Finding of No Significant Impact
Final Environmental Assessment
A&B Irrigation District - Unit A Pumping Plant #2
Minidoka County, Idaho

January 2015
FINDING OF NO SIGNIFICANT IMPACT

A&B Irrigation District – Unit A Pumping Plant #2
Minidoka County, Idaho

U.S. Department of the Interior
Bureau of Reclamation
Pacific Northwest Region

PN FONSI 15-01

Introduction

The Bureau of Reclamation (Reclamation) has prepared this Finding of No Significant Impact (FONSI) to comply with the Council on Environmental Quality’s regulations for implementing procedural provisions of the National Environmental Policy Act (NEPA). This document briefly describes the preferred alternative, other alternatives considered, the scoping process, Reclamation’s consultation and coordination activities, and Reclamation’s finding. The Final Environmental Assessment (EA) fully documents the analyses of the potential environmental impacts of constructing and operating an additional replacement pump station on the Snake River including an associated pipeline facility. The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) served as a cooperating agency in the completion of this EA.

Location

The A&B Irrigation District (District) is located in south-central Idaho near the town of Rupert, Idaho. The District operates Reclamation’s Minidoka Project North Side Pumping Division, which consists of approximately 82,600 acres of irrigable private land within Jerome and Minidoka counties. Approximately 66,700 acres (Unit B) are irrigated by pumping groundwater from deep wells from the Eastern Snake Plain Aquifer (ESPA), and approximately 15,900 acres (Unit A) are irrigated by pumping surface water from the Snake River.
Background

Reclamation developed the North Side Pumping Division of the Minidoka Project in the 1950s and early 1960s. Reclamation entered into a repayment contract with the District and turned over operations to the District in 1966. The Minidoka Project facilities for the North Side Pumping Division include a pumping plant on the Snake River for Unit A of the District, known as Unit A Pumping Plant #1, and approximately 180 deep groundwater wells for Unit B of the District.

The District’s Unit B wells were initially drilled in the 1950s and most were deepened at various points over time. Groundwater levels in the District have steadily declined, resulting in reduced production capacity and reduced water supplies. Deepening existing Unit B wells and drilling new wells has not resulted in a reliable new source of groundwater. In the mid-1990s, the District was forced to abandon 6 wells generally located in Township 9S Range 22E Minidoka County. The lack of available groundwater forced the District to convert approximately 1,400 acres in this area of Unit B to a surface water supply, delivered through the existing canal infrastructure from the Unit A Pumping Plant #1.

The additional acreage served by the surface water system has resulted in side effects on some areas within Unit A, causing increased potential for affected lands to receive a restricted delivery rate, or what the District terms “go on allotment.” Generally, when surface supplies are limited, acres served by the system share proportionately in the available water. However, due to changes in cropping patterns and capacity limitations in the existing surface water delivery system, some parts of Unit A go on allotment sooner than others and the reduced delivery can last for longer periods throughout the irrigation season. It is these lands that were most affected by extending surface irrigation to the 1,400 acres of Unit B noted above.

Approximately 66,900 acres (Unit B) are irrigated by pumping groundwater from deep wells from the Eastern Snake Plain Aquifer, and approximately 15,900 acres (Unit A) are irrigated by pumping surface water from the Snake River.

Purpose and Need

Reclamation developed the North Side Pumping Division of the Minidoka Project in the 1950s and early 1960s. Reclamation entered into a repayment contract with A&B and turned over operations to the District in 1966. The Minidoka Project facilities for the North Side Pumping Division include a pumping plant on the Snake River for Unit A of the District, known as Unit A Pumping Plant #1, and approximately 180 deep groundwater wells for Unit B of the District.

The District’s Unit B wells were initially drilled in the 1950s and most were deepened at various points over time. Groundwater levels in the District have steadily declined, resulting in reduced production capacity and reduced water supplies. Deepening existing Unit B wells
and drilling new wells has not resulted in a reliable new source of groundwater. In the mid-1990s, the District was forced to abandon 6 wells generally located in Township 9S Range 22E Minidoka County. The lack of available groundwater forced the District to convert approximately 1,400 acres in this area to a surface water supply, delivered through the existing canal infrastructure from the Unit A Pumping Plant #1.

The additional acreage served by the surface water system has resulted in side effects on some areas within Unit A, causing increased potential for affected lands to receive a restricted delivery rate, or what the District terms “go on allotment.” Generally, when surface supplies are limited, acres served by the system share proportionately in the available water. However, due to changes in cropping patterns and capacity limitations in the existing surface water delivery system, including the siphon under Interstate 84, some parts of Unit A go on allotment sooner than others and the reduced delivery can last for longer periods throughout the irrigation season. It is these lands that were most affected by extending surface irrigation to the 1,400 acres of Unit B.

Currently, an additional 1,500 acres of Unit B lands are experiencing reduced or failing groundwater supplies and are in need of supplemental or replacement supplies from the District’s surface water system. These lands are generally located in Township 9S Range 22E Minidoka County. Due to the location and the existing capacity limitations of Pumping Plant #1 and the canal system, the District is unable to provide this replacement water supply through the existing water delivery facilities. Moreover, adding additional converted groundwater acreage to the existing surface water delivery system would exacerbate the reduced surface water delivery rate to existing Unit A lands. The District needs to develop the means to maintain water delivery to these specific Unit B lands located in Township 9S Range 22E Minidoka County for an irrigation supply.

To overcome these existing infrastructure limitations and water delivery problems, the District proposes to develop an additional replacement pump station on the Snake River and an associated pipeline facility. This pump station and pipeline would be used to (1) restore and/or improve reliability of surface water delivery to approximately 4,500 acres of existing Unit A lands located in Townships 9 and 10S, Range 22E, Minidoka County, and (2) deliver surface water supplies, when available, to the additional 1,500 acres of Unit B land that are currently experiencing reduced groundwater supply. Overall, the goal of the proposed project is to ensure provision of an adequate and reliable source of irrigation water to approximately 6,000 acres within the District. Also, the project will help ensure efficient water delivery for entire district by reducing capacity restrictions on acres served by the Pumping Plant #1, increasing groundwater availability for the remaining deep wells in Unit B, and providing replacement facilities for the specific 6,000 acres referenced above. The project will benefit operations District-wide as water delivery operations will improve across Unit A and groundwater levels and pumping efficiency will be improved for lands in Unit B. The proposed project would be partially funded under the Agricultural Water Enhancement Program administered by the
NRCS. Thirty-one landowners located in Townships 9 and 10S, Range 22E, Minidoka County have executed agreements with NRCS to secure cost-share funding for the project. Construction and operation of the facilities would involve NRCS, Reclamation, and the District. This proposed project aligns with the objectives of the ESPA Comprehensive Aquifer Management Plan (CAMP) adopted by the Idaho Water Resources Board (IWRB) in 2009 and is consistent with recommended implementation action. The project is expected to reduce groundwater withdrawals from the ESPA, thereby benefiting groundwater levels throughout the remaining part of the District. The lands will be classified as “soft conversions” and will use surface water supplies when available. When surface water is not available, the groundwater wells will still be available to provide water to the lands. Further, the project will increase efficiency and assist the District in water delivery to all landowners throughout Unit A.

The NRCS and Reclamation conducted an EA to determine potential for environmental impacts from development and operation, including acquisition of property interests as necessary, of the pumping plant and delivery pipeline proposed by the District. In addition to the project alternative preferred by the District, the EA also reviewed potentially feasible alternatives. The intent is to confirm an alternative that provides optimum technical and cost feasibility, construction and operation efficiency, and avoidance of significant and unmitigable environmental impacts.

**Alternatives Considered**

The alternatives considered in detail in this Final EA include the No Action alternative and three action alternatives (Alternatives 2, 3, and 4) for developing a second pump station and delivery pipeline to the east of the existing District facilities. All three of the action alternatives were configured to meet the same objectives described in the Purpose and Need discussion above. Each of the three action alternatives shares a common route from the Highway 84 crossing northward (Figure 1 and Figure 2). The three alternatives differ primarily in the location of the pump station along the river and the route of the main pipeline leading from Highway 84 to the three alternative pump station locations. The action alternatives also differ in the configuration of secondary pipelines serving farmlands between Highway 84 and the river.

In reviewing the range of possible alternatives, the potential for locating the new pump station adjacent to the existing District pump station was considered. This would require using a combination of the existing canals and new pipeline to reach the location where the additional supplies of surface water are needed. Alternatives using this concept were found early in the study to be inefficient and prohibitively expensive, and were not considered in detail.
Figure 1. A&B Irrigation District Alternative 2 pump station and pipeline siting.
Figure 2. A&B Irrigation District Alternatives 3 and 4 pump station and pipeline siting. (Note: Alternative 3 is now the preferred alternative. This change from Alternative 2 as the preferred alternative was made due to public and landowner input received during the Public Draft EA review.)
**Alternative 1 (No Action)**

The No Action alternative would continue to provide available water to the project lands through existing facilities. The District would continue to deliver surface water to all existing Unit A lands (to be supplied under the proposed project) and previously converted Unit B project lands (approximately 4,500 acres and 1,400 acres, respectively) through the existing Pumping Plant #1 and canal and lateral distribution system. In addition, the District would continue to deliver groundwater to approximately 65,300 Unit B acres.

The existing delivery system in Unit A does not have sufficient capacity to meet crop demands throughout the irrigation season. Additionally, the existing groundwater supply for the Unit B groundwater wells is declining, reducing pumping levels and available capacity to provide sufficient irrigation water for District lands. If declines continue, it is anticipated that approximately 1,500 acres served through the existing deep wells and additional adjoining acres, are in jeopardy of being forced out of production because of insufficient water supply.

Also, under the No Action alternative, Reclamation and the District would not obtain ownership of land for a pump station or easements/rights-of-way (ROW) across private land for the pipeline associated with the proposed project. No replacement pump station or distribution pipeline would be constructed.

**Alternatives 2, 3, and 4**

*Elements Common to All Action Alternatives*

**Pumping Plant Design**

Each alternative pumping plant would require 2 to 3 months to build. Each would have an approximately 1.6 acre site, with similar configuration of pumps and associated electrical and mechanical equipment located “off channel,” 75 feet to 125 feet from the water’s edge. The plant would be screened from surrounding view by earthen berms and vegetation. Noise abatement measures, although not required, would be used to moderate noise at existing residential locations to levels within normal rural/suburban standards. Each alternative pumping plant site would also involve a new access road and electrical transmission line connections, routed in close association with affected landowner(s). The cost of plant construction would be approximately the same for each alternative.

Reclamation would obtain and hold legal title to the site and facilities of the pumping plant but would transfer control and responsibility for operation and maintenance of all the facilities to the District.
Main Pipeline and Laterals from Interstate 84 to the Northern Terminus

The route of the main pipeline and laterals from south of Interstate 84 to the end of the pipeline is common to all three action alternatives. The main pipeline would be aligned within the 2,000-foot-wide siting corridor shown on Figure 1 and Figure 2. For the lateral lines, the siting corridors are 400 feet in width. Siting corridors of these widths are identified to accommodate adjustments in alignment based on subsurface conditions found during more detailed studies. The corridor of both the main and lateral pipelines follow the most direct routes to reach the current A&B delivery points and the deep wells that would be subject to soft conversion. All pipe would be buried a minimum of 30 inches below ground surface. A 100-foot-wide strip of ground would be impacted along the pipeline route during construction, with all lands returned to their original condition upon completion of the pipeline. Construction of the pipeline is expected to take approximately 2 weeks in any given location. There would also be a limited number of temporary 1 to 2-acre staging areas along the route. These temporary construction work spaces would be sited to avoid existing roadways or environmentally-sensitive areas and would be restored upon completion of construction.

The pipeline corridor is a combination of crop, range, and field perimeter ground. Most of this land is privately owned, with a small portion in Reclamation ownership. The District has executed necessary written agreements with all private landowners along the corridor. This reach of the pipeline would cross Highways 84 and 25, several county roads, and the Eastern Idaho Railroad. Necessary permits to cross these facilities would be obtained once the final pipeline alignment is established.

Alternative 2

The total pipeline length of this alternative, including that common to all alternatives (north of the interstate), is approximately 95,165 feet (Figure 1). This is the shortest of the three “build” alternatives being considered. Related to the pipeline unique to this alternative (from Highway 84 to the pump station at the river) approximately half follows property boundaries, with the other half crossing crop/pasture and rangeland.

The pumping plant for Alternative 2 would consist of eight motors totaling 3,500 horsepower (hp) driving turbine pumps for a flow of 118 cubic feet per second (cfs). From the pumping plant, the flow would be directed into the buried pipeline. At the Alternative 2 pumping plant site, the water level in the Milner Pool is roughly 12 feet deep with a gravel and/or bedrock bottom. The main flow of the Snake River passes near the bank at this location, making it an advantageous location relative to the other alternatives in terms of sedimentation and depth of accessible surface water.

Approximately 3.8 miles of new power transmission line would be required to serve the 3 megawatt load expected at the pumping plant. All of this line and associated equipment would be located within the pipeline ROW.
The total cost of this alternative, including the pump station, pipeline, and electrical equipment is estimated at $10,836,000.

**Alternative 3 (Preferred Alternative)**

The total pipeline length for this alternative would be 94,000 feet (Figure 2). The pipeline unique to this alternative would cross predominantly crop/pasture, with relatively short lengths crossing range and following property boundaries. Necessary corridors would be obtained as easements or fee title ROW, as appropriate.

The pumping plant would be similar to that under Alternative 2, consisting of eight motors generating 3,500 hp and driving turbine pumps to produce a flow of 118 cfs. From the pumping plant the flow would be directed into the buried pipeline. At the Alternative 3 pumping plant site, the water level in Milner Pool is roughly 4 feet deep with a coarse-to-fine-grained sediment bottom. The main flow of the Snake River is on the south side of the Milner Pool. As compared to Alternative 2, this alternative may require a wider entrance to the inlet channel.

New power transmission line for this alternative would require approximately 2.2 miles of new ROW outside the pipeline ROW.

The total cost of this alternative, including the pump station, pipeline, and electrical equipment is estimated at $10,770,000. Even though the overall length of pipeline for Alternative 3 is greater than that for Alternative 2, the cost is slightly lower due to considerably lower cost for electrical systems.

**Alternative 4**

Total pipeline length for Alternative 4, including that north of the interstate and common to each alternative, is approximately 99,300 feet (Figure 2). South of Interstate 84, this alternative shares much of its pipeline route with Alternative 3, with the same type and proportion of land uses crossed. It diverges from Alternative 3 near the river and it trends further southwest, to a pump station location further west of all alternatives. The additional pipeline distance of this alternative when compared with Alternative 3 crosses predominantly cropland. Necessary corridors would be obtained as easements or fee title ROW, as appropriate.

The pumping plant for this alternative would consist of eight pumps generating 3,700 hp for turbine pumps producing a flow of 118 cfs. As compared to Alternatives 2 and 3, the additional horsepower in this alternative is due to the additional pipeline length. This also causes increased pressure, requiring higher pressure-class pipe near the pumping plant. The intake water depth is roughly 3 feet, with a coarse-to-fine-grained sediment bottom. The main
flow of the river is on the opposite, southern side. As compared to Alternatives 2 and 3, this alternative may require a wider entrance to the inlet channel.

Approximately 1.5 miles of new transmission line corridor would be required to supply the 3 megawatt load of this alternative.

The total cost of this alternative is estimated at $13,100,000, including the pump station, pipeline, and electrical equipment.

**Environmental Impacts**

This EA focused on those resource areas identified as potentially impacted by the alternatives considered, including the No Action alternative. Identified resources were land use and ownership, water rights, water quantity, water quality, vegetation, fish, wildlife, threatened and endangered (T&E) species, cultural resources, sacred sites, Indian Trust Assets (ITAs), transportation, public services and utilities, energy, recreation, visual resources, socioeconomics, environmental justice, air quality and climate change.

**Land Use and Ownership**

The preferred alternative would require short-term construction activities associated with a pumping plant, pipelines, a transmission line, and access road within the pipeline ROW.

Short-term construction related impacts would occur in and around the pumping plant site for 2 to 3 months. Construction related short-term impacts would occur along the pipeline route for approximately 2 weeks at any given location. All land disturbed during construction would be restored to preconstruction condition.

In the long term, the pump station would change land use on approximately 1.6 acres of land near the river shore. The change would be from open land or rural agriculture to an agricultural industry use. This small change would not be unlike similar uses downstream and would affect an insignificant portion of the broader landscape (see also Noise and Visual Quality). Except for the pump station and associated transmission line and access road, project facilities would be subsurface, resulting in no additional long-term change in existing land use.

As reflected in agreements previously reached with involved landowners, equitable compensation will be provided by the District for any adverse short-term or long-term effects on land use or land ownership (e.g., lost production during project construction).
Mitigation

The following mitigation measures would be implemented to minimize the impacts to land use from construction and O&M under Alternative 2:

- Work with affected landowner(s) to site permanent access road and transmission line along property and/or field boundaries or as requested by the owner(s).
- Strive to site the 100-foot-wide construction disturbance area so that it uses the areas between fields and parcels, to minimize the amount of land that would be taken out of agricultural production for construction activities.
- Minimize land disturbance within the 100-foot-wide construction disturbance area.
- After project construction is complete, restore the construction disturbance area to its pre-construction condition.
- Compensate landowners at fair market value for production lost during construction activities.

Water Rights

The District’s existing surface water rights would need to be amended to include the new diversion point represented by the proposed pump station. No change is proposed in the water volume or water uses specified in existing water rights.

Water Quantity

The preferred alternative would have minimal (if any) effects on water quantity. As noted above, the District would adjust use of a portion of its existing water right by diverting the water from a new pump station upstream from the existing diversion point. The volume of water diverted from the existing pumping plant would be reduced by the volume diverted at the new pumping plant. Further, the District would continue to take advantage of the Water District 1 rental pool when necessary to meet crop requirements (especially the additional 1,500 acres of Unit B that would be provided with surface water under this alternative).

Water Quality

The preferred alternative would have minimal effect on water quality. The preferred alternative would comply with all Clean Water Act (CWA) requirements, including development of an Erosion and Sediment Control Plan. Construction activities are likely to result in some temporary water quality impacts such as sediment plumes, but these potential impacts will be mitigated by erosion and sediment BMPs and other mitigation measures. All appropriate permits from the State of Idaho, Environmental Protection Agency (EPA), and the U.S. Army Corps of Engineers (Corps) would be obtained, and all work would comply with the mitigation required by those entities.
The preferred alternative would not result in any cumulative impacts to water quality.

**Noise**

Construction activities would bring a short-term increase in local noise levels at the pumping plant site and along the pipeline route. Measures including limits on the time of construction, proper equipment maintenance, and other standard BMPs would be used to manage these noise levels.

In the long-term, the pumping plant would introduce a new noise source to the area, affecting primarily residential uses along the opposite river shore. Measures are included in the project design to ensure that these long-term noise effects are within accepted standards.

**Vegetation**

The preferred alternative would result in temporary short-term impacts resulting from vegetation removal within the construction corridor. With the exception of the pumping plant building and parking area footprints and along the access road, vegetation would be restored in all disturbed areas.

