BUREAU OF RECLAMATION

Boise River Basin Feasibility Study

Specialist Report: Environmental Justice

Boise Project, Idaho

Interior Region 9: Columbia Pacific Northwest

U.S. Department of the Interior May 2020

Mission Statements

The Department of the Interior (DOI) conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
CEQ	Council on Environmental Quality
EO	Executive Order
EPA	U.S. Environmental Protection Agency
HD	Highway District
IDL	Idaho Department of Labor
NEPA	National Environmental Policy Act
NFS	National Forest System [Road]
Reclamation	Bureau of Reclamation
RMP	Resource Management Plan

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1. Introduction

The Boise River Basin Feasibility Study is a feasibility study to evaluate increasing water storage opportunities within the Boise River basin by expanding Anderson Ranch Reservoir. The project is located at Anderson Ranch dam and reservoir, the farthest upstream of the three reservoirs within the Boise River system and located 28 miles northeast of the city of Mountain Home in Elmore County, Idaho. Anderson Ranch Dam is a zoned earth fill embankment structure that provides irrigation water, flood control, power generation, and recreation benefits. The reservoir also provides a permanent dead storage pool for silt control and the preservation and propagation of fish and wildlife. Anderson Ranch Dam is operated by the Bureau of Reclamation (Reclamation). Reclamation, in partnership with the Idaho Water Resource Board (IWRB), proposes to raise Anderson Ranch Dam. New water storage would provide the flexibility to capture additional water when available, for later delivery when and where it is needed to meet existing and future demands. The alternatives analyzed in this document include the No-Action Alternative (Alternative A), a 6-foot raise of Anderson Ranch Dam (Alternative B), and a 3-foot raise of Anderson Ranch Dam (Alternative C).

Alternative A provides a basis for comparison with the two action alternatives, Alternative B and Alternative C. Under Alternative A, current baseline conditions would continue, without increasing Anderson Ranch Dam height or constructing associated reservoir rim projects, access roads, or facilities. The expected project duration of Alternative B is approximately 51 months and Alternative C is 44 months. Reclamation would continue existing operations of Anderson Ranch Dam. Alternative B proposes to raise the dam by 6 feet from the present elevation of 4196 feet to 4202 feet to capture and store approximately 29,000 additional acre-feet of water. Alternative B would inundate an estimated 146 acres of additional land around the reservoir above the current full pool elevation of 4196 feet. Alternative C proposes to raise the dam by 3 feet to 4199 feet, allowing for the ability to capture and store approximately 14,400 additional acre-feet of water. Alternative C would inundate an estimated 73 acres of additional land around the reservoir above the current full pool elevation of 4196 feet.

Each of the two action alternatives, Alternative B and Alternative C, includes two separate, but similar, structural construction methods for the dam raise, downstream embankment raise, or mechanically stabilized earth wall raise. Otherwise, the only difference is the dam raise elevations of 6 feet for Alternative B and 3 feet for Alternative C. Project areas and construction durations for each method are nearly identical, except for a 200-foot difference in approach road length at the right abutment and an approximate 1-month difference in construction duration. The longer road length is within the dam footprint on previously disturbed ground. Because these differences are negligible, they are not differentiated within the analysis of each alternative. Alternative analysis assumes the longer road length and

construction duration, however, a final construction method will be chosen during later phases of engineering evaluation.

Chapter 1 and Chapter 2 of the Boise River Basin Feasibility Study Environmental Impact Statement (EIS) provide a detailed description of the proposed action, project's purpose and need, project area, and alternatives including design features applicable to the action alternatives. This specialist report supports the analysis of expected impacts on environmental justice as described in the EIS.

1.1 Regulatory Framework

Executive Order (EO) 12898 (Environmental Justice, 59 *Federal Register* 7629 [1994]) requires Federal agencies to achieve environmental justice by addressing "disproportionately high and adverse human health and environmental effects on minority and low-income populations." To determine if environmental justice populations are present, the Federal agency examines the demographics of the affected area to determine if minority (including Native Americans) and/or low-income populations are present. If present, the agency must determine if the action would cause disproportionately high and adverse human health or environmental effects on the populations.

