 100 feet up in each tower to four guy anchors spaced in a square around the tower (Appendix B, Figure B-6). This would not change the amount of disturbance during construction or operation appreciably.

There is no appreciable difference in impact on visual resources from the use of this Structure Variation when compared to the use of self-supporting lattice towers, because the guyed towers would be around the same height and breadth at the top of the structure as the proposed self-supporting lattice towers. The use of guyed structures would not change the impacts to minority and low-income populations.

3.5.2.6 Schedule Variation

The Schedule Variation uses the two single-circuit design variation described above but extends construction over a longer time frame. Initially only one of the eventual two single-circuit lines would be constructed with the second to be constructed at a later date. The Schedule Variation proposes that the first single-circuit transmission line in

Segments 2, 3, and 4 would be built as soon as a ROW grant is issued, but that the second line would not begin construction until late 2018. This would mean nearly 2 years between the end of construction for the first line and beginning of construction for the second line. Any staging areas and fly yards that had been used for the first stage would have been revegetated after construction was complete and would have to be cleared again. There would be two sets of construction disturbances adding movement, noise, and dust to the area of construction in two instances in any given area.

In the short term, overall impacts on visual resources would be reduced when compared to the Proposed Action and Design Variation due to the single smaller tower used and roughly half of the total transmission towers being in the landscape. However, in the future any short-term reduction in visual impacts would be lost with construction of the second line. The Schedule Variation would not alter impacts to minority or low-income populations.

3.5.3 Mitigation Measures

No mitigation measures are needed.