Long-term impacts would be limited to removal of vegetation (potentially including several large trees) within the pumping plant facility footprint and access road corridor. Mitigation for these impacts is included as part of the project design. Vegetation would be restored, including tree planting around the pumping plant facility. This would include vegetation screening between the facilities and the river edge.

**Fish**

Minor, temporary impacts to fish may occur during installation of the inlet channel and associated shoreline stabilization near the pumping plant site.

No long-term impacts to fish resources would occur due to elements such as fish screens in the project design.

**Wildlife**

The preferred alternative would result in removal of vegetation. Construction activities would result in minor short-term impacts such as lost breeding and foraging habitat, possibly through one growing season after completion of construction as vegetation recovers. These impacts could also include construction activity extending into spring and early summer seasons, disrupting migratory bird nesting (particularly in wetland and woody habitats).

Up to 1.6 acres of shoreline habitat would be permanently lost due to construction of the pump station.
## Threatened and Endangered Species

Research and survey results indicate that no listed species are known to occur within or adjacent to the construction area. Therefore, no adverse impacts would occur to listed species.

## Cultural Resources

The proposed pipeline would cross the Northside branch of the Oregon Trail, the past route of the Oregon Short Line Railroad, and the site of Camp Rupert, a World War II internment camp.

No adverse impact is expected to these resources because of their current degraded condition, inherent avoidance through project design, or the absence of artifacts found during field surveys. Nonetheless, potential for subsurface artifacts would be addressed by having a qualified archaeologist present during construction excavation.

## Sacred Sites

No sacred sites have been identified within the project Area of Potential Effect (APE); therefore, no adverse effects on these resources would occur as a result of the preferred alternative.

## Indian Trust Assets

No Indian Trust Assets (ITAs) have been identified within the study area; therefore, no adverse effects on these resources would occur as a result of the proposed project.

## Transportation

The construction of a pumping plant, pipeline, transmission line, and new access road would likely result in short-term impacts including increased traffic on local roads and temporary road closures. However, the redundancy of the local road network would avoid any substantial disruption of ingress or egress from the project area.

Long-term O&M would require periodic visits (personnel and equipment) to the pump station. Any associated traffic disruptions are expected to be infrequent and minor.

## Public Services and Utilities

No short or long-term impact to public services and utilities is expected with as a result of the preferred alternative.
**Energy**

Beyond fuel consumed by construction vehicles, there would be no meaningful short-term impact on energy resources.

Over the long-term there would be an overall savings in power usage which would net a small positive impact to energy.

**Recreation**

No short-or long-term adverse impact to recreation would result from the preferred alternative.

**Visual Resources**

Construction activities would result in a short-term visual impact due to the presence of construction equipment, workers, etc. This would, however, be similar to vehicles and equipment used in the agricultural industry characteristic of the study area.

Long-term changes to the landscape would be primarily from the new pumping plant and utility features, which are similar to other agricultural industry facilities in the area.

**Socioeconomics**

There is potential for short-term beneficial effects as construction activities would bring a temporary economic boost to the local economy.

In the long term, provision of surface water to lands with currently failing groundwater supplies would result in beneficial effects on local socioeconomic parameters.

**Environmental Justice**

No short-term or long-term environmental justice impacts would result, as there is no Housing and Urban Development (HUD)-defined low-income population in the area and no impacts would occur from construction or operation of the project facilities.

**Air Quality and Climate Change**

Short-term impacts resulting from construction activities associated with a pumping plant, pipelines, transmission lines and access road would result in a temporary effect on air quality. BMPs would be implemented to reduce any impact.

Operation under the preferred alternative would have no measureable impact on air quality.

The study area could experience impacts with the changing climate (i.e., altered precipitation, shifting flow regimes, soil erosion, etc.).
Environmental Commitments

Reclamation will fulfill compliance requirements and environmental commitments given in the EA. Examples of these additional requirements include:

- The appropriate Best Management Practices (BMPs) and mitigation presented in the EA.
- Any necessary permits under Section 404 of the Clean Water Act.
- All appropriate permits from the State of Idaho, EPA, and the Corps would be obtained, and all work would comply with the mitigation required by those entities.

Consultation and Coordination

Endangered Species Act Section 7(a)(2)

The ESA requires all Federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or destroy or adversely modify their critical habitat. Reclamation consulted informally on the proposed project with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) and both agencies agreed with Reclamation’s determination that the project would have no effect on listed species. Consequently, no formal consultation is required for this action.

National Historic Preservation Act of 1966

In compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended in 1992), Reclamation consulted with the Idaho State Historic Preservation Office (SHPO) to identify cultural and historic properties in the area of potential effect. A letter was sent to the SHPO on April 23, 2014 initiating consultation (Final EA, Appendix B). In a letter dated May 23, 2014, SHPO concurred that the project would have no adverse effect on historic properties (Final EA, Appendix B). In response to comments received on the Draft EA, Reclamation changed its preferred alternative to Alternative 3 and refinements were made to the pipeline alignments. Reclamation consulted with the SHPO on these changes to the project and sent a letter to them on December 16, 2014 (Final EA, Appendix B). In a letter dated December 23, 2014, SHPO concurred that the changes in the project would have no adverse effect on historic properties (Final EA, Appendix B)
Tribal Coordination and Consultation

A scoping letter was sent to the Shoshone-Bannock Tribes to seek their involvement and address any questions or concerns related to the preferred alternative (Final EA, Appendix C). Additional letters were sent to the Tribe detailing the cultural resources evaluation and asking for their input. No indication was received from the Tribe that any sacred site existed or that they had any comments or concerns on the preferred alternative.

Public Involvement

As part of the NEPA process, Reclamation submitted a press release giving the dates of the scoping period. A scoping letter was sent to Federal and State agencies, Tribal Government, and local city and county officials soliciting comments, concerns, and issues related to the preferred alternative. A copy of the scoping letter is included in Appendix A of the Final EA. There were multiple responses to the scoping letter or the press release received during the July 12, 2013 to August 12, 2013 comment period. The letters are included in Appendix A of the Final EA. Issues mentioned in the letters are addressed in the Final EA, supported the preferred alternative, or were outside the scope of the project.

Public Comment Summary

Reclamation issued a Draft EA on May 2, 2014 for a 30-day public review period. During the Draft EA review period, a public meeting was held to receive input on the document and answer the public’s questions about the preferred alternative, the alternatives, and environmental analysis.

A total of approximately 30 notes, letters, and emails were received during the public review period of the EA. The concerns expressed in this correspondence, as a whole, focused on the following four main categories:

- Cost comparisons of the three action alternatives.
- Concerns of nearby residents.
  - Noise and potential impacts to residents living across the river to the south of the project site.
  - Water supply and potential impacts to shoreline residents.
  - Wildlife viewing and fishing activities and potential impacts to residents across the river from the proposed pumping plant site.
  - Property values and resident concern that construction of the pumping plant site and operation of the proposed facility would have an adverse effect on their property values.
- Historical values and Indian Sacred Sites viewing.
- Alternative 3 or 4 would be preferable to reduce potential impacts for existing residents along the river.

- Concerns of A&B Irrigation District members included:
  - Water rights of Unit A landowners.
  - The 1955 “Definite Plan.”
  - District governance.

- Protected resources and follow-on permit requirements:
  - Idaho Department of Environmental Quality (IDEQ).
  - Idaho Department of Water Resources (IDWR).
  - Idaho Transportation Department (ITD).
  - USFWS.

Given these characteristics of the comments received, Reclamation’s responses are organized under the same 4 main topical headings and associated subheadings and located in Appendix F of the Final EA.

**Changes to the Final EA**

As a result of public review and comment on the Draft EA, Reclamation and NRCS decided that the preferred alternative should be changed from that identified in the draft document (i.e., Alternative 2) to Alternative 3. This change was made to reduce impacts on residents in the area surrounding Alternative 2. As a result of this change, further assessment was made of Alternative 3 and refinements were made in its pipeline alignment. Both the change in preferred alternative and the adjustments made in the pipeline alignment of the new preferred alternative resulted in revisions to the impact analysis of both Alternatives 3 and 4. These changes are reflected in the Final EA. Thus, the narrative for Alternatives 3 and 4 in the Final EA is modified from than that contained in the Draft EA.

**Finding**

Based on a thorough review of the comments received and analysis of the environmental impacts, mitigation measures, and implementation of all environmental commitments as presented in this Final EA and FONSI, Reclamation concludes that implementation of the preferred alternative will not have a significant effect on the quality of the human or natural environment and cultural resources. The effects of the preferred alternative will be short term, minor, and localized. Therefore, Reclamation concludes that preparation of an Environmental...
Impact Statement (EIS) is not required and that this FONSI satisfies the requirements of NEPA.

**Recommended:**

[Signature]
James Taylor  
Environmental Specialist

**Approved:**

[Signature]
Jerrold Gregg  
Snake River Area Manager  
Pacific Northwest Region

1/20/2015  
Date
# Acronyms and Abbreviations

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Chapter 1  PURPOSE AND NEED

The U.S. Department of the Interior Bureau of Reclamation (Reclamation) prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) for the proposed A&B Irrigation District (A&B or District) replacement pumping plant project. This EA analyzes the potential environmental impacts of constructing and operating an additional replacement pump station on the Snake River including an associated pipeline facility. The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) served as a cooperating agency in the completion of this EA.

1.1  Project Location and Background

The District is located in south-central Idaho near the town of Rupert (Figure 1-1). The District operates Reclamation’s Minidoka Project North Side Pumping Division, which consists of approximately 82,600 acres of irrigable private land within Jerome and Minidoka counties. Approximately 66,700 acres (Unit B) have been irrigated by pumping groundwater from deep wells in the Eastern Snake Plain Aquifer\(^1\) (ESPA), and approximately 15,900 acres (Unit A) are irrigated by pumping surface water from the Snake River.

Water for Unit A is pumped from the Snake River by a pumping plant located about 8 miles west of Burley. The plant capacity is 270 cubic feet per second (cfs) which delivers water to a 26-mile-long unlined canal system that has the same capacity. The District and Reclamation hold natural flow water rights along with storage water rights in American Falls and Palisades reservoirs. The pumping plant is also used to deliver water to about 1,400 acres in Unit B that were previously converted to a surface water supply in the mid-1990s when certain wells failed for lack of a groundwater supply.

Water for Unit B is pumped from the ESPA by approximately 180 wells ranging from 12 to 24 inches in diameter. The average discharge of these wells is about 6.4 cfs.

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\(^1\) The ESPA has been defined as the aquifer underlying an area of the Eastern Snake River Plain that is about 170 miles long and 60 miles wide as delineated in the report ‘Hydrology and Digital Simulation of the Regional Aquifer System, Eastern Snake River Plain, Idaho,’ U.S. Geological Survey Professional Paper 1408-F, 1992, excluding areas lying both south of the Snake River and west of the line separating Sections 34 and 35, Township 10 South, Range 20 East, Boise Meridian.”
1.1 Project Location and Background

Figure 1-1. Project location map.
1.2 Proposed Action

The proposed action is to develop an additional replacement pump station on the Snake River including an associated pipeline facility. This pump station and pipeline would be used to (1) restore and/or improve reliability of surface water delivery to approximately 4,500 acres of existing Unit A lands located in Townships 9 and 10S, Range 22E, Minidoka County, and (2) deliver surface water supplies, when available, to an additional 1,500 acres of Unit B lands.

The project will convey 118 cfs of water from the Snake River to approximately 4,500 acres of existing Unit A surface water users and an additional 1,500 acres of existing groundwater Unit B lands. The project will enhance delivery efficiency to the existing Unit A system by replacing ditches with pipelines, and supplementing water deliveries to Unit B lands so that six to eight wells can be shut down when surface water is available, and ensure water delivery to areas where wells have already transitioned to surface water. The pipeline corridor will be returned to pre-existing conditions after the pipeline is installed.

As a result of the delivery efficiency improvements provided by the proposed project, deliveries from the existing pump station and ditch system would be generally reduced by 118 cfs to 152 cfs. Thus, except for rare circumstances in the summer dry season, total deliveries from the District’s pumping stations would remain at 270 cfs. The only exception to this would be drought conditions in the summer, when an additional 30 cfs of the District’s water right would be delivered as needed.

1.3 Purpose and Need for Action

Reclamation developed the North Side Pumping Division of the Minidoka Project in the 1950s and early 1960s. Reclamation entered into a repayment contract with A&B and turned over operations to the District in 1966. The Minidoka Project facilities for the North Side Pumping Division include a pumping plant on the Snake River for Unit A of the District, known as Unit A Pumping Plant #1, and approximately 180 deep groundwater wells for Unit B of the District.

The District’s Unit B wells were initially drilled in the 1950s and most were deepened at various points over time. Groundwater levels in the District have steadily declined, resulting in reduced production capacity and reduced water supplies. Deepening existing Unit B wells and drilling new wells has not resulted in a reliable new source of groundwater. In the mid-1990s, the District was forced to abandon 6 wells generally located in Township 9S Range 22E Minidoka County. The lack of available groundwater forced the District to convert approximately 1,400 acres in this area to a surface water supply, delivered through the existing canal infrastructure from the Unit A Pumping Plant #1.
1.3 Purpose and Need for Action

The additional acreage served by the surface water system has resulted in side effects on some areas within Unit A, causing increased potential for affected lands to receive a restricted delivery rate, or what the District terms “go on allotment.” Generally, when surface supplies are limited, acres served by the system share proportionately in the available water. However, due to changes in cropping patterns and capacity limitations in the existing surface water delivery system, including the siphon under Interstate 84, some parts of Unit A go on allotment sooner than others and the reduced delivery can last for longer periods throughout the irrigation season. It is these lands that were most affected by extending surface irrigation to the 1,400 acres of Unit B.

Currently, an additional 1,500 acres of Unit B lands are experiencing reduced or failing groundwater supplies and are in need of supplemental or replacement supplies from the District’s surface water system. These lands are generally located in Township 9S Range 22E Minidoka County. Due to the location and the existing capacity limitations of Pumping Plant #1 and the canal system, the District is unable to provide this replacement water supply through the existing water delivery facilities. Moreover, adding additional converted groundwater acreage to the existing surface water delivery system would exacerbate the reduced surface water delivery rate to existing Unit A lands. The District needs to develop the means to maintain water delivery to these specific Unit B lands located in Township 9S Range 22E Minidoka County for an irrigation supply.

To overcome these existing infrastructure limitations and water delivery problems, the District proposes to develop an additional replacement pump station on the Snake River and an associated pipeline facility. This pump station and pipeline would be used to (1) restore and/or improve reliability of surface water delivery to approximately 4,500 acres of existing Unit A lands located in Townships 9 and 10S, Range 22E, Minidoka County, and (2) deliver surface water supplies, when available, to the additional 1,500 acres of Unit B land that are currently experiencing reduced groundwater supply. Overall, the goal of the proposed project is to ensure provision of an adequate and reliable source of irrigation water to approximately 6,000 acres within the District. Also, the project will help ensure efficient water delivery for entire district by reducing capacity restrictions on acres served by the Pumping Plant #1, increasing groundwater availability for the remaining deep wells in Unit B, and providing replacement facilities for the specific 6,000 acres referenced above. The project will benefit operations District-wide as water delivery operations will improve across Unit A and groundwater levels and pumping efficiency will be improved for lands in Unit B.

The proposed project would be partially funded under the Agricultural Water Enhancement Program administered by the NRCS. Thirty-one landowners located in Townships 9 and 10S, Range 22E, Minidoka County have executed agreements with NRCS to secure cost-share funding for the project. Construction and operation of the facilities would involve NRCS, Reclamation, and the District. This proposed project aligns with the objectives of the ESPA Comprehensive Aquifer Management Plan (CAMP) adopted by the Idaho Water Resources Board (IWRB) in 2009 and is consistent with recommended implementation.
action. The project is expected to reduce groundwater withdrawals from the ESPA, thereby benefitting groundwater levels throughout the remaining part of the District. The lands will be classified as “soft conversions” and will use surface water supplies when available. When surface water is not available, the groundwater wells will still be available to provide water to the lands. Further, the project will increase efficiency and assist the District in water delivery to all landowners throughout Unit A.

The NRCS and Reclamation are conducting an EA to determine potential for environmental impacts from development and operation, including acquisition of property interests as necessary, of the pumping plant and delivery pipeline proposed by the District. The intent is to confirm an alternative that provides optimum technical and cost feasibility, construction and operation efficiency, and avoidance of significant and unmitigable environmental impacts.

1.4 Authority

The Minidoka Project was authorized by the Secretary of the Interior on April 23, 1904, under the 1902 Reclamation Act. Investigation and construction funds for the Gravity Extension Unit (Gooding Division) were provided by the Interior Department Appropriation Act, 1927, the Act of January 12, 1927 (44 Stat. 934) and the Secretary’s finding of feasibility July 2, 1928, and was approved by the President on July 3, 1928 pursuant to section 4 of the Act of June 25, 1910 (36 Stat. 836) and subsection B of section 4 of the Act of December 5, 1924 (43 Stat. 702). The Upper Snake River Storage Project was authorized by a finding of feasibility by the Secretary of Interior on September 6, 1935, and approved by the President on September 20, 1935, pursuant to the foregoing acts. The North Side Pumping Division was authorized for construction by the Act of September 30, 1950 (64 Stat. 1083, Public Law 81-864). Transfer of facilities and rights-of-way (ROW) of the South Side Pumping Division to the Burley Irrigation District was authorized by the Congress on January 27, 1998 (112 Stat. 3219-3221; Public Law 105-351).

1.5 Scoping of Issues and Concerns

Scoping requirements under the NEPA include requesting input from the public and interested parties. Scoping allows the public to help identify issues or concerns related to the project. These issues were considered in the development of the EA.

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2 Soft conversions are full or partial replacement of groundwater with additional surface water to irrigate mixed-source lands when additional surface water is available. Wells would be maintained for further use if the additional surface water is limited.
A public scoping period was held for the EA from July 12, 2013, to August 12, 2013. A statement was released to the media and over 300 letters were sent notifying the public and interested parties of the intent to prepare an EA. The letter included the information on the project, scoping period duration, comment submittal instructions, and scoping meeting information (Appendix A). Concerns resulting from scoping included:

- Water rights/supply reliability for Unit A users.
- Economic – impacts including project cost versus benefit; potential devaluation of land; possible compensation for crop loss due to construction or repair.
- Land use – potential impacts of pumping plant to landowners, easement issues, impact of pipeline crossing, potential impacts to recreation, impacts from increased public access.
- Noise – resulting from pumping station to neighboring landowners.
- Cultural resources – pumping plant site has historical value.
- Wildlife – potential impact to bald eagles.
- Transportation – regarding review process for encroachment permit; pipeline must be underground across entire highway ownership.

### 1.6 Regulatory Compliance

Various laws, Executive Orders, and Secretarial Orders apply to the proposed action and are summarized below. The legal and regulatory environment within which the Federal activity would be conducted depends on which alternative is implemented.

#### 1.6.1 National Environmental Policy Act

NEPA requires that the action agency use a public disclosure process to determine whether or not there are any environmental impacts associated with proposed Federal actions. If there are no significant environmental impacts, a FONSI can be signed to complete the NEPA compliance.