2. Affected Environment

2.1 Construction

The closest private residence to the action area is approximately 19 miles east of Anderson Ranch Dam in the town of Pine, Idaho. There are also private residences several miles beyond the upper south rim of the canyon along Highway District (HD) road 134 that extends north from its intersection with U.S. Highway 20 to Anderson Ranch Dam. There are no private residences immediately adjacent to Anderson Ranch Dam.

The town of Prairie, Idaho, is approximately 22 miles northwest of Anderson Ranch Dam. The farmers and ranchers of this town currently use NFS Road 134 across Anderson Ranch Dam to transport primarily hay and cattle from Prairie to the Mountain Home area. This is also the route used by buses to transport children to public schools in Mountain Home. The more gradually angled turns and less steep grade of this route allow for safe and efficient transport. These activities contribute largely to the livelihood and economic well-being of the individuals in Prairie.

2.1.1 Racial Minorities

The project construction area is located in Elmore County, a remote and sparsely populated area, where much of the land is owned by the Federal government. Near the project construction area, there are only scattered residential dwellings along Anderson Ranch Dam Road, around the reservoir, and along the South Fork Boise River downstream from the dam. The general proportions of race and ethnicity in Elmore County are similar to Idaho as a whole, with a white population of more than 86% according to the U.S. Census Bureau 2013–2017 American Community Survey (Table 1).

Table 1. 2018 Summary of racial and ethnic minority distribution in Idaho and Elmore County

Race or Ethnicity	Idaho	Elmore County
White	91.0%	86.8%
Black or African American	0.7%	2.9%
Asian	1.4%	3.1%
Native Hawaiian and Other Pacific Islander	0.1%	0.3%
Two or More Races	2.6%	2.9%
Hispanic or Latino (any race)[1]	12.2%	16.4%

Source: U.S. Census Bureau. 2018

1By definition from the Federal Office of Management and Budget, race and Hispanic or Latino origin are two separate categories. People who report themselves as Hispanic or Latino can be of any race.

2.1.2 Low-Income Populations

Low-income populations are identified by several socioeconomic characteristics. As categorized by the 2000 Census, specific characteristics include income (median family and per capita), percentage of population below poverty (individuals), and unemployment rates (Table 2). The Census Bureau's 2013–2017 American Community Survey shows a slightly lower median household income of $45,154 for Elmore County than $50,985 for Idaho (U.S. Census Bureau, 2017). The Census Bureau reported that about 12.9% of the population of Elmore County and 11.8% of Idaho's population were living in poverty in 2017 (U.S. Census Bureau, 2017).

Table 2. 2017 income and poverty status and 2019 unemployment status for Elmore County, Idaho, and the state of Idaho

	Idaho	Elmore County
Median household income (in 2017 dollars), 2013–2017	$50,985	$45,154
Per capita income in past 12 months (in 2017 dollars), 2013–2017	$25,471	$23,029
Persons in poverty, percent	11.8%	12.9%
Persons unemployed (2019), percent	2.8%	3.7%

Other measures of low income, such as unemployment, characterize demographic data in relation to environmental justice. The 3.7% unemployed in Elmore County is only slightly higher than the state of Idaho's 2.8% unemployed (Idaho Department of Labor [IDL], 2019). Figure 1 shows the boundaries for unemployment rates geographically throughout the project area and the majority of Elmore County, Idaho, according to the U.S. Environmental Protection Agency (EPA) EJSCREEN screening and mapping tool (EPA, 2018).