#### 1.6.2 Endangered Species Act (1973)

The Endangered Species Act (ESA) requires all federal agencies ensure that their actions do not jeopardize the continued existence of listed species, destroy, or adversely modify their critical habitat. As part of the ESA’s Section 7 process, an agency must request information from the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) on whether any threatened and endangered species occur within or near
the action area. The agency then must evaluate impacts to those species. If the action may affect any listed species, the agency must consult with the USFWS or NOAA Fisheries.

### 1.6.3 Clean Water Act (33 U.S.C. 1251 et seq.)

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredge and fills material into waters of the United States, including wetlands. The U.S. Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA) work with the Department of Environmental Quality (DEQ) to obtain certification for National Pollutant Discharge Elimination System (NPDES) permits and Section 404 Dredge and fill permits. Permit review and issuance follows a sequence process that encourages avoidance of impacts, followed by minimizing impacts and, finally, requiring mitigation for unavoidable impacts to the aquatic environment. This sequence is described in the guidelines at Section 404(b)(1) of the CWA.

The Idaho DEQ (IDEQ) administers Section 401 of the CWA in Idaho. IDEQ determines if a proposed project will meet water quality standards for any activities requiring certain federal permits including Section 404 permits. If the project will not create unacceptable water quality problems, IDEQ issues its 401 Certification.

Reclamation will obtain appropriate CWA and State permits prior to construction activities.

### 1.6.4 National Historic Preservation Act of 1966

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires that federal agencies consider the effects that their projects have on properties eligible for or on the National Register of Historic Places. The 36 CFR 800 regulations provide procedures that Federal agencies must follow to comply with the NHPA. For any undertaking, federal agencies must determine if there are properties of National Register quality in the project area, the effects of the project on those properties, and the appropriate mitigation for adverse effects. In making these determinations, federal agencies are required to consult with the State Historic Preservation Office (SHPO), Native American tribes with a traditional or culturally-significant religious interest in the study area, the interested public, and in certain cases, the Advisory Council on Historic Preservation (ACHP).

### 1.6.5 Executive Order 13007: Indian Sacred Sites

Executive Order (EO) 13007, dated May 24, 1996, instructs federal agencies to promote accommodation of access to and protect the physical integrity of American Indian sacred sites. A “sacred site” is a specific, discrete, and narrowly delineated location on Federal land. An Indian tribe or an Indian individual determined to be an appropriately authoritative
representative of an Indian religion must identify a site as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion. However, this is provided that the tribe or authoritative representative has informed the agency of the existence of such a site.

1.6.6 Secretarial Order 3175: Department Responsibilities for Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States (with the Secretary of the Interior acting as trustee) for Indian tribes or Indian individuals. Examples of ITAs are lands, minerals, hunting and fishing rights, and water rights. In many cases, ITAs are on-reservation; however they may also be found off-reservation.

The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian tribes or Indian individuals by treaties, statutes, and executive orders. These rights are sometimes further interpreted through court decisions and regulations. This trust responsibility requires that officials from federal agencies, including Reclamation, take all actions reasonably necessary to protect ITAs when administering programs under their control.

1.6.7 Executive Order 12898: Environmental Justice

EO 12898, dated February 11, 1994, instructs federal agencies, to the greatest extent practicable and permitted by law, make achieving environmental justice part of its mission by addressing, as appropriate, disproportionately high and adverse human health or environmental effects on minority populations and low income populations. Environmental justice means the fair treatment of people of all races, income, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental impacts resulting from the execution of environmental programs.

1.6.8 Executive Order 13514: Federal Leadership in Environmental, Energy, and Economic Performances

EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance, seeks to establish an integrated strategy towards sustainability in the Federal Government. Section 8(i) of the EO requires that as part of the formal Strategic Sustainability Performance Planning process, each federal agency evaluate agency climate change risks and vulnerabilities to manage both the short- and long-term effects of climate change on the
agency’s mission and operations. Section 5(b) of the EO specifies that the Chair of the Council on Environmental Quality (CEQ) shall issue instructions to implement the order (CEQ’s Federal Agency Climate Change Adaptation Planning: Implementing Instructions, issued March 4, 2011). The purpose of this document is to provide implementing instructions to be used by federal agencies in climate change adaptation planning.
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Chapter 2 ALTERNATIVES

This chapter describes the alternatives analyzed in this EA and provides a brief summary of impact analysis findings. The No Action alternative and three action alternatives are described in detail in Section 2.2. Other alternatives that were considered but eliminated from detailed analysis are also documented in Section 2.4. Section 2.5 identifies other actions in the area that are considered in the review of potential for cumulative effects. Finally, Section 2.6 provides a summary comparison of the environmental impacts of the alternatives.

2.1 Alternative Development

NEPA requires agencies to evaluate both a No Action alternative and a range of reasonable alternatives to a proposed federal action. Action alternatives should meet the purpose and need of the proposal while minimizing or avoiding environmental impacts. The NEPA alternative development process allows Reclamation to work with interested agencies and the public to formulate alternative management actions that respond to identified issues. This process resulted in the development of the action alternatives described below.

2.2 Description of Alternatives

The goals for the action alternatives, including the preferred alternative, for the A&B Pumping Plant #2 project are to eliminate the delivery constraints to the system and manage the demands the District experiences annually to Unit A, as well as continue to provide water to lands in Unit B that are experiencing failing groundwater supplies. The local context of the overall District in relation to other irrigation districts is illustrated on Figure 2-1. Within the District, Figure 2-2 illustrates the location of Unit A and Unit B lands and the location of the proposed project.

The proposed project would convey 118 cfs of water from the Snake River to approximately 4,500 acres of existing Unit A surface water users, a portion of the approximately 1,400 acres of Unit B lands provided with supplemental surface water from the existing system in the 1990s, and an additional 1,500 acres of existing groundwater Unit B lands. Changes in deliveries to Unit B lands are illustrated on Figure 2-2. Overall, the project would enhance delivery efficiency to the existing Unit A system by replacing ditches with pipelines, and supplementing water deliveries to Unit B lands so that six to eight wells can be shut down.
Figure 2-1. A&B Irrigation District local setting – surrounding irrigation districts and land use.
2.2 Description of Alternatives

Figure 2.2: A&B Irrigation District – locations of Unit A, Unit B, and transitional, soft conversion lands.
The following alternatives are being considered for implementation of the A&B Pumping Plant and Pipeline #2 project. This section describes the No Action alternative and the three action alternatives in detail and provides a summary comparison.

2.2.1 Alternative 1 (No Action)

The No Action alternative would continue to provide available water to the project lands through the existing facilities. The District would continue to deliver surface water to all existing Unit A lands and previously converted Unit B project lands (approximately 1,400 acres) through the existing Pumping Plant #1 and canal and lateral distribution system. In addition, the District would continue to deliver groundwater to approximately 65,300 Unit B acres.

The existing delivery system in Unit A does not have sufficient capacity to meet crop demands throughout the irrigation season. Further, the existing groundwater supply for the Unit B groundwater wells is declining, reducing pumping levels and available capacity. If declines continue it is anticipated that approximately 1,500 acres located in Township 9 S Range 22 E and additional adjoining acres served from the existing deep wells referred to as 28A922, 15B922, 15C922, 11B922, 11C922, 3AB922, and 3C922, are in jeopardy of being forced out of production because of insufficient supply.

Also, under the No Action alternative, Reclamation and the District would not obtain ownership of land for a pump station or easements/ROW across private land for the pipeline associated with the proposed project. No pump station or distribution pipeline would be constructed.

2.2.2 Action Alternatives 2, 3, and 4

The general location of the action alternatives within the District is illustrated on Figure 2-2. The specific location and layout Alternative 2 is shown on Figure 2-3. Alternatives 3 and 4 are illustrated on Figure 2-4. Alternative 4 utilizes the same main pipeline and laterals as Alternative 3, but uses a pump station alternative further to the west requiring an additional 5,300 feet of 54-inch main pipeline (the red line on Figure 2-4).
2.2 Description of Alternatives

Figure 2-3. A&B Irrigation District Alternative 2 pump station and pipeline siting.
2.2 Description of Alternatives

Figure 2-4. A&B Irrigation District Alternatives 3 and 4 pump station and pipeline siting. (Note: Alternative 3 is now the preferred alternative. This change from Alternative 2 as the preferred alternative was made due to public and landowner input received during the Public Draft EA review.)
Some action alternative features are common and similar and described below. Features unique to each alternative and/or common features that differ substantially among the alternatives are included later within each specific alternative description.

**Pumping Plant Location and Design**

- All three alternative pumping plant sites were chosen based on their access to the Milner Pool of the Snake River in relation to pipeline routes generally accepted as feasible; and physical access to the site.

- Each pumping plant would have:
  - An “off channel” site, with similar pumps, motors and structures located approximately 75 to 125 feet away from the existing stream bank. The total site requirement, including structures, parking, and screening/landscape is expected to be approximately 1.6 acres.
  - Similar configuration, including an inlet channel that connects the river to the intake structure.
  - Screening capability and vertical turbine pumps with sufficient horsepower (hp) to convey 118 cfs with adequate pressure to all locations within the pipeline system. To compensate for delivery variations the minimum delivery pressure is approximately 10 psi at each turnout.
  - An earthen berm and vegetation surrounding it to provide protection from vandalism, avoid visual impact, and reduce noise.
  - A new access road.
  - New electrical transmission lines constructed to deliver electrical power.
  - Pump and motors control system, and one or more variable frequency drives.

- Reclamation would hold legal title to the site and facilities of the pumping plant but would transfer control and responsibility for operation and maintenance (O&M) of all of the newly constructed facilities to the District.

- The cost of constructing the pumping plant and appurtenances for each action alternative is approximately the same.

- The pumping plant would also be constructed using noise abatement techniques/materials as necessary to voluntarily achieve normal rural/suburban noise standards at the nearest existing residential uses. This action would be taken by the District even though the proposed project is specifically exempted from such noise control standards by existing Right to Farm legislation.

- Reclamation would obtain fee title ownership of the pumping plant site. This ownership would be acquired through willing seller/willing buyer negotiations to the
maximum achievable extend. If circumstances arise where this approach is not feasible, land ownership/rights would be acquired through applicable state or District authority, with ownership transferred to Reclamation.

- Construction of the complete pumping plant is expected to require 2 to 3 months.

**Transmission Corridor(s) and Access Roads**

New electrical transmission lines and access roads would be required for each action alternative to transmit energy to the proposed pumping plant and provide access. Transmission and access roads that would be required outside of the pipeline corridor would be anticipated to disturb a width of approximately 25 feet.

**Main Pipeline from Interstate 84 to its Northern Terminus**

The proposed route to construct the main pipeline from south of Interstate 84 to the end of the pipeline is common to all three action alternatives. It would be aligned within the 2,000-foot-wide siting corridor shown on Figures 2-3 and 2-4, from Interstate 84 to the north. A siting corridor of this width is identified for all main pipeline alternatives, as well as the common reach, to accommodate adjustments in the pipeline alignment (i.e., from the centerline shown on the maps and used as the prototype for quantifying potential impacts) based on subsurface conditions found during more detailed studies to be conducted upon a decision related to the project and the proposed route. The corridor of the pipeline is generally determined by the most direct route to reach the current A&B delivery points and the deep wells that have been identified for soft conversion. Pipe size(s) would be largest south of the interstate and would decrease as water is delivered to farms along the route to the north. All pipe would be buried a minimum of 30 inches below ground surface. It is anticipated that a 100-foot-wide strip of ground would be impacted along the pipeline route during construction. The planned main pipeline corridor route, from just south of the interstate to the northern terminus, would cross approximately 26,127 feet of crop ground, 5,645 feet of range ground, and 7,215 feet of lands classified as property boundaries. These reaches of the pipeline would cross Interstate 84, State Highway 25, and the Eastern Idaho Railroad tracks. The pipeline would also cross several county roads. Permits would be acquired from the respective owners for all road and railway crossings.

The pipeline corridor common to all three alternatives would be located predominantly on private lands and through a portion of Reclamation lands. The District has executed written agreements with all private landowners of properties within this corridor. The agreements state the landowners would execute a perpetual easement for the pipeline including the area needed for operation and maintenance. The agreements also state that each landowner would allow access for construction, surveying, trenching, installation of the pipeline, and any related infrastructure (as described above).
The actual location of the pipeline along with associated easements would be recorded with Minidoka County upon completion. Further, the ground would be restored to preconstruction condition after installation is complete. In addition to private lands within the corridor, there would be several permits/easements that would be obtained prior to construction for road, railroad, and highway crossings. The final pipeline route would utilize existing ROW as much as practical. The District would be responsible for securing any additional permits and easements with state and local entities once the pipeline route is defined in the final engineering design and prior to construction.

Construction of the pipeline is expected to take approximately 2 weeks in any given location. During that 2-week period, construction would be intermittent, as activities occur in sequence (e.g., excavation of trench, installation of pipe, refilling trench, etc.). Care would be taken to coordinate with landowners related to minimizing impact on crop production or other existing use. If construction is required during normal growing/use season, affected landowners would be compensated for lost production/use. Once the pipeline is installed, land would be restored to its previous condition.

**Lateral Pipelines**

Some existing A&B delivery points would get water conveyed to them via “lateral pipelines” that branch off of the main pipeline. The proposed centerline of these lateral pipelines is shown on Figure 2-3 and Figure 2-4. As with the main pipelines described above, a siting corridor is also shown for all laterals to accommodate route adjustments based on field conditions, with the centerline of the corridor used as the prototype for impact quantification. In the case of lateral lines, the siting corridor is 400 feet wide. Over half of the delivery points would receive water via a lateral pipeline. Lateral pipelines are included in each alternative. They would be installed throughout the entire project area as depicted by the solid blue lines on Figure 2-3 and Figure 2-4. They would range in diameter from 4 to 24 inches. The lateral pipelines north of the interstate, as the main pipeline is, would be the same for each alternative. The planned lateral pipelines corridor route, from just south of the interstate to the northern terminus, would cross approximately 25,715 feet of crop ground, 163 feet of range ground, and 16,294 feet of lands classified as property boundaries. Those south of the interstate are the same for Alternatives 3 and 4, however, differ for Alternative 2.

The lateral corridors are aligned to be the most direct routes to the delivery points with the least amount of agricultural land disturbance. All lateral pipelines would be installed under the same conditions and requirements as the main pipeline.

- All lateral pipeline would be buried a minimum of 30 inches below ground surface.
- Where pipelines cross county roads, the appropriate crossing permits would be obtained.
2.2 Description of Alternatives

- Pipelines would predominantly cross private land and would be placed in existing district right of ways wherever possible.
- Crossing agreements with the landowners have been obtained.

**Staging Areas**

Under all action alternatives, all staging of equipment and materials required for construction would occur within an approximately 100-foot-wide construction zone along the pipeline route, at the A&B West Division O&M yard, and/or at a limited number of temporary 1 to 2-acre staging areas along the route. Therefore, the construction of staging areas would result in no additional disturbed lands. These temporary construction work spaces would be sited to avoid existing roadways or environmentally sensitive areas.

2.2.3 Alternative 2

The pumping plant and pipeline routes for Alternative 2 are shown on Figure 2-3. Total amount of pipe to be installed, including that north of the interstate and common to each alternative, is approximately 95,165 feet. The total cost is estimated at $10,836,000. This includes estimated costs for the complete pumping plant, electrical transmission lines, access roads, legal costs, and all pipeline and appurtenances.

Near the Alternative 2 pumping plant site the water level in the Milner Pool is roughly 12 feet deep with a gravel and/or bedrock bottom. The main flow of the Snake River passes near the bank at this location and is, therefore, an advantageous location relative to the other alternatives regarding sedimentation and depth of accessible surface water.

The pumping plant for this alternative would consist of six 500 hp and two 250 hp motors for a total of 3,500 hp. The motors would drive short-coupled turbine pumps that would produce a flow of 118 cfs at a Total Dynamic Head (TDH) of 217 feet. From the pumping plant the flow would be directed into buried, pressurized PVC pipe.

The main pipeline route unique to Alternative 2 would cross crop/pasture for approximately 6,250 feet and follow property boundaries for approximately 3,475 feet. Lateral pipelines under Alternative 2 would cross crop/pasture for approximately 2,678 feet and property boundaries for approximately 1,603 feet. No rangeland would be crossed by the main or lateral pipelines under Alternative 2. There are five landowners along this unique portion of the main pipeline route that will have ground impacted during installation. Necessary corridors would be obtained as easements or fee title ROW, as appropriate. The main pipeline route for this alternative is the shortest (all differences being from the river to the common point south of the interstate).
2.2 Description of Alternatives

Under Alternative 2, the new transmission corridor improvements required to supply energy to the pumping plant would occur primarily within the proposed pipeline ROW. Approximately 210 feet of transmission line and newly constructed access road (25 feet wide) would occur outside of the proposed pipeline ROW. Idaho Power study results show adding a 3 megawatt load at this site would require upgrade to 3.0 miles of existing conductor line, installation of approximately 0.8 miles of distribution line, and installation of various line devices to maintain feeder voltage and reliability for a total cost of $1,206,600.

2.2.4 Alternative 3 (Preferred Alternative)

The pumping plant and pipeline routes for Alternative 3 are shown on Figure 2-4. Total amount of pipe to be installed, including that north of the interstate and common to each alternative, is approximately 94,000 feet. The total cost is estimated at $10,770,000. This includes estimated costs for the complete pumping plant, electrical transmission lines, access roads, legal costs, and all pipeline and appurtenances.

Near the Alternative 3 pumping plant site, the water level in Milner Pool is roughly 4 feet deep with a coarse-to-fine-grained sediment bottom. The main flow of the Snake River is on the south side of Milner Pool. As compared to Alternative 2 this alternative may require a wider entrance to the inlet channel as described above (common to each action alternative).

The pumping plant for this alternative would consist of six 500 hp and two 250 hp motors for a total of 3,500 hp. The motors would drive short-coupled turbine pumps that would produce a flow of 118 cfs at a TDH of 217 feet. From the pumping plant the flow would be directed into buried, pressurized PVC pipe.

The main pipeline route unique to Alternative 3 would cross crop/pasture for approximately 8,802 feet, range ground for approximately 1,099 feet, and follow property boundaries for approximately 1,445 feet. Lateral pipelines under Alternative 3 would cross crop/pasture for approximately 2,100 feet and property boundaries for approximately 1,503 feet. No rangelands would be impacted by lateral pipelines under Alternative 3. There are seven landowners along this unique portion of the main pipeline route that will have ground impacted during installation. Necessary corridors would be obtained as easements or fee title rights-of-way, as appropriate.

Under Alternative 3, an additional access road (a portion of which would include a new transmission line) corridor would impact approximately 2,292 feet of ROW outside the pipeline ROW through crop/pasture, rangeland, and property boundaries. An additional transmission corridor outside the pipeline ROW of approximately 1,057 feet would also be required under this alternative. Idaho Power study results show adding a 3 megawatt load at this site would require upgrade to 0.3 miles of existing conductor line, installation of
2.2 Description of Alternatives

approximately 1.5 miles of distribution line, and installation of various line devices to maintain feeder voltage and reliability for a total cost of $724,400.

2.2.5 Alternative 4

The pumping plant and pipeline routes for Alternative 4 are shown on Figure 2-4. Total amount of pipe to be installed, including that north of the interstate and common to each alternative, is approximately 99,300 feet. The total cost is estimated at $13,100,000. This includes estimated costs for the complete pumping plant, electrical transmission lines, access roads, legal costs, and all pipeline and appurtenances.

Near the Alternative 4 pumping plant site the water level in Milner Pool is roughly 3 feet deep with a coarse-to-fine-grained sediment bottom. The main flow of the Snake River is on the south side of Milner Pool. As compared to Alternative 2, this alternative may require a wider entrance to the inlet channel than that described above (common to each action alternative).

The pumping plant for this alternative would consist of one 200 hp and seven 500 hp motors for a total of 3,700 hp. The motors would drive short-coupled turbine pumps that would produce a flow of 118 cfs at a TDH of 232 feet. As compared to Alternatives 2 and 3, the additional TDH and horsepower requirement is due to increased friction resulting from the additional pipeline length as compared to both alternatives. The increase in TDH and its resultant increase in pressure also requires higher pressure class pipe near the pumping plant, which increases cost. From the pumping plant the flow would be directed into buried, pressurized PVC pipe.

The Alternative 4 main pipeline route south of Interstate 84 would share a considerable distance with Alternative 3, but would veer southwest to access a pump station site further west than that of Alternative 3. The main pipeline route of this alternative south of Interstate 84 would cross crop/pasture for approximately 13,560 feet, range ground for approximately 392 feet, and follow property boundaries for approximately 2,408 feet. Lateral pipelines under Alternative 4 would be the same as under Alternative 3. There are six landowners along this unique portion of the main pipeline route that will have ground impacted during installation. Necessary corridors would be obtained as easements or fee title ROW, as appropriate. The overall pipeline route for this alternative is approximately 5,958 feet longer than that for Alternative 2 and approximately 5,015 feet longer than that for Alternative 3.

Under Alternative 4, the new access road/transmission corridor required to supply access/energy to the pipeline/pumping plant would require approximately an additional 6,596 feet of ROW outside the pipeline ROW through crop/pasture, rangeland, and property boundaries. Idaho Power study results show adding a 3 megawatt load at this site would require upgrade to 0.3 miles of existing conductor line, installation of approximately 0.8 miles
of distribution line, and installation of various line devices to maintain feeder voltage and reliability for a total cost of $417,600.

### 2.3 Summary of Action Alternatives

Table 2-1 presents a summary of physical impacts that each alternative will have on the corresponding types of property that the pipeline will affect during construction. Once construction is completed the vegetated areas would be reseeded and subsequently return to their current uses.

Table 2-1. Summary of action alternatives.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Landowners south of the interstate(^1)</th>
<th>Distance through irrigated cropland or pasture (feet)(^1)</th>
<th>Distance through range (feet)(^1)</th>
<th>Property boundary, road, and easement (feet)(^1)</th>
<th>Total length of pipelines (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5</td>
<td>8,928</td>
<td>0</td>
<td>5,078</td>
<td>95,165</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>10,902</td>
<td>1,099</td>
<td>2,948</td>
<td>96,108</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>15,660</td>
<td>392</td>
<td>3,911</td>
<td>101,123</td>
</tr>
</tbody>
</table>

\(^1\) Only data for south of the interstate are shown because the main and lateral pipeline routes north of the interstate are the same for each alternative.

The total cost of the project alternatives is not the only element that was considered in selecting the preferred alternative as described below.

- The location suitability was determined by the area needed to construct the inlet, water screening, manifold layout and electrical infrastructure. Each of the sites has adequate area for construction.
- The electrical infrastructure needed was determined by Idaho Power. The materials and costs associated with bringing power into the pumping plant station was determined by Idaho Power and shown in the Engineering Assessment for Bonneville Power for A&B Pump-Station #2, (January 17, 2014).
- Inlet conditions are typical for constant water surface elevations found in a reservoir or a lake. Historic water levels indicate that during the irrigation season the water surface elevation does not typically change more than about 1 foot. Even with a 3 to 4-foot water depth at site 4, the typical water fluctuation will not affect the overall operation of the pumping plant.
- The access roads and easements needed at each site vary. All of the sites have the physical ability for access from a paved road. Alternatives 2 and 4 would require the greatest amount of new easements and road construction. Each of the respective landowners at these sites has expressed an opposition to the location.
• The location of the pumping plant station relative to the project area and the turnouts affects the amount of mainline required. Both site 2 and 3 are relatively in line with the respective mainlines leading from the pumping plant sites to the interstate crossing.

Table 2-2 shows the three pumping plant station sites and compares the location suitability, electrical infrastructure, inlet conditions, access roads, access easements, location relative to turnouts, hp, and total project cost.

Table 2-2. Summary of pump station selection criteria.

<table>
<thead>
<tr>
<th>Comparison Element</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitability of Pumping Plant Location - Physical Constraints</td>
<td>Approximately 6 feet above water surface; constructed on pasture/cropland; adequate spacing between river and rock outcrop.</td>
<td>Approximately 8 feet above water surface; constructed on non-crop land, sage brush.</td>
<td>Approximately 3 feet above water surface; constructed on pasture/crop-land.</td>
</tr>
<tr>
<td>Electrical Infrastructure required to bring in the power to the pumping station</td>
<td>3.0 miles of existing conductor line, installation of approximately 0.8 miles of distribution line, and installation of various line devices to maintain feeder voltage and reliability for a total cost of $1,206,600</td>
<td>0.3 miles of existing conductor line, installation of approximately 1.5 miles of distribution line, and installation of various line devices to maintain feeder voltage and reliability for a total cost of $724,400</td>
<td>0.3 miles of existing conductor line, installation of approximately 0.8 miles of distribution line, and installation of various line devices to maintain feeder voltage and reliability for a total cost of $417,600</td>
</tr>
<tr>
<td>Average Water Depth of the Milner Pool</td>
<td>10 foot plus water depth; gravel cobble bottom, unable to collect sample due to size of materials.</td>
<td>4 to 5 foot water depth; sandy bottom</td>
<td>3 to 4 foot water depth; sandy bottom</td>
</tr>
<tr>
<td>Access - Road Construction</td>
<td>½-mile existing private field road; approximately 800 feet of new road crosses farm ground.</td>
<td>Utilizes existing A&amp;B drain road; approximately 800 feet of existing private field road.</td>
<td>Requires ½-mile of new road that crosses farm ground.</td>
</tr>
<tr>
<td>Access - Easements</td>
<td>Landowner not willing; would require legal action to acquire access.</td>
<td>Landowner willing; negotiation required for long-term access.</td>
<td>Landowner not willing; would require legal action to acquire access.</td>
</tr>
<tr>
<td>Location Relative to Current Irrigation Turnouts</td>
<td>Aligns well with site 2 mainline route.</td>
<td>Aligns well with site 3 mainline route.</td>
<td>Approximately 1 mile additional 54-inch mainline needed to join site 3 mainline route.</td>
</tr>
<tr>
<td>Pumping Plant Size (hp)</td>
<td>3,500</td>
<td>3,500</td>
<td>3,700</td>
</tr>
<tr>
<td>Total Project Costs</td>
<td>$10,836,000</td>
<td>$10,770,000</td>
<td>$13,100,000</td>
</tr>
</tbody>
</table>
2.4 Alternatives Eliminated from Consideration

Other alternatives were considered to meet the District’s needs. Each would place the new pump station adjacent to the existing pump station, Unit A Pumping Plant #1, which is approximately 4 miles downstream of the Alternative 2 location. See Figure 2-5 for an illustration of the alternatives considered. They did not require further evaluation for a variety of reasons. The alternatives eliminated from consideration included:

- **Alternative 5a** – The existing pumps are already operating at capacity so a new pump station with essentially the same footprint as Alternatives 2 through 4 would be built on site. Approximately 13,000 feet more pipeline than Alternative 4 would be required; this is essentially the distance to the Alternative 4 pumping plant site. There would be additional affected landowners. The pumping plant would require additional horsepower because of friction loss in the additional pipeline; and the magnitude of the associated increase in pressure would require a higher pressure rating for the pipeline. The total project cost is roughly estimated at $16,500,000.

- **Alternative 5b** – This option for water delivery uses the existing canal system. A new pumping station built adjacent to the existing Unit A Pumping Plant #1 would lift water up to the open canal. The canal would be enlarged to carry the additional 118 cfs. The canal would have to be enlarged to increase capacity to carry the additional water. Approximately 18,000 feet of canal would require movement of approximately 2.3 cubic yards of earth per foot; about 42,000 cubic yards of dirt would need to be moved. Also, an additional pump is required to get the water from the open canal to the site 3 and 4 pipeline. A spillway from the canal back to the river would also be required for this alternative. The canal enlargement would affect an additional nine landowners, the pipeline would affect an additional five landowners and the spillway would affect an estimated seven additional landowners. The total project cost is roughly estimated at $14,500,000.

- **Alternative 6** – This alternative considered paying landowners for the purchase of existing lands and water rights where groundwater supplies are failing. This alternative was eliminated because Reclamation does not have authority under any authorization related to the Minidoka Project North Side Pumping Division to purchase lands and water rights from landowners that receive water from A&B.

---

1 Final EA note: In the draft EA, the preferred alternative was Alternative 2, and the alternatives considered but not carried forward, as illustrated on Figure 2-5, are shown connecting to and following the alignment of Alternatives 2 northward. Changing the connection point for the Figure 2.5 alternatives to the new, preferred route (Alternative 3) would have no meaningful effect on the assessment or rejection of these alternatives.
Figure 2-5. A&B Irrigation District alternatives considered but not carried forward.

2.4 Alternatives Eliminated from Consideration

Alternatives Eliminated from Consideration

- ANCF
- Associated Alternative Pipeline Pathway
  - All Not Carried Forward (ANCF) Opt A
  - ANCF Opt B - Enlarging Canal
  - ANCF Opt B - Pipeline
  - ANCF Opt B - Pipeline, Emergency

- Common Point
- Common Pipeline Corridor
- Common Pipeline in Corridor
These alternatives were eliminated because of lack of operation efficiency, the additional pipeline/pumping stations, the increased area of disturbance, the required spillway to carry water from the canal back to the river, increased management required, increased power use, and the increased costs relative to the other action alternatives. In addition, the operational constraints that would be added to the District’s roles and responsibilities from governmental rules and regulations made these alternatives unreasonable to carry forward.

When considering the part of the pipeline that is common to all action alternatives (both those carried into detailed analysis and those not considered viable), no substantially different routing options are available. As shown on Figure 2-3 and Figure 2-4, the proposed route for the pipeline north of the interstate is sited to serve the target points of supply while minimizing pipeline length. Significantly different routes for this reach of the pipeline, either west or east, would involve substantially increased cost for easement acquisition, construction, and operation.

### 2.5 Other Actions Considered for Cumulative Impact

A separate A&B project is in the planning stages and is discussed here relative to its potential for cumulative impact. The project would divert water from Lake Walcott within the Minidoka National Wildlife Refuge (NWR), convey the water through a pipeline to a State section of land (08S 25E 36 north of the reservoir) and inject the water into the aquifer through a series of injection wells. It is a joint effort between the IWRB, the District, and the Magic Valley Ground Water District for the general goal to assist with aquifer recharge on the ESPA and develop a managed aquifer recharge facility from which recharge to the ESPA can be conducted in accordance with the CAMP adopted into law as part of the State Water Plan in 2009. The project is being designed to achieve a diversion and injection rate of 100 cfs with a yearly goal of 30,000 acre-feet of water recharging the aquifer. Although noted here, to date this project is still in the preliminary stages of determining if it is feasible.

Note, the Reclamation land located in the northern part of this project area (and through which the proposed pipeline would pass) is part of one alternative being considered for relocation of the Burley municipal airport. However, study of the potential to relocate this airport has been limited to preliminary FAA site screening analysis. No decision or formal proposal has been made by the City to pursue airport relocation, and Reclamation has not been contacted regarding such a project. Given these circumstances, the potential relocation of this airport is considered too speculative to be considered in a cumulative impact analysis at this time.
2.6 Summary Comparison of the Environmental Impacts of the Alternatives

The environmental impacts, including proposed mitigation, of each alternative are compared in Table 2-3 against the environmental impacts that would result under Alternative 1 (No Action). Potential short and long-term, direct and indirect impacts of the alternatives are summarized. As noted in the previous section, no cumulative effects would be associated with the project; thus this type of impact is not noted on the table.

The environmental consequences of the alternatives arranged by resource are described in detail in Chapter 3. The terms “environmental consequences” and “environmental impacts” are synonymous in this document.

Table 2-3. Summary of environmental effects of actions.

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<tr>
<td>Land Use</td>
<td>No construction of new project facilities would occur; therefore, there would be no short-term interruptions in existing land use.</td>
<td>Short-term, construction-related impacts would occur in and around the pumping plant site for 2 to 3 months. Construction-related short-term impacts would occur along the pipeline route for approximately 2 weeks at any given location. All land disturbed during construction would be restored to preconstruction condition.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
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A&B Irrigation District – Unit A Pumping Plant #2 Final Environmental Assessment
### 2.6 Summary Comparison of the Environmental Impacts of the Alternatives

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<td>rural agriculture to an agricultural industry use. This small change would not be unlike similar uses downstream and would affect an insignificant portion of the broader landscape (see also Noise and Visual Quality). Except for the pump station and associated transmission line and access road, project facilities would be subsurface, resulting in no additional long-term change in existing land use. As reflected in agreements previously reached with involved landowners, equitable compensation will be provided by the District for any adverse short-term or long-term effects on land use or land ownership (e.g., lost production during project construction).</td>
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<tr>
<td>Water Rights</td>
<td>No direct or indirect, short-term or long-term effects to water rights would occur as a result of the No Action alternative.</td>
<td>The District’s existing surface water rights would need to be amended to include the new diversion point represented by the proposed pump station. No change is</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
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### 2.6 Summary Comparison of the Environmental Impacts of the Alternatives

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<tr>
<td>Water Quantity</td>
<td>The No Action alternative would not change the amount of water the District currently pumps from the ESPA or diverts from the Snake River. Under No Action, groundwater availability for Unit B users will continue to diminish resulting in potential reduction in crop production.</td>
<td>The proposed project would have minimal (if any) effects on water quantity. As noted above, the District would adjust use of a portion of its existing water right by diverting the water from a new pump station upstream from the existing diversion point. The volume of water diverted from the existing pumping plant would be reduced by the volume diverted at the new pumping plant. Further, the District would continue to take advantage of the water bank when necessary to meet crop requirements (especially the additional 1,500 acres of Unit B that would be provided with surface water under this alternative).</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
</tr>
<tr>
<td>Water Quality</td>
<td>There would be no effects on water quality as a result of No Action.</td>
<td>Construction of the proposed pump station and associated intakes would likely result in short-term increases in local sediment plumes in the river. Such potential for increased sediment discharge during construction would be</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
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### 2.6 Summary Comparison of the Environmental Impacts of the Alternatives

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<tr>
<td>Noise</td>
<td>There would be no short or long-term impacts on the noise environment as a result of No Action.</td>
<td>Construction activities would bring a short-term increase in local noise levels at the pumping plant site and along the pipeline route. Measures including limits on the time of construction, proper equipment maintenance, and other standard BMPs would be used to manage these noise levels. In the long-term, the pumping plant would introduce a new noise source to the area affecting primarily residential uses along the opposite river shore. Measures are included in project design to ensure that these long-term noise effects are within accepted standards.</td>
<td>Same as Alternative 2, although this alternative would have considerably less long-term effects on residential uses from pump station noise than would Alternative 2.</td>
<td>Same as Alternative 3.</td>
</tr>
<tr>
<td>Vegetation</td>
<td>There would likely be minimal to no short-term impacts to existing vegetation. Long-term impacts would likely include fallowing of agricultural fields currently in production. This</td>
<td>Short-term impacts would consist of temporary vegetation removal within the construction corridor. With the exception of the pumping plant building and parking area footprints and along the access road, vegetation would be restored in all disturbed areas.</td>
<td>Short-term and long-term impacts to vegetation, as well as restoration and mitigation measures would be essentially the same as those described for Alternative 2. Differences from Alternative 2 would include: a slightly</td>
<td>Same as Alternative 3, but with longer distances of short-term impact due to longer pipeline requirement.</td>
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## Summary Comparison of the Environmental Impacts of the Alternatives

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<td></td>
<td>Long-term impacts would be limited to removal of vegetation (potentially including several large trees) within the pumping plant facility footprint and access road corridor. Mitigation for these impacts is included as part of project design. Vegetation would be restored, including tree planting around the pumping plant facility. This would include vegetation screening between the facilities and the river edge.</td>
<td>larger area of temporary impact due to longer pipeline, reduction in potential for removal of existing large trees, and some potential for increased long-term effects on open or farm land due to separation of transmission line and the access road.</td>
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<tr>
<td>Fish</td>
<td>The No Action alternative would have no effects to fish or aquatic resources.</td>
<td>Minor, temporary impacts to fish may occur during installation of the inlet channel and associated shoreline stabilization near the pumping plant site. No long-term impacts to fish resources would occur due to elements in project design (such as fish screens).</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
</tr>
<tr>
<td>Wildlife</td>
<td>The No Action alternative would have no impact on wildlife.</td>
<td>Temporary removal of vegetation and construction activity would result in minor short-term impacts as breeding and foraging habitat is lost during construction and possibly through one growing season following construction as vegetation</td>
<td>Same as Alternative 2, with a slightly larger extent of short-term impacts due to longer pipeline length, but a reduced potential for short-term impact to wetland and woody</td>
<td>Same as Alternative 3, with a larger extent of short-term impacts due to longer pipeline length.</td>
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### Summary Comparison of the Environmental Impacts of the Alternatives

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<tr>
<td>Threatened and Endangered Species (TES)</td>
<td>The No Action alternative would have no impact on listed species.</td>
<td>Research and survey results indicate that no listed species are known to occur within or adjacent to the construction area. Therefore, no adverse impacts would occur to listed species.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>No impact to cultural resources would occur under the No Action alternative.</td>
<td>The proposed pipeline would cross the Northside branch of the Oregon Trail, the past route of the Oregon Short Line Railroad, and the site of Camp Rupert, a World War II internment camp. No adverse impact is expected to these resources either because of their current degraded</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
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### Table: Summary Comparison of the Environmental Impacts of the Alternatives

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<tr>
<td><strong>Sacred Sites</strong></td>
<td>No impact to sacred sites would occur under the No Action alternative.</td>
<td>No impacts would occur as a result of Alternative 2.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
</tr>
<tr>
<td><strong>Indian Trust Assets (ITAs)</strong></td>
<td>No impact to ITAs would occur under the No Action alternative.</td>
<td>No impact to ITAs within the project area of potential effect (APE) would occur as a result of Alternative 2.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>No short or long-term impacts to transportation would occur under the No Action alternative.</td>
<td>The construction of a pumping plant, pipeline, transmission line, and new access road would likely result in short-term impacts including increased traffic on local roads and temporary road closures. However, the redundancy of the local road network would avoid any substantial disruption of ingress or egress</td>
<td>Same as Alternative 2, although with a longer pipeline and transmission line, construction duration may be longer than Alternative 2.</td>
<td>Same as Alternative 2, although with a longer pipeline and transmission line, construction duration may be longer than Alternative 2.</td>
</tr>
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## Summary Comparison of the Environmental Impacts of the Alternatives