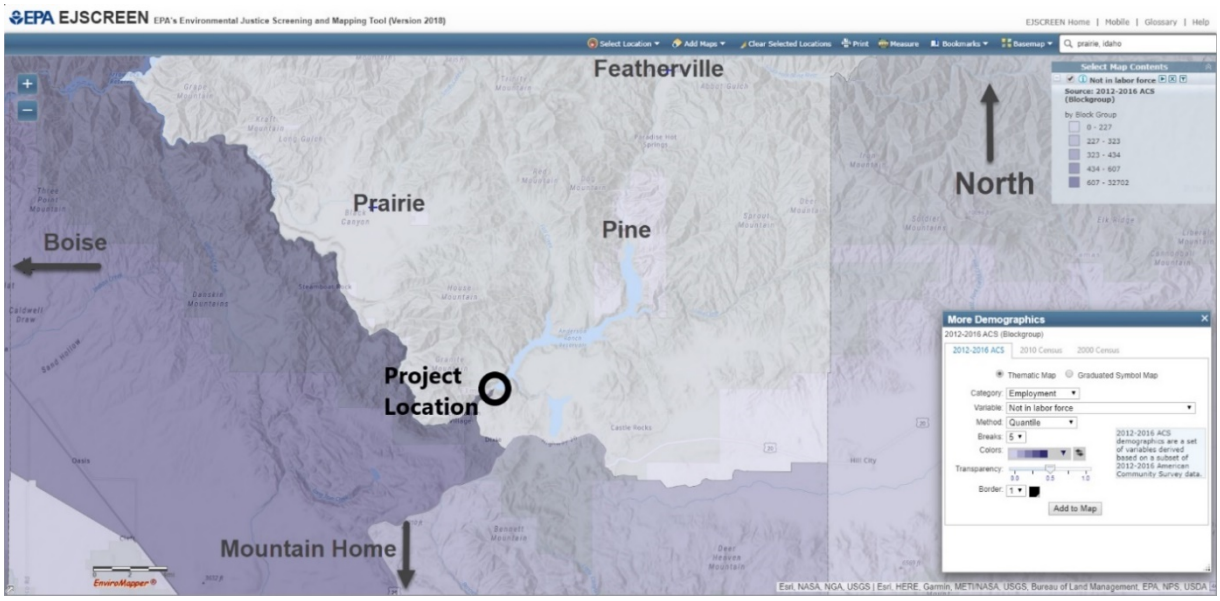

Figure 1. Unemployment rates in project area using EPA EJSCREEN mapping tool

2.2 End Users – Racial Minorities

The end user would be existing water users within Idaho Water District 63. The area of concern for end users is in Ada County and portions of Canyon County, Idaho. The general proportions of race and ethnicity in Ada and Canyon counties are similar to Idaho as a whole, with a white population of more than 91% and more than 93%, respectively, according to the Census Bureau's 2013–2017 American Community Survey (Table 3). Based on this review, Hispanics or Latinos represent the largest minority population in Canyon County, with double the population percentage of Idaho as a whole.

2.3 End Users - Low-Income Populations

Low-income populations are identified by several socioeconomic characteristics (Table 4). As categorized by the 2000 Census, specific characteristics include income (median family and per capita), percentage of population below poverty (individuals), and unemployment rates. The Census Bureau's 2013–2017 American Community Survey shows a slightly higher median household income of $60,151 for Ada County than $50,985 for Idaho (U.S. Census Bureau, 2017). The Census Bureau 2013–2017 American Community Survey shows a slightly lower median household income of $46,426 for Canyon County than $50,985 for Idaho (U.S. Census Bureau, 2017). The Census Bureau reported that about 10.8% of the population of Ada County and 11.8% of the state of Idaho's population were living in poverty in 2017 (U.S. Census Bureau, 2017). The Census Bureau reported that about 15.5% of the population of Canyon County and 11.8% of the state of Idaho's population were living in poverty in 2017 (U.S. Census Bureau, 2017).

Table 3. 2018 summary of racial and ethnic minority distribution in the state of Idaho, Ada County, and Canyon County

Race or Ethnicity	Idaho	Ada County	Canyon County
White	93.0%	91.9%	93.3%
Black or African American	0.9%	1.3%	0.8%
Asian	1.6%	2.8%	1.1%
Native Hawaiian and Other Pacific Islander	0.2%	0.2%	0.3%
Two or More Races	2.5%	3.0%	2.7%
Hispanic or Latino (any race)[1]	12.7%	8.3%	25.6%

Source: U.S. Census Bureau, 2017

1By definition from the Federal Office of Management and Budget, race and Hispanic or Latino origin are two separate categories. People who report themselves as Hispanic or Latino can be of any race.

Table 4. 2017 income and poverty and 2019 unemployment status for the state of Idaho, Ada County, and Canyon County

	Idaho	Ada County	Canyon County
Median household income (in 2017 dollars), 2013–2017	$50,985	$60,151	$46,426
Per capita income in past 12 months (in 2017 dollars), 2013–2017	$25,471	$31,642	$19,765
Persons in poverty, percent	11.8%	10.8%	15.5%
Persons unemployed, percent	2.8%	2.6%	3.3%

Other measures of low income, such as unemployment, characterize demographic data in relation to environmental justice. The 2.6% unemployed in Ada County is only slightly lower than the state of Idaho 2.8% unemployed (IDL, 2019). The 3.3% unemployed in Elmore County is only slightly higher than the state of Idaho 2.8% percent unemployed (IDL, 2019).