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<tr>
<td>Public Services</td>
<td>No short or long-term impact to public services and utilities would occur under the No Action alternative.</td>
<td>No short or long-term impact to public services and utilities is expected with this alternative.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
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<tr>
<td>and Utilities</td>
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<tr>
<td>Energy</td>
<td>No short or long-term impact to energy would occur under the No Action alternative.</td>
<td>Beyond fuel consumed by construction vehicles, there would be no meaningful short-term impact on energy resources.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
</tr>
<tr>
<td>Recreation</td>
<td>No short or long-term impact to recreation would occur under the No Action alternative.</td>
<td>No short or long-term adverse impact to recreation would result from this alternative.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
</tr>
<tr>
<td>Visual</td>
<td>No construction of project facilities</td>
<td>Construction activities would result in a</td>
<td>Same as</td>
<td>Same as</td>
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Long-term O&M would require periodic visits (personnel and equipment) to the pump station. Any associated traffic disruptions are expected to be infrequent and minor.
### 2.6 Summary Comparison of the Environmental Impacts of the Alternatives

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<tr>
<td>Resources</td>
<td>would occur; therefore, no impact to visual resources. If short-term fallowing of agricultural land occurs, there would be a change to the landscape from existing conditions.</td>
<td>short-term visual impact due to the present of construction equipment, workers, etc. This would, however, be similar to vehicles and equipment used in the agricultural industry characteristic of the study area. Long-term changes to the landscape would be primarily from the new pumping plant and utility features, which are similar to other agricultural industry facilities in the area.</td>
<td>Alternative 2.</td>
<td>Alternative 2.</td>
</tr>
<tr>
<td>Socioeconomics</td>
<td>No project facilities (i.e., jobs) would be associated with this alternative. In the long term, as groundwater levels continue to decline, agricultural land would be forced to either convert to dryland crops or go out of production, resulting in a reduction in adverse socioeconomic impacts (population, housing, and/or employment).</td>
<td>Potential for short-term beneficial effects as construction activities would bring a temporary economic boost to the local economy. In the long term, provision of surface water to lands with currently failing groundwater supplies would result in beneficial effects on local socioeconomic parameters.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
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## 2.6 Summary Comparison of the Environmental Impacts of the Alternatives

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<tr>
<td>Environmental Justice</td>
<td>No short or long-term impacts would result as there is no U.S. Department of Housing and Urban Development (HUD)-defined low-income population in the area.</td>
<td>No short-term or long-term impacts would result as there is no HUD-defined low-income population in the area and no impacts would occur from construction or operation of the project facilities.</td>
<td>Same as Alternative 2.</td>
<td>Same as Alternative 2.</td>
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</table>
| Air Quality and Climate Change | No project facilities would be constructed. The long-term impact on air quality under the No Action alternative would be potential dust being raised by wind from fallowed agricultural land. | Short-term impacts resulting from construction activities associated with a pumping plant, pipelines, transmission lines and access road would result in a temporary effect on air quality. BMPs would be implemented to reduce any impact.  
  
  Operation under this alternative would have no measureable impact on air quality.  
  
  Study area could experience impacts with the changing climate (i.e., altered precipitation, shifting flow regimes, soil erosion, etc.). | Same as Alternative 2, although with a longer pipeline and transmission line, construction duration is expected to be longer than Alternative 2. | Same as Alternative 2, although with a longer pipeline and transmission line, construction duration is expected to be longer than Alternative 2. |
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Chapter 3  AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This chapter supplies the background information and a description of the study conducted for key resources as part of the Unit A Pumping Plant #2 EA. It analyzes baseline conditions of various resource areas at the project site and in the project vicinity, and evaluates the potential effects of constructing and operating the three action alternatives and the No Action alternative, based upon the purpose and need and project description provided by Reclamation, NRCS, and A&B.

The affected environment section describes the existing environment that could be affected by the alternatives. The environmental consequences section describes the potential environmental consequences of those alternatives, if implemented, on the resources evaluated below. Mitigation measures necessary to reduce any potential impacts to those resources are addressed in the mitigation section. Cumulative impacts, which are impacts that may result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, are also evaluated.

Public health and hazardous wastes were not addressed as there are no hazardous wastes identified in the project area and there would be no public health issues.

Information necessary to develop the affected environment discussion was obtained through a combination of online data searches; meetings, discussions, and reports from agencies; field review notes; and a review of available aerial photography.

3.2 Land Use and Ownership

This section describes the existing land uses and ownership at and in the vicinity of the project facility locations. It also lists the applicable goals and policies that are listed in Minidoka County’s Comprehensive Plan (Comprehensive Plan).
3.2 Land Use and Ownership

Study and Analysis Methodology

Aerial photographs of the project facilities locations and the project vicinity, site visit notes, Reclamation mapping, and the Comprehensive Plan, were reviewed.

Area of Potential Effect

The APE for land use is the land where the project facilities would be constructed within Minidoka County.

3.2.1 Affected Environment

The majority of land in Minidoka County is privately owned (61.8 percent). Federal land ownership comprises 35.9 percent of the county’s land, and the remainder of land (2.3 percent) is owned by the City, County, and State. Agriculture is an important part of Minidoka County’s economy, but agricultural land use in Minidoka County is declining. The number of farms has increased but the average size of the farms has decreased (Minidoka County 2010).

The three alternative pumping plant sites are located on private land in Township 10 S Range 22 E on the north side of the Snake River. The Alternative 2 pumping plant site and its associated pipeline that would connect to the common pipeline route are located in Section 16. The Alternative 3 pumping plant site is located in Section 20 and its associated pipeline that would connect to the common pipeline route is located in Sections 16, 17, and 20. The Alternative 4 pumping plant site is located in Section 19 and its associated pipeline that would connect to the common pipeline route is located in Sections 16, 17, 19, and 20. The common pipeline route would be constructed on mostly private land, and it would also cross some Reclamation land. The Snake River abuts the southern ends of the three alternative pumping plant alternative sites.

The existing land use at the Alternative 2 pumping plant site is zoned as agricultural low and the parcel is currently undeveloped open space. There is a road at the southern end of the parcel, along with a few trees. To the north, east, and west of the pumping plant site, the land is zoned as agricultural low and is undeveloped open space and agricultural land uses, with a few rural residences located approximately 0.5 to 0.9 mile away (to the west, northwest, north, northeast, and east). The Snake River is on the south side of the pumping plant site. The nearest residence is located approximately 0.2 mile to the south of the pumping plant site, on the south side of the Snake River.

The existing land use at the Alternative 3 pumping plant site is zoned as agricultural low and the parcel is currently agriculture and undeveloped open space, with a road in the southern portion of the parcel and a few trees near the center and southern boundary of the parcel. The land is zoned agricultural low and is in agricultural and undeveloped open space uses to the
north, east and west of the pumping plant site. The Snake River is on the south side of the pumping plant site. The nearest rural residences are located approximately 0.4 mile to the northeast and approximately 0.4 mile to the southeast on the south side of the Snake River.

The Alternative 4 pumping plant site is zoned as agricultural low and the parcel is currently almost completely in agricultural land use, with a few trees at the southeast corner of the parcel and a road at the southern end. The land is zoned agricultural low and is in agricultural and undeveloped open space uses to the north, east and west of the pumping plant site. The Snake River is on the south side of the pumping plant site. There are a few rural residences located approximately 0.7 to 1.25 miles to the northwest, north, and northeast. The nearest residences are located approximately 0.6 mile to the south of the pumping plant site, on the south side of the Snake River.

The pipeline is proposed to be installed on land that is primarily in agricultural with a small amount of undeveloped open space and is zoned agricultural medium and agricultural highland use with a small amount of undeveloped open space. Grazing may occur within the undeveloped open space lands.

The following Comprehensive Plan objectives are applicable to the project:

- Property Right Objective #3: To review each new proposed use carefully for its potential impact on current uses and that any potentially negative impact should be mitigated.
- Property Right Objective #5: To address the concepts of “Right to Farm” laws and encourage protection of agriculture.
- Land Use (High and Medium Agriculture) Objective #2: To have orderly rural growth by using the land according to its best use (as related to social, economic, and physical factors) while encouraging the property owner to retain as many acres as possible in agricultural use.
- Land Use (High and Medium Agriculture) Objective #3: To encourage maximum compatibility between land uses.
- Land Use (High and Medium Agriculture) Objective #11: Support the “Right to Farm” concepts in zoning and other developmental laws to protect the County’s agricultural base.
- Land Use (Low Agricultural) Objective #2: Support open space and rural residential lifestyle (Minidoka County, 2010).

Also relevant is the State’s Right to Farm Act (Title 22, Chapter 45), which states:

“No city, county, taxing district or other political subdivision of this state shall adopt any ordinance or resolution that declares any agricultural operation, agricultural facility, or expansion thereof that is operated in accordance with generally recognized agricultural
practices to be a nuisance, nor shall any zoning ordinance that requires abatement as a nuisance or forces the closure of any such agricultural operation or agricultural facility be adopted.”

### 3.2.2 Environmental Consequences

This section provides the expected potential impacts on land use from implementation of the alternatives.

**Methods and Assumptions**

Aerial photographs of the project facilities locations and the project vicinity were reviewed to aid in determining if the proposed project (all alternatives) would be compatible with existing land uses. In addition, the Comprehensive Plan was reviewed to determine if the proposed project (all alternatives) would be consistent with the Plan’s objectives.

**Alternative 1 (No Action)**

**Short-term Impacts**

If Alternative 1 is implemented, no project facilities would be constructed, so no construction vehicles, equipment, and workers would be at the project sites, no construction activities would occur, and no short-term interruptions in existing land uses would occur. Therefore, there would be no short-term impact on land use from construction activities.

If the No Action alternative is implemented and water becomes unavailable for crop irrigation, then lands may be forced out of agricultural production (short-term fallowing) until another water source or delivery option is developed, or a different (less water intensive) crop is planted. This would result in a short-term change in land use.

**Long-term Impacts**

If Alternative 1 is implemented, the District would continue to deliver surface water from the Snake River to the 15,900 acres of Unit A agricultural land and 1,400 acres of Unit B agricultural land via the existing pumping plant and canal. However, the existing Unit A delivery system does not have sufficient capacity to meet crop demands throughout the irrigation season. This may result in the long-term fallowing of agricultural land until another water source or delivery option is developed, or a different (less water intensive) crop is planted. Continuing groundwater declines could also result in eventually curtailing water deliveries to 1,500 Unit B acres due to insufficient water to produce a crop. If this occurs, then there would be a long-term impact on land use from implementation of Alternative 1.
3.2 Land Use and Ownership

In addition, the District would continue to deliver groundwater to approximately 66,700 Unit B acres of agricultural land, resulting in no impact to these acres.

**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, and pipelines, a transmission line, and access road primarily within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water from the Snake River to various locations along the pipeline alignment. These short-term and long-term activities would not result in extensive land use impacts because of the short duration of the proposed construction period and because much of the pipeline ROW (which would encompass the pipeline, transmission line, and access road) would follow existing property boundaries, reducing many impacts on land use.

Alternative 2 would also require acquisition by Reclamation and the District of land rights to the pumping plant site (fee title) and the route of the pipeline, access road and transmission line (easements or ROW). These acquisitions would not result in large-scale impacts on current or planned uses of involved lands. Given this conclusion, the necessary changes in landownership or access rights would not result in a major disruption of land use.

**Short-term Impacts**

Construction of Alternative 2 would require taking some agricultural fields along the pipeline/transmission line/access road alignment out of production temporarily during the period of construction. Lands owned by five landowners would be affected by project construction. The pipeline ROW from the common point to the end point (which includes only the pipeline) would be approximately 81,159 feet long (186 acres). The pipeline ROW from the common point to the pump station (in which the pipeline and majority of the transmission line and access road would be located) would be approximately 14,006 feet long. Approximately 119 acres of crop/pasture land, approximately 54 acres of property boundary land, and approximately 13 acres of range land would be temporarily affected by project construction from the common point to the end point. Approximately 20.5 acres of crop/pasture land and approximately 11.7 acres of property boundary land would be temporarily affected by project construction from the common point to the pump station. No rangeland would be temporarily affected by project construction from the common point to the pump station. All of the impacts described here would be short term. Given the commitment by the District to compensate landowners at fair market value for any lost production during project construction, there would be no substantial short-term impact on land use. All temporary impacts from pipeline construction from the common point to the project’s end would be the same for all action alternatives.
3.2 Land Use and Ownership

**Long-term Impacts**

After the proposed pipeline is constructed, it is expected that the majority of the disturbed areas owned by the five landowners would return to their pre-construction land use. Land use on the approximately 1.6 acres used for the pumping plant would, however, be converted from agricultural use (grazing) to developed land. In addition, approximately 2.4 acres of land within or near the pipeline ROW alignment would become a permanent access road (which would include a transmission line corridor), and would, therefore, change land use. Given (1) the type of land-use affected, (2) the general scale of affected ownership in the area, and (3) the commitment to site and manage the access road and transmission line route in consultation with affected landowners, there would be no long-term adverse effect. This observation is further reinforced by the fact that O&M of the pumping plant, pipeline, transmission line, and the access roads would require only periodic visits to the site and alignments. Implementation of Alternative 2 would be consistent with the Comprehensive Plan and the State Right to Farm Act objectives to protect agricultural land uses.

**Mitigation**

The following mitigation measures would be implemented to minimize the impacts to land use from construction and O&M under Alternative 2:

- Work with affected landowner(s) to site permanent access road and transmission line along property and/or field boundaries or as requested by the owner(s).
- Strive to site the 100-foot-wide construction disturbance area so that it uses the areas between fields and parcels, to minimize the amount of land that would be taken out of agricultural production for construction activities.
- Minimize land disturbance within the 100-foot-wide construction disturbance area.
- After project construction is complete, restore the construction disturbance area to its pre-construction condition.
- Compensate landowners at fair market value for production lost during construction activities.

**Alternative 3 (Preferred Alternative)**

This alternative would result in the same land use impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same land use impacts as were discussed for Alternative 2. The only differences are that this alternative has a slightly longer pipeline from the common point to the pump station, as well as a slightly longer access road. Based on the minimal added length of pipeline and access road, construction duration, and associated short-term
impacts would not be anticipated to be noticeably greater than those described under Alternative 2. These impacts are quantified later in Section 3.7.2 (Vegetation – Environmental Consequences). Similar to Alternative 2, short-term impacts would be negligible.

**Long-term Impacts**

This alternative would result in the same land use impacts as discussed for Alternative 2. Land use on the approximately 1.6 acres used for the pumping plant would be converted from agricultural use (grazing) to developed land. The access road would result in the loss of approximately 2.6 acres of crop/pasture, range, and property boundary land and would, therefore, change land use. Approximately 26,428 square feet of non-agricultural land would be converted to a standalone transmission corridor. However, the extent of permanent impacts within this area would be minimal and consist only of the area lost due to the placement of power poles. Similar to Alternative 2, however, these impacts would be negligible.

**Mitigation**

Mitigation measures for Alternative 3 are the same as described for Alternative 2.

**Alternative 4**

This alternative would result in the same land use impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same land use impacts as those discussed for Alternative 2. The only differences are that this alternative has a longer pipeline from the common point to the pump station than Alternative 2 (thereby affecting more landowners than Alternative 2). These impacts are quantified in Section 3.7.2 (Vegetation – Environmental Consequences). The construction duration for Alternative 4 is expected to be longer than for Alternative 2. Nonetheless, similar to Alternatives 2 and 3, these short-term impacts would not be substantial.

**Long-term Impacts**

This alternative would result in the same land use impacts as those discussed for Alternatives 2 and 3, but with a longer easement length for the pipeline. Land use on the approximately 1.6 acres used for the pumping plant would be converted from agricultural use (grazing) to developed land. The access road would result in the loss of 3.1 acres of crop/pasture, range, and property boundary land and would, therefore, change land use. All new transmission lines constructed in association with this alternative would occur within the access road. Similar to Alternative 2, these impacts would not be substantial.
3.3 Water Rights

**Mitigation**

Mitigation measures for Alternative 4 would be the same as those described for Alternative 2.

**Cumulative Impacts**

No cumulative impacts are anticipated on this resource as a result of the proposed project.

3.3 Water Rights

This section supplies the background information and a description of the study conducted for water resources.

**Study and Analysis Methodology**

The primary source of information for this analysis was personal communication with A&B staff.

**Area of Potential Effect**

The APE for water rights is focused on the project footprint, but also extends to the A&B boundaries.

3.3.1 Affected Environment

A&B holds several decreed water rights for irrigation purposes in Basins 01 and 36. For surface water delivery, A&B holds 7 surface water natural flow rights totaling 270 cfs with the earliest priority dating back to April 1, 1939. The District uses natural flow when it is available in priority, which can vary year to year. A&B also holds storage water rights in American Falls (46,826 acre-feet) and Palisades (90,800 acre-feet) reservoirs. When natural flow is unavailable, the District delivers storage from one or both reservoirs to supply water to the project. The total amount of surface water diverted by A&B varies by year but on average is approximately 55,000 to 63,000 acre-feet (Thompson 2014).

For groundwater delivery, A&B holds 12 groundwater rights totaling approximately 1,130 cfs with the earliest priority dating back to September 9, 1948. The groundwater rights are not fully utilized due to declining groundwater levels and the lack of available water supply in the ESPA in the area. However, on average A&B diverts approximately 170,000 to 190,000 acre-feet annually. The District currently uses 177 wells to pump and deliver groundwater to the landowners (Thompson 2014).
3.3.2 Environmental Consequences

Water rights affect the distribution of available water for irrigation, domestic, and commercial uses. Water in the APE is a valuable commodity because of the region’s heavy dependence on irrigated agriculture.

Methods and Assumptions

Impacts were quantitatively determined by comparing existing and proposed water rights. Impacts to water rights would be considered significant if project implementation resulted in modification of existing water rights in the APE.

Alternative 1 (No Action)

No direct or indirect, short-term, long-term, or cumulative effects to water rights would occur as a result of the No Action alternative.

Alternative 2

Under Alternative 2, the District would only need to file an application for transfer with the Idaho Department of Water Resources (IDWR) to add a point of diversion to its seven surface water natural flow rights. All of the other water right elements for the surface rights would remain unchanged. The surface water rights would continue to be fully utilized as water is available. No changes are expected for the groundwater rights; A&B will continue to use those rights as water is available. For the Unit A lands previously irrigated with groundwater, A&B intends to make annual application to the Water District 01 rental pool and lease available storage for delivery to these lands. These lands would be considered “soft conversions,” meaning that the groundwater wells will still be operated and maintained and used only when storage water is unavailable. The total quantity and priority of the existing natural flow surface water rights would be maintained; consequently, there would be no impact to delivery of water to other lands with A&B’s Unit A (Thompson 2014).

No direct or indirect, short-term, long-term, or cumulative effects to water rights would occur as a result of Alternative 2.

Alternative 3 (Preferred Alternative)

All impacts to water rights related to Alternative 3 would be the same as identified for Alternative 2.

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1 The State administrative district created by Idaho law to supervise the distribution of water among surface water rights in the Upper Snake River basin above Milner Dam (both natural flow and storage water rights).
3.4 Water Quantity

Alternative 4

All impacts to water rights related to Alternative 4 would be the same as identified for Alternative 2.

Cumulative Impacts

No cumulative impacts are anticipated on this resource as a result of the proposed project.

3.4 Water Quantity

This section describes existing surface water and groundwater quantity in the project area.

Study and Analysis Methodology

The primary sources of information for this analysis were the U.S. Geological Survey (USGS) National Water Information System (USGS 2014) and Reclamation’s Minidoka North Side Resource Management Plan (RMP) Environmental Assessment (Reclamation 2005). Reclamation’s document addresses lands owned by Reclamation in Minidoka County, Idaho, which include the project area. While the project will be constructed primarily on private land, these lands are adjacent to or surrounded by Reclamation lands. Where applicable, the data in the RMP and EA were assumed representative of the private lands within the project area.

Area of Potential Effect

The APE for water quantity extends beyond the project footprint. Surface water resources were assessed in the Snake River (Milner Lake) from the proposed pump station locations, approximately 7 miles downstream to Milner Dam. Groundwater resources are connected throughout the ESPA, but localized effects on quantity are most likely within a few miles of the project area.

3.4.1 Affected Environment

The Snake River at Milner drains an area of 17,180 square miles in Idaho, Wyoming, and Utah. The Hydrologic Unit Code for the project area is 17040209. Flows are regulated by American Falls Reservoir, Lake Walcott, Milner Lake, and other reservoirs with a usable capacity of approximately 4,700,000 acre-feet (USGS 2014). From 1926 through 2013 (regulated period), peak daily flow passing Milner was 31,200 cfs, and mean monthly discharge is shown in Table 3-1.
Table 3-1.  Mean discharge – gaging station 13088000 – Snake River at Milner, Idaho (1926 to 2013) (USGS 2014)

<table>
<thead>
<tr>
<th>Month</th>
<th>Mean Discharge (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>3,380</td>
</tr>
<tr>
<td>February</td>
<td>3,450</td>
</tr>
<tr>
<td>March</td>
<td>3,640</td>
</tr>
<tr>
<td>April</td>
<td>4,680</td>
</tr>
<tr>
<td>May</td>
<td>3,940</td>
</tr>
<tr>
<td>June</td>
<td>3,800</td>
</tr>
<tr>
<td>July</td>
<td>1,000</td>
</tr>
<tr>
<td>August</td>
<td>520</td>
</tr>
<tr>
<td>September</td>
<td>549</td>
</tr>
<tr>
<td>October</td>
<td>1,610</td>
</tr>
<tr>
<td>November</td>
<td>2,320</td>
</tr>
<tr>
<td>December</td>
<td>2,910</td>
</tr>
</tbody>
</table>

Note: Flow at this location represents combined flow to the Snake River from 13087995 Snake River gaging station at Milner and 13087505 lower Milner Powerplant.

The ESPA underlies the study area, covering an area approximately 180 miles by 60 miles from St. Anthony, Idaho, to Bliss, Idaho. The aquifer is supplied by seepage from streams and irrigation, underflow from tributary valleys, and precipitation. Water is discharged from the aquifer as spring flows and as groundwater pumped for irrigation, domestic, and commercial supplies. Depth of groundwater below the surface ranges from less than 10 feet up to 400 feet, and water yields range from less than 100 gallons per minute per foot of drawdown in the lower permeability sediment-basalt aquifer in the south (closer to the study area) up to several thousand gallons per minute per foot of drawdown in the basalt-dominated aquifer to the north (Reclamation 2005).

3.4.2 Environmental Consequences

The local economy, culture, and biological resources are dependent on water provided by the Snake River and the ESPA. Water quantity is critical because water in the region is in high demand and shortages limit the sustained growth of the parameters listed above.
Methods and Assumptions

Impacts to water quantity were qualitatively evaluated by assessing trends in affected water resources and looking at the potential for changes caused by the alternatives. Impacts to water quantity would be considered important and adverse if project implementation resulted in reduced water availability for users in the APE.

Alternative 1 (No Action)

The No Action alternative would not change the amount of water that A&B currently pumps from the ESPA or diverts from the Snake River. Groundwater resources are declining in the aquifer, as evidenced by the approximately 1,400 acres in Unit B that used to be irrigated with groundwater and had to be converted to a surface water supply in the mid-1990s, when several wells failed because of a lack of groundwater supply. Over time, under the No Action alternative, groundwater availability for Unit B users will probably continue to diminish. It is anticipated that approximately 1,500 acres in Unit B currently served by deep wells 28A922, 3AB922, 15B922, 15C922, 11B922, 11C922, and 3C922 will be forced out of production because of insufficient groundwater supply at some point in the future. Also, since the existing delivery system in Unit A does not have sufficient capacity to meet crop demands throughout the entire irrigation season, additional acreage in Unit A or the portion of Unit B currently supplied with surface water may be forced out of production.

Alternative 2

Alternative 2 would have a minimal effect on water quantity.

Short-term Impacts

No short-term impacts to water quantity are anticipated under Alternative 2.

Long-term Impacts

A&B’s cumulative water right would not change under Alternative 2, although a higher percentage of water may be diverted as surface water from the Snake River rather than pumped as groundwater from the ESPA based upon a district-wide water use analysis. This redistribution of water source is not anticipated to cause a reduction in Snake River flows at the point of diversion because any additional water to be diverted at the proposed pumping plant would be storage water leased from the Water District 01 rental pool and released for the A&B’s use on-call from one of the upstream storage reservoirs. Reduced groundwater pumping would reduce drawdown and groundwater depletion in the ESPA, allowing 1,500 acres in Unit B currently served by deep wells 28A922, 3AB922, 15B922, 15C922, 11B922, 11C922, and 3C922 to stay in production. Construction of a pipeline to replace the unlined
canal and ditch system will reduce evaporation and seepage, minimizing losses to the atmosphere but also reducing potential recharge to the aquifer.

*Mitigation*

No mitigation for water quantity is anticipated under Alternative 2.

**Alternative 3 (Preferred Alternative)**

All impacts to and mitigation measures for water quantity related to Alternative 3 would be the same as identified for Alternative 2.

**Alternative 4**

All impacts to and mitigation measures for water quantity related to Alternative 3 would be the same as identified for Alternative 2.

**Cumulative Impacts**

The proposed Lake Walcott Groundwater Recharge Project is a joint effort between the Idaho Water Resource Board, A&B, and the Magic Valley Groundwater District to divert water from Lake Walcott (part of the Snake River system upstream of Milner Lake), convey the water through a pipeline to a State section of land north of the reservoir, and inject the water into the aquifer through a series of injection wells. The project is anticipated to achieve a diversion and injection rate of 100 cfs with a yearly goal of 30,000 acre-feet volume of water recharging the aquifer. However, this project is still in the preliminary stages of determining its feasibility and there is no certainty that it will be constructed. Based on the understood nature of this project and the uncertainty of construction, no cumulative impacts to water quantity are anticipated as a result of the implementation of Alternative 2 and the Lake Walcott Groundwater Recharge Project.

**3.5 Water Quality**

**Study and Analysis Methodology**

The study and analysis methodology for water quality is the same as that defined for water quantity, except the USGS National Water Information System was not referenced.

**Area of Potential Effect**

The APE for water quality is the same as that defined for water quantity.
3.5 Water Quality

3.5.1 Affected Environment

Pollutants of concern in the Snake River above Milner Dam (Milner Lake) include sediment, oil and grease, nutrients, and temperature. Sediment, oil and grease, and total phosphorus Total Maximum Daily Loads (TMDLs) have been developed for the Minidoka Dam to Milner Dam segment (IDEQ 2000). The Snake River between Milner Dam and Burley is not listed as impaired for any constituents in Section 5 of the 2010 Integrated Report (commonly referred to as the 303(d) list) (IDEQ 2011), but temperature is being further evaluated and a recent review of the Lake Walcott Subbasin Assessment, TMDL, and Implementation Plan found that water quality standards are still not fully supported (IDEQ 2012).

Although the Snake River canyon is deeply incised, the land surface in the adjacent Snake River Plain is generally flat to gently rolling. There are small benches and knolls, but much of the area lacks a well-defined stream drainage pattern, and many small basins have no natural drainage outlet. Since there are limited options for irrigation return flows and stormwater to be conveyed back to the river, A&B historically disposed of this water through injection wells into the underlying groundwater aquifer (Reclamation 2005). The ESPA was designated by the EPA as a sole source of drinking water under the Federal Safe Drinking Water Act in 1991, which resulted in more restrictive groundwater quality standards. Drain water monitoring results suggest that return flows entering injection wells often exceed the Safe Drinking Water act maximum contaminant levels for coliform bacteria and turbidity. Since continued injection could result in contamination of the ESPA (or the Snake River via horizontal transport of water within the aquifer back to the river), wetlands were constructed to reduce contamination and facilitate evaporation and evapotranspiration of the irrigation drain water (Reclamation 2005). As of January 2014, A&B had only nine active injection wells remaining and those receive precipitation flood flows only (Temple 2014).

3.5.2 Environmental Consequences

The local economy, culture, and biological resources are dependent on water provided by the Snake River and the ESPA. Water quality is critical for supporting healthy fish and wildlife populations, safe drinking water sources, and irrigation water that optimizes crop growth.

Methods and Assumptions

Impacts to water quality were qualitatively evaluated by assessing current status and trends in affected water resources and looking at the potential for changes caused by the alternatives. Impacts to water quality would be considered important and adverse if project implementation resulted in exceedances of state water quality criteria or standards in the APE.
Alternative 1 (No Action)

No direct or indirect, short-term, long-term, or cumulative effects to water quality would occur as a result of the No Action alternative.

Alternative 2

Alternative 2 would have a minimal effect on water quality.

Short-term Impacts

Short-term degradation of water quality from small plumes of sediment could likely be released into the Snake River during construction of the pump station, regardless of mitigation measures and methods implemented. Ground-breaking activities may have some potential for erosion in the short term; however, these effects would be minimized through implementation of mitigation measures and other BMPs. The new construction areas surrounding the pump station would be potential sources of sediment until they are revegetated and stabilized, but potential delivery to the river would be very limited because of planned revegetation.

To protect water quality from chemical contamination associated with Alternative 2, uncured concrete would not come in contact with flowing water; vehicles and other equipment would be refueled away from standing or flowing water in the Snake River, and spill containment equipment would be available during refueling. Consequently, no effects from contaminants are anticipated.

Long-term Impacts

No long-term impacts related to slope erosion would be anticipated under this alternative because surfaces disturbed during construction would be seeded with a mixture of native grasses. Conversion of unlined canals and ditches to pipelines may result in slightly less suspended sediment in the delivery system, but sediment concentrations in drain water following field application are not anticipated to change. The riparian vegetation that would be removed during construction of the pump station and support structure is negligible and does not provide any appreciable stream shade. No increase in temperature is anticipated because there would be no reduction in Snake River flows at the point of diversion. Any additional water to be diverted would be released on-call from one of the upstream storage reservoirs.

Mitigation

Alternative 2 would comply with all CWA requirements, including development of an Erosion and Sediment Control Plan. Construction activities are likely to result in some temporary water quality impacts such as sediment plumes, but these potential impacts will be mitigated.
by erosion and sediment control BMPs and other mitigation measures. All appropriate permits from the State of Idaho, EPA, and the Corps would be obtained, and all work would comply with the mitigation required by those entities. Additional water quality-related mitigation measures are described in Fish Resources in Section 3.8.

**Alternative 3 (Preferred Alternative)**

All impacts to and mitigation measures for water quality related to Alternative 3 would be the same as identified for Alternative 2.

**Alternative 4**

All impacts to and mitigation measures for water quality related to Alternative 3 would be the same as identified for Alternative 2.

**Cumulative Impacts**

No cumulative impacts to water quality are anticipated as a result of the implementation of the proposed project.

### 3.6 Noise

This section describes the existing noise setting at and in the vicinity of the project facility locations, and it identifies existing sources of noise. It also notes applicable goals and policies of the Comprehensive Plan and the State Right to Farm Act.

**Study and Analysis Methodology**

Aerial photographs of the project facilities locations and the project vicinity, as well as the Comprehensive Plan were reviewed.

**Area of Potential Effect**

The APE for noise is the land where the project facilities would be constructed and the lands surrounding those facilities within Minidoka County and the northern portion of Cassia County where residences are located across the river from the proposed pumping plants.

#### 3.6.1 Affected Environment

The land use at and in the vicinity of the three pumping plant sites and along the pipeline alignment is primarily agricultural, with associated rural residences and a small amount of undeveloped open space. As such, the area’s ambient noise levels are expected to be low
except when farm equipment is operating. Existing noise sources include farm equipment, vehicles on local roadways, and people and their pets at the residences and along the Snake River.

There are no Comprehensive Plan objectives for noise applicable to the project. However, the State Right to Farm Act is relevant to planning and land use (including noise) in the study area; relevant language from that legislation is cited in Section 3.2.1.

3.6.2 Environmental Consequences

This section provides the expected potential impacts on ambient noise levels from implementation of the alternatives.

Methods and Assumptions

Aerial photographs of the project facilities locations and the project vicinity were reviewed to aid in determining the distances of residences to the proposed pumping plant. The analysis assumes that the pumping plant will be sound buffered to the extent that objectionable noise will not be heard by residences on the south side of the Snake River. For purposes of the following analysis, a substantial adverse impact is one where noise levels from the project results in an ambient average noise level that exceeds 55 decibels (dB) at a residence (IDT 2011). For residences where the average ambient noise level already exceeds 55 dB, a project related increase of 15 dB over the ambient average noise level would be considered substantial (IDT 2011). Table 3-2 below lists representative noise levels as perceived by the human ear (expressed in A-weighted decibels).
Table 3-2. Representative inside and outside noise levels as measured in dBA units (USDOT FHA 2006).

<table>
<thead>
<tr>
<th>At a Give Distance from Noise Source</th>
<th>A-Weighted Sound Level in Decibels</th>
<th>Noise Environments</th>
<th>Subjective Impression Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil defense siren (100’)</td>
<td>— 140 —</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jet takeoff (200’)</td>
<td>— 130 —</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— 110 —</td>
<td>Rock music concert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel pile driver (100’)</td>
<td>— 100 —</td>
<td></td>
<td>Very loud Hearing damage after 15 minutes exposure</td>
</tr>
<tr>
<td>— 95 —</td>
<td></td>
<td></td>
<td>Repeated exposure risks permanent hearing loss</td>
</tr>
<tr>
<td>Heavy truck (50’)</td>
<td>— 90 —</td>
<td>Boiler room</td>
<td>Very annoying Hearing damage (8 hours)</td>
</tr>
<tr>
<td>Freight cars (50’)</td>
<td></td>
<td>Printing press plant</td>
<td></td>
</tr>
<tr>
<td>Pneumatic drill (50’)</td>
<td>— 80 —</td>
<td></td>
<td>Annoying, intrusive interferes with conversation</td>
</tr>
<tr>
<td>Freeway (100’)</td>
<td></td>
<td>In Kitchen With Garbage Disposal Running</td>
<td></td>
</tr>
<tr>
<td>Vacuum cleaner (10’)</td>
<td>— 70 —</td>
<td></td>
<td>Moderately loud intrusive, interferes with telephone conversation Noise begins to harm hearing</td>
</tr>
<tr>
<td>Air conditioning unit (20’)</td>
<td>— 60 —</td>
<td>Data processing center</td>
<td></td>
</tr>
<tr>
<td>Light traffic (100’)</td>
<td>— 50 —</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large transformer (200’)</td>
<td>— 40 —</td>
<td>Private business office</td>
<td>Quiet</td>
</tr>
<tr>
<td>— —</td>
<td>Quiet bedroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft whisper (5’)</td>
<td>— 30 —</td>
<td>Recording studio</td>
<td>Very quiet</td>
</tr>
<tr>
<td>— 20 —</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— 10 —</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— 0 —</td>
<td></td>
<td></td>
<td>Threshold of hearing</td>
</tr>
</tbody>
</table>
**Alternative 1 (No Action)**

**Short-term Impacts**

If Alternative 1 is implemented, no project facilities would be constructed, therefore, no construction vehicles, equipment, and workers would be at the project sites, no construction activities would occur, and no short-term construction noise would be heard at the nearest residences to the project facilities. Therefore, there would be no short-term impact on ambient noise levels from project construction activities.

If the No Action alternative is implemented and water becomes unavailable for crop irrigation, then lands may be temporarily forced out of agricultural production (short-term fallowing) until another water source or delivery option is developed, or a different (less water intensive) crop is planted. If this occurred, then the noise that would be typically heard in an agricultural community from farm equipment, vehicles, and workers would not be heard. This would result in a short-term change in ambient noise levels.

**Long-term Impacts**

The long-term impact on ambient noise levels of implementing the No Action alternative would be the same as described for the short-term, but the impacts would continue indefinitely until another water source, water delivery option, or crop change occurs.

**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, pipelines, a transmission line, and access road within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water from the Snake River to various locations along the pipeline alignment. These short-term and long-term activities would not result in adverse noise impacts; there are few residences in the vicinity of the project facility sites and appropriate noise attenuation (i.e., general maximum of 55 dB at the nearest residence) is expected to result from the design plan for the project pumping plant.

**Short-term Impacts**

Construction activities associated with Alternative 2 facilities would generate noise from materials deliveries, vegetation removal, grading and other land preparation activities, pumping plant construction (in water and on land), pipeline trenching and installation, installation of transmission line poles and stringing conductor on the poles, waste pickup, and land restoration. In addition, the increased traffic on the local roads leading to the project facilities would result in additional traffic noise.
Not all vehicles and pieces of equipment are expected to be used simultaneously, but would be used intermittently throughout the entire construction phase of the project. It is expected that the vehicles and equipment would be used only on Mondays through Fridays during daylight hours (approximately 7:00 a.m. to 7:00 p.m.). Nighttime and weekend construction is not planned, but may be needed at times. Construction is expected to start in the fall, and continue during the winter months, depending on weather conditions.

These increases in local noise levels would be short-term, occurring only during the construction period. Some of the project construction noise may be similar to that heard during farming operations. Therefore, construction of Alternative 2 would not result in substantial short-term noise impacts.

**Long-term Impacts**

Long-term and continuous noise from O&M associated with Alternative 2 would be generated from the pumps at the pumping plant and from the transmission line. Other noise sources during project O&M include the regular inspections of the project facilities and repairs, as needed. This periodic noise would be generated from the maintenance vehicles, maintenance and repair equipment, and the personnel. These noises would be consistent with current noise in the project area.