3. Environmental Consequences

3.1 Methods for Evaluating Impacts

The Federal Council on Environmental Quality (CEQ), which has oversight of the Federal government's compliance with EO12898 and National Environmental Policy Act (NEPA), developed its guidance to assist Federal agencies with their NEPA procedures so environmental justice concerns are effectively identified and addressed.

The CEQ methodology involves collecting demographic information on the area where the project may cause significant and adverse effects, identifying the low-income and minority populations in that area using census data, and identifying whether the project's adverse effects are disproportionately high on the low-income and minority populations in comparison to those on other populations. Mitigation measures should be developed and implemented for any disproportionately high and adverse effect. Under NEPA, the potential for disproportionately high and adverse effects on minority and/or low-income populations should then be one of the factors the Federal agency considers in making its finding on a project and issuing a Record of Decision.

3.2 Methodology Used for This Analysis

Environmental justice issues are focused on environmental impacts on natural resources (and associated human health impacts) and potential socioeconomics impacts. The following issues are evaluated to determine potential impacts.

- Are affected resources used by minority or low-income populations?
- Do the resources affected by the project support subsistence living?
- Are minority or low-income populations disproportionately subject to adverse environmental, human health, or economic impacts?

If any potential impacts on minority or low-income populations are determined to exist, they were evaluated by comparing the action's potential effect on minority and low-income populations relative to its overall effects to determine whether any potential adverse impacts on those populations would be disproportionate, and thus disproportionately high.

Identification of Minority and Low-Income Populations

There are no requirements for, nor are records maintained, on the race, ethnicity, or income of the water users within water districts or irrigation districts. Published data do not indicate the race, ethnicity, or income levels of these specific individuals. Thus, county-level data were used for the analysis for this EIS. Data on population, race, ethnicity, and poverty status were gathered from the U.S. Census Bureau for the counties within the project area for Alternative B and Alternative C. The project area is further defined in Chapter 2 of the EIS.

3.3 Direct, Indirect and Cumulative Impacts

3.3.1 Alternative A - No Action

Under the No-Action Alternative, Reclamation would not modify Anderson Ranch Dam to increase storage capacity. Neither Alternative A or Alternative B would alter the current regional environmental justice status; therefore, no change would occur to any low-income or minority populations. Farmers, ranchers, and other transportation such as buses and emergency services in the area would continue to use HD 134 for transportation across Anderson Ranch Dam and Anderson Ranch Reservoir would continue to provide water to end users within Water District 63 as is the case currently.

3.3.2 Alternative B – 6-Foot Dam Raise at Anderson Ranch Dam

Construction

Environmental resources potentially used by low-income and minority groups that could exist in the study area are primarily aquatic-related resources. These groups currently use these resources disproportionately to the total population and would be expected to do so in the future. Access to these resources should not change based on this alternative.

While most of the fishing occurs in the dam and reservoir area, is not a defined subsistence fishery. Definitions of what constitutes “subsistence” tend to differ by geographic area and be influenced by perception. For example, the definition of subsistence may include social, cultural, and spiritual aspects of the harvest, or be the definition presented by the CEQ: “The dependency by a minority population, low-income population, Indian tribe or subgroup of such populations on indigenous fish, vegetation and/or wildlife, as the principal portion of their diet” (CEQ, 1997). Although data are not available to determine the use of renewable natural resources, e.g., fish, wildlife, and vegetation for subsistence by any group in the area, it is likely these resources are used to supplement their diet and do not constitute the principle portion of their diet. The information presented previously also indicates that there are few, if any, minority populations in or near the project area.

Construction activities with Alternative B could most directly impact those using HD 134 to cross Anderson Ranch Dam for transportation purposes. Due to the closure of HD 134 for approximately 51 months during construction, a detour would be designated through HD 131 or Cow Creek Road to allow for school buses, agricultural, and stock trucks to access a safe route. This is important because these trucking activities are a large portion of the livelihood of the residents within the town of Prairie and surrounding areas. These individuals usually use HD 134 for transportation based on the more gradual turns and less steep grade compared to other routes. However, the detour route through HD 131 would be modified to realign the road to allow more gradually angled turns and less steep grade than the current condition, which would not be safe transportation routes for large trucks and semis. This would also be the main route for access for public school district buses, emergency response services (police, fire, medical), mail, and local residents.