To the north, east, and west of the pumping plant site, the land is undeveloped open space and agricultural land uses, with a few rural residences located approximately 0.5 to 0.9 mile away (to the west, northwest, north, northeast, and east). The Snake River is on the south side of the pumping plant site. The nearest residence is located approximately 0.2 mile to the south of the pumping plant site, on the south side of the Snake River. The periodic noise that would be generated during inspections, maintenance, and repairs of project facilities over the long-term would not differ markedly from the noise generated by farm equipment in the area and therefore would not result in an unusual impact the nearest residences. The continuous long-term noise that would be generated would also not result in a large increase in noise levels at residences in the surrounding area due to (1) the distance to the nearest northern, western, and eastern residences, and (2) the sound attenuation that would accompany the protective berms, vegetation, and other structural/protective components that would be included as part of facility design at the pumping plant. In the latter regard, the design elements included to protect and reduce the visibility of pump station components would result in sound attenuation as part of facility design. Even though the Right to Farm Act requires no direct mitigation for agricultural equipment noise in an agricultural area (i.e., the study area), the project proponent intends to voluntarily achieve a rural/suburban noise generation standard, such as that cited above, at the nearest residence as part of project design.
Mitigation

The following mitigation measures would be implemented to minimize the impacts to ambient noise levels from construction. Noise from O&M of Alternative 2 will be mitigated as a result of pump design and therefore no mitigation measures for operation are included below.

- Noisy construction equipment would be placed on the construction sites so that they are as far away as possible from sensitive receptors (occupied residences). It may be possible to buffer them by placing other pieces of equipment/vehicles between the noise source and the receptor.
- Construction equipment would have mufflers, if standard; be in good working condition; and be maintained properly.
- Noisy equipment would be used only on Monday through Friday during daylight hours (approximately 7:00 a.m. to 7:00 p.m.). If nighttime and/or weekend construction is determined needed, or if construction activities are determined to be needed outside of the above-listed window of hours, a written notification would be delivered to all of the residences located within a one-mile radius of the project facility at least 48 hours prior to the construction schedule change.
- Operations equipment would be state-of-the-art; have mufflers, if standard; be in good working condition; and be maintained properly.

Alternative 3 (Preferred Alternative)

Short-term Impacts

This alternative would result in the same noise impacts as was discussed for Alternative 2. The only differences are that this alternative has a slightly longer pipeline, transmission corridor, and extent of access roads. The construction duration including any impacts on ambient noise levels is expected to be similar to Alternative 2.

Long-term Impacts

This alternative would result in the same noise impacts as discussed for Alternative 2. The existing land use at the Alternative 3 pumping plant site is agriculture and undeveloped open space, with a road in the southern portion of the parcel and a few trees near the center and southern boundary of the parcel. The nearest rural residences are located approximately 0.4 mile to the northeast and approximately 0.4 mile to the southeast on the south side of the Snake River.

Mitigation

Mitigation measures for Alternative 3 would be the same as those for Alternative 2.
3.7 Vegetation

**Alternative 4**

This alternative would result in the same noise impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same noise impacts as discussed for Alternative 2. The only differences are that this alternative has a longer pipeline line than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. The construction duration for Alternative 4 is expected to be longer than Alternative 2; therefore, the duration of short-term impacts to noise would also be longer.

**Long-term Impacts**

This alternative would result in the same noise impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

The Alternative 4 pumping plant site is almost completely in agricultural land use, with a few trees at the southeast corner of the parcel and a road at the southern end. There are a few rural residences located approximately 0.7 to 1.25 miles to the northwest, north, and northeast. The nearest residences are located approximately 0.6 mile to the south of the pumping plant site, on the south side of the Snake River. For the same reasons discussed for Alternative 2, no substantial long-term noise impact would be expected from this alternative.

**Mitigation**

Mitigation measures for Alternative 4 would be the same as those described for Alternative 2.

**Cumulative Impacts**

No cumulative impacts to noise are anticipated as a result of the proposed project.

3.7 Vegetation

**Study and Analysis Methodology**

The primary source of information for this analysis includes the Reclamation’s RMP (Reclamation 2005) and EA (Reclamation 2004a). These documents address lands owned by Reclamation in Minidoka County, Idaho, which includes the project area. While the project will be constructed primarily on private land, these lands are adjacent to or surrounded by Reclamation lands. As such, the data in the RMP and EA was extended to include the private
lands within the project area. The IDFG Fish and Wildlife Information System (FWIS) was also consulted (IDFG 2012). A site visit was conducted to observe existing conditions at the proposed pumping station locations and along the proposed pipeline corridors.

**Area of Potential Effect**

The APE for vegetation resources is the project footprint. This encompasses the proposed pipeline corridor ROWs, pumping stations, and any additional areas facilitating construction traffic and storage.

### 3.7.1 Affected Environment

This section describes existing vegetation resources, including State of Idaho and U.S. Bureau of Land Management (BLM) sensitive species that occur or could potentially occur within the project area. Any federally listed threatened and endangered species are not addressed here.

Historically, lands within the project area consisted of shrub-steppe habitat, which is characterized by woody, mid-height shrubs, perennial bunchgrasses and forbs. Within the project area, the original vegetation included Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*), bluebunch wheatgrass (*Pseudoroegneria spicata*), Sandberg bluegrass (*Poa secunda*), needlegrasses (*Hesperostipa spp.*), lupine (*Lupinus spp.*), Indian paintbrush (*Castilleja spp.*), and penstemon (*Penstemon spp.*).

During the 2013 site visit, four major land cover types were delineated within the project area. These are discussed below.

- Crop and pasture lands consist chiefly of row crops, small grains, and hay. Most of the lands within the project area have been converted to irrigated agricultural land. The primary crops include alfalfa, beans, corn, peas, potatoes, small grains, and sugar beets.
- Rangeland throughout the area is characterized by big sagebrush shrubland. The dominant shrub is Wyoming big sagebrush, with yellow rabbitbrush (*Chrysothamnus viscidiflorus*) scattered throughout. Recent fires have left a degraded herbaceous understory, now dominated by invasive non-native species, including cheatgrass (*Bromus tectorum*), tall tumbledmustard (*Sisymbrium altissimum*), and crested wheatgrass (*Agropyron cristatum*).
- Property boundaries within the project area are dominated by non-native forb and grasslands. Common forb species include Canada thistle (*Cirsium arvense*), prickly lettuce (*Lactuca serriola*), tall tumbledmustard, clamping leaf pepperweed (*Lepidium perfoliatum*), and kochia (*Bassia scoparia*). Common grass species include smooth brome (*Bromus inermis*), cheatgrass, and crested wheatgrass.
• Riparian fringe is found along the Snake River. Species found here include Russian olive (*Elaeagnus angustifolia*), black cottonwood (*Populus trichocarpa*), willow (*Salix spp.*), softstem bulrush (*Schoenoplectus tabernaemontani*), and cattail (*Typha sp.*).

No special-status species occur within the APE.

### 3.7.2 Environmental Consequences

The quality of an area’s vegetation is an important factor in determining the suitability of wildlife habitat. Vegetation provides forage and cover for birds and wildlife, and can be an indicator of an area’s overall ecological integrity.

**Methods and Assumptions**

Impacts to vegetation were evaluated by the acreage of each land cover type potentially affected by the proposed actions. Impacts on vegetation resources would be considered significant if project implementation would be expected to reduce overall native vegetation resources through increased introduction of invasive species, particularly of legally noxious weeds and/or cheatgrass, and/or reduced habitat availability and function for wildlife habitat, especially breeding bird habitat, from reduction in riparian forested and/or shrub habitat.

Temporary impacts in Table 3-3 include pipeline installation. Permanent impacts in Table 3-3 include access roads, transmission lines, and pumping stations. For temporary pipeline impacts, acreages were calculated by multiplying the length of the pipeline crossing each land cover type by 100 feet, the width of the proposed construction corridor. However, in portions of the pipeline extending from the common point for Alternatives 2, 3, and 4, the 25-foot-wide access roads would be constructed within the 100-foot-wide pipeline corridor. For access road impacts, acreages were calculated by multiplying the length of the road crossing each land cover type by 25 feet, the width of the proposed access road. Pumping station impacts were determined by overlaying the land cover type map with the footprint (1.6 acres) of each proposed station. Transmission line impacts occur either within the pipeline/access road corridor (Alternatives 2, 3, and 4) or as new disturbances on the landscape (Alternative 3), in which case permanent impacts are anticipated to be limited to the installation of 20-inch-diameter t-poles every 300 feet. In the case of Alternative 3, the amount of poles required and total area of permanent impacts is negligible. These numbers are therefore not reflected in Table 3-3. There are no potential impacts to special-status plant species.
### Table 3-3. Summary of impacts to each land cover type by alternatives (in acres).

<table>
<thead>
<tr>
<th>Land Cover Type</th>
<th>Temporary</th>
<th>Permanent</th>
<th>Temporary</th>
<th>Permanent</th>
<th>Temporary</th>
<th>Permanent</th>
<th>Temporary</th>
<th>Permanent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumping Station, Access Road, and Pipeline Corridor from Common Point to Pump Station(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop/pasture</td>
<td>0</td>
<td>0</td>
<td>20.50</td>
<td>3.22</td>
<td>25.03</td>
<td>3.03</td>
<td>35.95</td>
<td>3.90</td>
</tr>
<tr>
<td>Rangeland</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.6</td>
<td>2.52</td>
<td>0.74</td>
<td>0.90</td>
<td>0.74</td>
</tr>
<tr>
<td>Property boundaries</td>
<td>0</td>
<td>0</td>
<td>11.66</td>
<td>0.76</td>
<td>6.77</td>
<td>0.37</td>
<td>8.98</td>
<td>1.26</td>
</tr>
<tr>
<td>Riparian fringe</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>trace</td>
<td>0</td>
<td>trace</td>
<td>0</td>
<td>trace</td>
</tr>
<tr>
<td>Subtotal</td>
<td>0</td>
<td>0</td>
<td>32.16</td>
<td>4.04</td>
<td>34.32</td>
<td>4.14</td>
<td>45.83</td>
<td>5.90</td>
</tr>
<tr>
<td>Pipeline Corridor from Common Point to End of Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop/pasture</td>
<td>0</td>
<td>0</td>
<td>119.01</td>
<td>0</td>
<td>119.01</td>
<td>0</td>
<td>119.01</td>
<td>0</td>
</tr>
<tr>
<td>Rangeland</td>
<td>0</td>
<td>0</td>
<td>13.33</td>
<td>0</td>
<td>13.33</td>
<td>0</td>
<td>13.33</td>
<td>0</td>
</tr>
<tr>
<td>Property boundaries</td>
<td>0</td>
<td>0</td>
<td>53.97</td>
<td>0</td>
<td>53.97</td>
<td>0</td>
<td>53.97</td>
<td>0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>0</td>
<td>0</td>
<td>186.31</td>
<td>0</td>
<td>186.31</td>
<td>0</td>
<td>186.31</td>
<td>5.90</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>218.47</td>
<td>4.04</td>
<td>220.63</td>
<td>4.14</td>
<td>232.14</td>
<td>5.90</td>
</tr>
</tbody>
</table>

**Alternative 1 (No Action)**

**Short-term Impacts**

Alternative 1 would have no short-term impacts on vegetation resources.

**Long-term Impacts**

Under Alternative 1, long-term impacts to vegetation would include the fallowing of agricultural fields currently in production. This fallowed ground could potentially be invaded by noxious weeds, which would lead to an increase in noxious weed cover and overall habitat degradation throughout the project area.
3.7 Vegetation

**Mitigation**

Property owners would be required to control noxious weeds on their land, as stated in the Idaho Noxious Weed Law (Idaho Code Ann. § 22-24). This would result in an economic impact within the project area.

**Alternative 2**

Alternative 2 would have temporary and permanent impacts on the vegetation within the project area. Impacts to each vegetation type under this alternative are shown in Table 3-3.

**Short-term Impacts**

Under Alternative 2, short-term impacts to the vegetation would include the removal of any existing vegetation within the construction corridor. These areas would be revegetated after the completion of construction. Crop areas would return to production as soon as appropriate. Disturbed sections within rangeland areas and along property boundaries would be reseeded with a mixture of native species, potentially including bluebunch wheatgrass, Sandberg bluegrass, lupine, and penstemon. The revegetation of these disturbed areas with native seed would result in the replacement of invasive non-native species, which would improve these areas over current conditions. Alternative 2 has the smallest amount of temporary vegetation impacts (218.47 acres). Alternative 2 also has the largest acreage of disturbed area dominated by rural vegetation (designated as population boundaries). Short-term impacts related to pipeline construction from the common point to the project’s end are the same for all action alternatives.

**Long-term Impacts**

Under Alternative 2, long-term impacts to vegetation would include the removal of vegetation within the pumping station footprint (1.6 acres) and the access road corridor (2.4 acres). Vegetation within these areas, including several large trees along the Snake River, would not be replaced. Transmission lines would occur within the access road corridor, and would have no additional impacts.

**Mitigation**

Prior to construction, weed control would be implemented on all ground being disturbed by this project. This would include the removal of noxious weeds via chemical and mechanical means. The revegetation of all disturbed areas immediately after construction would minimize open ground where weeds could germinate. Constraints to keep the public from driving onto reseeded areas would be incorporated into the project design.
Prior to entering the worksite and after work is finished, all vehicles would be power-washed to minimize the spread of noxious weeds. All weeds germinating on reseeded or revegetated construction sites would be controlled using an approved herbicide. A dye would be placed in the weed control slurry, so that spray radius could be seen by both the sprayer and A&B. Spraying would include a dripless wand method so that spray would not be accidently dripped on unintended vegetation.

**Alternative 3 (Preferred Alternative)**

Alternative 3 would have temporary and permanent impacts on the vegetation within the project area. Impacts to each vegetation type under this alternative are shown in Table 3-3. Mitigation, short-term impact, and cumulative impacts would be similar to those under Alternative 2, although temporary impacts are greater and total 220.63 acres. Long-term impacts caused by the construction of the access road (approximately 2.6 acres) and pumping plant (1.6 acres) would also be similar to those under Alternative 2, although the addition of a transmission line corridor outside of any other construction corridors would increase areas of permanent, although minimal, impact. Approximately 4 poles would be installed along the approximately 1,057 feet of transmission line outside of other construction areas resulting in approximately 8.8 square feet (2.18 square foot/pole) or 0.0002 acres of lost vegetation; the vegetation type is unknown until design is complete. Vegetation in these areas would be permanently removed. As with Alternative 2, a few large trees would be removed during pumping plant construction and would not be replaced.

**Alternative 4**

Alternative 4 would have temporary and permanent impacts on the vegetation within the project area. Impacts to each vegetation type under this alternative are shown in Table 3-3. Mitigation, short-term impacts, long-term impacts, and cumulative impacts under Alternative 4 would be similar to those under Alternative 2, although temporary impacts would be greater and total 232.14 acres. There would be a permanent vegetation loss of 1.6 acres for the pumping plant and 3.79 acres (6,596 feet) for the access road. The transmission line will be constructed within the access ROW and along existing property boundary lines and result in no additional loss of native vegetation or cropland.

**Cumulative Impacts**

No cumulative impacts to vegetation are anticipated as a result of the implementation of the proposed project.
3.8 Fish

This section describes existing fish and aquatic resources, including State of Idaho-listed sensitive species that occur or could potentially occur within the project area. Any federally-listed threatened and endangered species are not addressed here.

Study and Analysis Methodology

As for vegetation, the primary source of information for this analysis include the Reclamation’s RMP (Reclamation 2005) and EA (Reclamation 2004a), as well as the Middle Snake River Watershed Management Plan (IDEQ 1997). These documents provided information related to fish populations and assemblages in the area and approximate areas. The project will be constructed primarily on private land, these lands are adjacent to or surrounded by Reclamation lands. As such, the data in the RMP and EA was extended to include the private lands within the project area. The IDFG FWIS was also consulted (IDFG 2012). A site visit was conducted July 25 and 26, 2013, to observe existing conditions at the proposed pumping station locations and along the proposed pipeline corridors.

Area of Potential Effect

The APE for fish and aquatic resources includes the project footprint and extends upstream (in the Snake River) approximately 150 feet to accommodate for noise associated with construction and approximately 1,000 feet downstream to accommodate for sediment and turbidity that may result during construction and installation of the pump station. The project footprint encompasses the proposed pipeline corridor ROWs and pumping stations, and any additional areas facilitating construction traffic and storage. The primary potential for effects to fish and aquatic resources surrounds the pumping plant.

3.8.1 Affected Environment

The Snake River in the project area is designated as Hydrologic Unit Code 17040209. This stretch of the Snake River is influenced by hydroelectric development and receives return flows from irrigated agriculture, hatchery effluent, sewer treatment plant discharges, and natural spring flows.

Cold water biota and salmonid spawning are both designated as beneficial uses in the Snake River in the project area. Biological diversity of cold water biota has been reduced from historic conditions and is clearly stressed by water quality concerns surrounding temperature, nutrient loading, and sedimentation. In turn, salmonid spawning in this stretch is now confined to cold, clear, and well-oxygenated spring areas.
Aquatic biota in the Snake River that may occur in the project area include some threatened and endangered invertebrates, numerous exotic species, and a few remaining native species. Fish assemblages in the project area are indicative of both river and lake habitats. In total, as many as 20 species of fish (Table 3-4) are identified as having potential to occur in the area. Two of these species, Shoshone sculpin (*Cottus greenei*) and White Sturgeon (*Acipenser transmontanus Richardson*) are recognized as a state-sensitive species, with stateside ranks of S1 and S2, respectively (as determined by the IDFG IFWIS).

**Table 3-4. Fish species potentially occurring in the project area.**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largescale sucker</td>
<td><em>Catostomus catostomus</em></td>
<td>None</td>
</tr>
<tr>
<td>Bridgelip sucker</td>
<td><em>Catostomus colombianus</em></td>
<td>None</td>
</tr>
<tr>
<td>Shoshone sculpin</td>
<td><em>Cottus greenei</em></td>
<td>S2</td>
</tr>
<tr>
<td>Mottled sculpin</td>
<td><em>Cottus bairdi</em></td>
<td>None</td>
</tr>
<tr>
<td>Chisleumouth</td>
<td><em>Acrocheilus alutaceus</em></td>
<td>None</td>
</tr>
<tr>
<td>Cutthroat trout</td>
<td><em>Oncorhynchus clarki</em></td>
<td>None</td>
</tr>
<tr>
<td>Rainbow Trout</td>
<td><em>Oncorhynchus mykiss</em></td>
<td>None</td>
</tr>
<tr>
<td>Rainbow-Cutthroat hybrid</td>
<td><em>O. mykiss x O. clarki</em></td>
<td>None</td>
</tr>
<tr>
<td>Mountain whitefish</td>
<td><em>Prosopium williamsoni</em></td>
<td>None</td>
</tr>
<tr>
<td>White Sturgeon</td>
<td><em>Acipenser tranmontanus Richardson</em></td>
<td>S1</td>
</tr>
<tr>
<td>Speckled dace</td>
<td><em>Rhinichthys osculus</em></td>
<td>None</td>
</tr>
<tr>
<td>Redside shiner</td>
<td><em>Richardsonius balteatus</em></td>
<td>None</td>
</tr>
<tr>
<td>Utah Chub</td>
<td><em>Gila atraria</em></td>
<td>None</td>
</tr>
<tr>
<td>Channel catfish</td>
<td><em>Ictalurus punctatus</em></td>
<td>None</td>
</tr>
<tr>
<td>Brown bullhead</td>
<td><em>Ameiurus nebulosus</em></td>
<td>None</td>
</tr>
<tr>
<td>Yellow perch</td>
<td><em>Perca flavescens</em></td>
<td>None</td>
</tr>
<tr>
<td>Bluegill</td>
<td><em>Lepomis macrochirus</em></td>
<td>None</td>
</tr>
<tr>
<td>Smallmouth bass</td>
<td><em>Microperus dolomieui</em></td>
<td>None</td>
</tr>
<tr>
<td>Largemouth bass</td>
<td><em>Microperus salmoides</em></td>
<td>None</td>
</tr>
<tr>
<td>Common Carp</td>
<td><em>Cyprinus carpio</em></td>
<td>None</td>
</tr>
</tbody>
</table>

**Status: None**=No Special Status.

**S1**= Critically imperiled: at high risk because of extreme rarity (often five or fewer occurrences), rapidly declining numbers, or other factors that make it particularly vulnerable to rangewide extinction or extirpation.