End Users

For the end user, Alternative B could increase the amount of water delivered to an additional 29,000 acre-feet. This water would likely be distributed throughout Water District 63 and would cause no impacts to low-income or minority populations when considering the quantity of water and the wide distribution within established water delivery areas.

Other than minor construction impacts that are localized and temporary, no adverse impacts to aquatic related resources have been identified. No CEQ-defined subsistence level use of renewable natural resources by any population has been identified in the area. No adverse human health impacts for any human population have been identified. Therefore, even though there is a higher percentage of Hispanic or Latino population in the area, this alternative would have no adverse environmental justice impact to any low-income or minority population end users.

3.4 Alternative C – Anderson Ranch Dam Three-foot Raise

Environmental resources potentially used by low-income and minority groups that could exist in the project area are the same as Alternative B. These groups currently use these resources and would be expected to do so in the future. Access to these resources should not change based on this alternative. Construction activities with Alternative C would be the same as Alternative B.

End Users

Alternative C would be the same for end users as in Alternative B except the available water would add a maximum of 14,000 additional acre-feet, not 29,000 additional acre-feet. This water would still likely be distributed throughout Water District 63 and would cause no impacts to low-income or minority populations when considering the quantity of water and the wide distribution within established water delivery areas.

Other than minor, temporary construction impacts, no adverse impacts to aquatic-related resources have been identified. No CEQ-defined subsistence level use of renewable natural resources by any population has been identified in the area. No adverse human health impacts for any human population have been identified. Therefore, even though there is a higher percentage of Hispanic or Latino population in the area, this alternative would have no adverse environmental justice impact to any low-income or minority population end users.

3.5 Cumulative Effects

Cumulative effects are analyzed for the Alternative B and Alternative C. Cumulative effects are those that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The cumulative effects analysis considers projects, programs, and policies that are not speculative and are based on known or reasonably foreseeable long-range plans, regulations, operating agreements, or other information that establishes them as reasonably foreseeable. While no present actions are

identified, Reclamation has identified two past actions: Pine Bridge replacement and the 4-foot Anderson Ranch Dam crest raise for security enhancement. Reclamation has also identified two potential future projects to be considered for the cumulative impact analysis: Cat Creek Energy Project and South Fork Boise River Diversion Project. Additional project proposal information for these, as known by Reclamation to date, is provided in Chapter 2 of the EIS.

The proposed 2025 dam construction date is well removed in time from the 2018 installation of the newly replaced Pine Bridge and the 2010 construction of the security berm along the dam crest. Any potential direct or indirect impacts to environmental justice associated with the proposed Alternatives would not be additive; therefore, no cumulative environmental justice impacts are identified for these past actions.

Due to the incomplete nature of the Cat Creek Energy LLC proposal it is difficult to foresee specific effects to the area. However, there would be no work done at Anderson Ranch Dam; therefore, no road closures across the dam would be triggered that require a detour to ensure economic-based transportation have a through route. Anderson Ranch Reservoir would still not be considered a subsistence reservoir. There would still be no minority or low-income populations in the surrounding areas affected if this action takes place in the near future. If years pass beyond "near future," a new analysis would be done to consider changes in the populations in this area. Based on known details, it seems there may be expected minor ongoing positive effects to the local economy and labor force through the contracting process for construction and other general and specialized labor. Cumulatively, the effects of this individual future project may contribute to slight, but insignificant, economic gains to the local area.

This application and possible pipeline installation for the South Fork Boise River Diversion Project would require no closures across Anderson Ranch Dam and therefore would not need detour consideration. Again, there would be no subsistence designation to consider and there are no effects to minority or low-income populations in the area based on current data. Based on known details, it seems there may be expected minor ongoing positive effects to the local economy and labor force through the contracting process for construction and other general and specialized labor. Cumulatively, the effects of this individual future project may contribute to slight, but insignificant, economic gains to the local area.

3.1.1 Mitigation

No significant adverse effects to environmental justice are anticipated for Alternative B or C, so no formal mitigation measures are recommended.

4. References

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