**S2**= Imperiled: at risk because of restricted range, few populations (often 20 or fewer), rapidly declining numbers or other factors that make it vulnerable to rangewide extinction or extirpation.

The most abundant fish species known to occur in this section is the largescale sucker (*Catostomus marcocheilus*) (IDEQ 1997). Salmonids found in the area include rainbow trout (*Oncorhynchus mykiss*), cutthroat trout (*Oncorhynchus clarki*), and brown trout (*Salmo trutta*).
Cut-bows (rainbow trout-cutthroat trout hybrids) are also known to occur (IDFG 2001). Warm-water species present in the area include largemouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), bluegill (*Lepomis macrochirus*), yellow perch (*Perca flavescens*), and channel catfish (*Ictalurus punctatus*). Other species in the Middle Snake River Watershed include mountain whitefish (*Prosopium williamsoni*), mottled sculpin (*Cottus bairdi*), redside shiner (*Richardsonius balteatus*), Utah chub (*Gila atraria*), common carp (*Cyprinus carpio*), bridgelip sucker (*Catostomus columbianus*), chislemouth (*Acrocheilus alutaceus*), and speckled dace (*Rhinichthys osculus*) (IDEQ 1997).

The fishery below Minidoka Dam is directly affected by seasonally fluctuating water levels and poor water quality conditions in the area are exacerbated during low-flow periods. In general, the fishery is considered to be a moderate-use area that can produce trophy-size salmonids. Fishing is permitted all year, with salmonids and bass being the primary game species.

Although natural reproduction in the Snake River is limited by fluctuating water levels, lack of spawning gravels, heavy siltation, and generally poor water quality (IDEQ 1997), this stretch of the Snake River still supports a self-sustaining salmonid population that is not stocked. With the exception of spawning areas, trout habitat in the main Snake River is available throughout most of the free-flowing reaches between C.J. Strike Reservoir and Lake Walcott. It is especially good in the section between Milner Dam and King Hill, where large amounts of spring flow are discharged into the Snake River from the Snake River Plain Aquifer. Trout (such as rainbow, brown, cutthroat, and rainbow-cutthroat hybrids) are found in portions of the Snake River, below Minidoka Dam and Upper Salmon Falls Dam. The cutthroat trout and rainbow-cutthroat hybrids are found mainly in the area between Milner Dam and Twin Falls Dam, which has been seriously impacted by low flows during the irrigation season.

The bass population in the project area is also self-sustaining and more tolerant of poor water quality conditions than salmonids. Many of the tributaries to this section of the Snake River near the project area contain good trout habitat and continue to support healthy fish populations with species indicative of good water quality (such as sculpin). Some of these streams and springs in the area provide important spawning grounds for salmonids in the area.

### 3.8.2 Environmental Consequences

**Methods and Assumptions**

Effects to fish and other aquatic organisms may result from a variety of factors related to construction activities. These include reduced or impaired water quality, habitat alteration, and displacement of individuals. Impacts to fish and other aquatic biota were qualitatively determined by evaluating the potential effects of proposed construction activities and
considering the effects these may have on individual species, populations, and the habitats they occupy. These include the construction and O&M phases of the project.

Impacts on fisheries would be considered significant if project implementation would be expected to reduce overall reproductive fitness of established fisheries and other aquatic resources through increased introduction of invasive species, reduced habitat availability and function for established fisheries and aquatic resource populations (including deleterious impacts on the riparian corridor, increased erosion, decreased bank stability and/or altered flows), and/or mortality to fish or other aquatic resources that would not occur under current conditions.

**Alternative 1 (No Action)**

No direct or indirect, short-term, long-term, or cumulative effects to fish or aquatic resources would occur as a result of the No Action alternative.

**Alternative 2**

No effects to fish and aquatic resources in the Snake River would occur as a result of constructing the pipeline under any of the action alternatives. Constructing the pump station(s) does, however, have the potential to affect fish and aquatic resources. Effects to fish and other aquatic resources as a result of constructing the pump station under this alternative and the other action alternatives are primarily related to water quality over the short term, and the potential for entrainment/impingement of fish in the pumps over the long term. These effects are the same for each action alternative, as pump station construction would not vary.

**Short-term Impacts**

Short-term degradation of water quality from small plumes of sediment could likely be released into the Snake River during construction of the pump station, regardless of mitigation measures and methods implemented. Ground-breaking activities may have some potential for erosion in the short term; however, these effects would be minimized through implementation of mitigation measures and other BMPs. Other ground-breaking activities may have some potential for erosion in the short term; however, these effects would be minimized through the implementation of mitigation measures described below. The new construction areas surrounding the pump station would be potential sources of sediment until they are revegetated and stabilized, but delivery to the river would be very limited because of planned revegetation and other mitigation measures to be implemented.

To protect water quality from chemical contamination associated with Alternative 2, uncured concrete would not come in contact with flowing water; vehicles and other equipment would be refueled away from standing or flowing water in the Snake River and spill containment
equipment would be available during refueling. In turn, no effects from contaminants are anticipated.

Aquatic organisms (including those identified as state sensitive) have the potential to be temporarily disturbed during construction. Application of BMPs and mitigation measures would minimize impacts from construction, but the physical action of working in the stream would still likely displace individual organism. These organisms would be anticipated to return to the project area following cessation of construction activities. Short-term adverse effects to aquatic species (primarily in the form of displacement) may result in association with this alternative, as well as the other action alternatives.

**Long-term Impacts**

The short-term impacts surrounding sediment delivered to the river are not likely to be a cause of permanent decline in instream habitat quality. Water quality in the Snake River would not be degraded over the long term under this alternative. The riparian vegetation that would be removed during construction of the pump station and support structure is negligible and does not provide any effective stream shade. In turn, this is not anticipated to affect temperature in the Snake River (relative to existing conditions). Disturbed areas would be scarified, and the soil surfaces left with a rough, corrugated surface to help anchor seed. The concrete and riprap structure proposed in association with construction of the pump station would be amended by soils. Disturbed lands would be seeded with a mixture of native grasses suitable for the site. Slopes would be hydro-seeded including fertilizer and mulch to retain moisture and facilitate germination and survival. No long-term impacts related to slope erosion would therefore be anticipated under this alternative.

The footprint of the proposed pump station would alter bank composition from soils to concrete and riprap, but not to the extent that is anticipated to recognizably affect fish and other aquatic biota. Substrate composition and embeddedness would be minimally altered over the long term (in the pump station footprint) as a result of Alternative 2, but not to the extent that it would be anticipated to adversely affect fish or other aquatic biota.

Design of the pump station would create a slack pool at the intake(s) for the pump station. Although design of the pumps would minimize the potential for fish to be sucked into the pump station, there is still the potential for juvenile fish to be entrained and/or impinged on the screens. Due to the isolation of the slack water pool this would only occur to fish voluntarily entering the area and would not be anticipated to occur at a level that would noticeably affect fish at the population level.

**Mitigation**

Mitigation measures to minimize direct, indirect, short-term, and long-term impacts associated with this alternative (in addition to those identified in the project description above) are
described in the following text. The following measures to minimize potential detrimental effects to water quality include erosion and sediment control as well as measures to prevent deleterious materials associated with construction equipment from entering the water. No cumulative impacts to fish or other aquatic organisms are anticipated in association with this alternative and, in turn, no mitigation to address cumulative impacts is required. Guidelines that would be followed during construction of project features include:

Low-water Work Window

All instream work in the Snake River relative to the project will be conducted during low-flow conditions. All instream construction activities will be completed within one work season.

Fish Avoidance

All water intakes (pumps) used during project implementation will have a fish screen installed, operated, and maintained in accordance with IDFG fish screen standards.

Erosion Control Measures

Minimize Site Preparation Impacts

i. Site clearing, staging areas, access routes, and stockpile areas will be identified to minimize overall disturbance, minimize disturbance to riparian vegetation, and preclude sediment delivery to stream channels.

ii. Silt fence, straw bales, straw wattles, or other sediment barriers will be placed around disturbed sites to prevent sediment from entering a stream directly or indirectly, including by way of roads and ditches.

Minimize Earthmoving-related Erosion

i. Ground-disturbing activities will be confined to the minimum area necessary to complete the project.

ii. An onsite supply of erosion control materials (for example, silt fence and straw bales) will be used to respond to sediment emergencies. Sterile straw or “weed free” certified straw bales will be used to prevent introduction of noxious weeds.

iii. All project operations will cease, except efforts to minimize storm or high-flow erosion, under precipitation and high-flow conditions that result in uncontrollable erosion in the construction area.

iv. Sediment control measures will be installed prior to construction activities and will remain in place, until threats of erosion exceeding existing conditions cease. After this determination is made, all sediment control measures will be removed within 30 days and disposed of in accordance with all federal, state, and local laws and regulations.
Site Rehabilitation

i. Upon project completion, project-related waste would be removed. Rehabilitation of all disturbed areas would be conducted in a manner that results in conditions similar to pre-work conditions through spreading of stockpiled soil materials, seeding, and/or planting with native seed mixes or plants. If native stock is not available, soil-stabilizing vegetation (seed or plants) would be used that does not lead to propagation of exotic species.

ii. Only approved herbicide application would occur as part of the action.

iii. Trees will be retained at the project sites wherever possible. Instream or floodplain rehabilitation materials (if required) would mimic as much as possible those found in the project vicinity. Such materials may be salvaged from the project site or hauled in from offsite, but cannot be taken from streams, wetlands, or other sensitive areas.

iv. Site rehabilitation activities will be completed prior to the end of the construction field season.

Pollution Control Measures:

State Water Quality Guidelines and Clean Water Act

The CWA requires states to set water quality standards sufficient to protect designated and existing beneficial uses. In Idaho, “Sediment shall not exceed quantities…which impair designated beneficial uses. Determinations of impairment shall be based on water quality monitoring and surveillance and the information utilized as described in Section 350.” (Idaho Administrative Procedures Act [IDAPA] 58.01.02.200.08). In Idaho State Water Quality Standards for Aquatic Life (Section 250), “Turbidity shall not exceed background turbidity by more than 50 nephelometric turbidity units (NTUs) instantaneously (at any point in time)” (IDAPA Idaho Code 58.01.02.350.01.a). In Section 350 (Rules Governing Nonpoint Source Activities), “Best management practices should be designed, implemented, and maintained to provide full protection or maintenance of beneficial uses. Violations of water quality standards which occur in spite of implementation of best management practices would not be subject to enforcement action. However, if subsequent water quality monitoring and surveillance indicate water quality standards are not met due to nonpoint source impacts, even with the use of current best management practices, the practices would be evaluated and modified as necessary by the appropriate agencies in accordance with the provisions of the Administrative Procedures Act” (IDAPA 58.01.02.350.01.a).

Project actions will follow all substantive requirements of the CWA and provisions for maintenance of water quality standards under the jurisdiction of the DEQ. Project activities will be in substantive compliance with all applicable state and federal laws and processes (for example, Section 404 permits).
Spill Prevention, Containment, and Reporting

All vehicles carrying fuel will have specific equipment and materials needed to contain or clean any incidental spills at the project site. Equipment and materials will be specific to the project site and will include a spill kit appropriately sized for specific quantities of fuel (absorbent pads, straw bales, containment structures and liners, and/or booms). Storing and refueling areas will be located away from streams in areas where a spill would not have the potential to reach live water. Containment structures will be used as appropriate to prevent spilled material from reaching live water. All pumps and generators used within Snake River floodplain will have appropriate spill containment structures and/or absorbent pads in place during use.

Should quantities of stored fuel for the project exceed 1,320 gallons, A&B will be required to have a standard EPA written Spill Prevention Control and Countermeasures (SPCC) Plan onsite that describes measures to prevent or reduce impacts from potential spills (e.g., from fuel or hydraulic fluid) (40 CFR 112, Oil Pollution Act relating to SPCC Plans).

A&B will be required to prepare a written spill plan, also known as a Stormwater Pollution Prevention Plan (SWPPP). The plan will conform with NPDES general permit requirements and contain a description of the specific hazardous materials, procedures, and spill containment that will be used, including inventory, storage, and handling.

Federal and Idaho state regulations regarding spills will be followed (see http://www.deq.state.id.us/water/data_reports/storm_water/catalog/index.cfm). Any spills resulting in a detectable sheen on water would be reported to the EPA National Response Center (1-800-424-8802). Any spills over 25 gallons will be reported to the IDEQ (1-800-632-800) and cleanup will be initiated within 24 hours of the spill.

NPDES Construction General Permit

Compliance with a NPDES Construction General Permit (CGP) will prevent water quality impacts. EPA, Region 10, is the NPDES permitting authority for Idaho and as such is responsible for issuing NPDES stormwater permits (IDEQ does not have an EPA-approved NPDES program). Construction site operators engaged in clearing, grading, and excavating activities that disturb 1 acre or more are required to obtain coverage under an NPDES permit for their stormwater discharges. Coverage under the CGP will be necessary for stormwater management associated with construction activities (clearing, grading, and excavation) and requires a Notice of Intent, and an SWPPP containing erosion control measures. Coverage under this permit is available only if stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are not likely to jeopardize the continued existence of any species that are federally listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is federally
designated as critical under the ESA (critical habitat). This federally-issued CGP triggers the requirement for ESA review. ESA review requires informal consultation with the USFWS, or may trigger formal Section 7 Consultation between EPA and USFWS. This may result in the requirement for biological surveys to assess risk of federally listed species and mitigative action under Section 10 of the ESA. In order to be eligible for coverage under this permit, consultation must result in a “no jeopardy opinion” or a written concurrence by the USFWS and/or NOAA Fisheries on a finding that the stormwater discharge(s) and stormwater discharge-related activities are not likely to adversely affect listed species or critical habitat.

Coverage under the CGP does not trigger review under NEPA because the CGP does not regulate new sources (that is, dischargers subject to New Source Performance Standards under Section 306 of the CWA), and is thus statutorily exempted from NEPA. However, some construction activities might require review under NEPA for other reasons such as Federal funding or other Federal involvement in the project.

**Minimize Exposure to Heavy Equipment Fuel/Oil Leakage**

Methods to minimize fuel/oil leakage from construction equipment into the stream channel will include the following:

i. All equipment used for instream work will be cleaned of external oil, grease, dirt and mud, and leaks repaired, prior to arriving at the project site. All equipment will be inspected by the Contract Administrator before unloading at site. Any leaks or accumulations of grease will be corrected before entering streams or areas that drain directly to streams or wetlands. Equipment shall not have damaged hoses, fittings, lines, or tanks with the potential to release pollutants into any waterway.

ii. Equipment used for instream or riparian work will be fueled and serviced in an established staging area. When not in use, vehicles will be parked in the designated staging area. The staging area will be in an area that would not deliver fuel or oil, for example, to streams.

iii. Oil-absorbing floating booms and other equipment, such as absorbent pads appropriate for the size of the stream, will be available onsite during all phases of construction. Booms will be placed in a location that facilitates an immediate response to potential petroleum leakage.

iv. Vehicle staging, cleaning, maintenance, refueling, and fuel storage will occur as far as possible from any stream, waterbody, or wetland to minimize concerns associated with exposure to fuel and other fluids.

**Aquatic Invasive Control Measures**

Many streams have invasive aquatic species such as the New Zealand Mudsnail and Whirling Disease. Many of these species are practically invisible to the naked eye and impossible to
detect if attached to heavy equipment. To ensure that equipment is not contaminated, any visible plants, mud, and dirt will be removed at a predetermined decontamination area away from the Snake River or other waters.

**Alternative 3 (Preferred Alternative)**

All impacts to and mitigation measures for fish and aquatic resources related to Alternative 3 would be the same as identified above for Alternative 2.

**Alternative 4**

All impacts to and mitigation measures for fish and aquatic resources related to Alternative 4 would be the same as identified above for Alternative 2.

**Cumulative Impacts**

No cumulative impacts to fish or other aquatic organisms would occur as a result of the proposed project.

### 3.9 Wildlife

This section describes existing wildlife resources, including State of Idaho and BLM-sensitive species that occur or could potentially occur within the project area. Any federally listed threatened and endangered species are addressed in Section 3.10.

**Study and Analysis Methodology**

The primary sources of information for this analysis include the Reclamation RMP (Reclamation 2005) and EA (Reclamation 2004a). The data in the RMP and EA was extended to include the private lands within the project area. The IDFG FWIS was consulted for wildlife (IDFG 2012) and evaluated during the site visit on July 25 and 26, 2014.

**Area of Potential Effect**

The APE for wildlife resources includes the project footprint and includes a buffer of approximately 1/2 mile to accommodate for concerns to wildlife related to noise generated during construction of the project. The project footprint encompasses the proposed pipeline corridor ROWs and pumping stations, and any additional areas facilitating construction traffic and storage.
3.9 Wildlife

3.9.1 Affected Environment

Wildlife use in the APE is directly related to the habitat available. As described in Section 3.7 – Vegetation, habitats available include irrigated crop land, sagebrush with a degraded herbaceous layer, and property boundary areas dominated by non-native grasses and forbs. One additional terrestrial habitat within the wildlife APE is riverine riparian shrub/forest. Riparian habitat is concentrated in a narrow band along the Snake River and is dominated by Russian olive (*Elaeagnus angustifolia*) with scattered cottonwood (*Populus trichocarpa*) and willow (*Salix sp.*). Aquatic habitats include palustrine emergent marsh (PEM) and open water. PEM habitat is found along the shoreline of the Snake River and in a small constructed wetland to the south of the pipeline ROW between Pumping Station #3 and the common pipeline point (see Figure 2-2). Emergent wetlands are dominated by cattails (*Typha spp.*) and bulrush (*Scirpus spp.*). The open water habitat includes the Snake River, stock ponds, and drain water areas with no wetland vegetation.

Compared to historical conditions, wildlife diversity in the APE has decreased through reduction in native vegetation and plant structural diversity, overgrazing, and fire (Sands, Sather-Blair, and Saab 2000). Wildlife is mostly restricted to species tolerant of the interspersed sagebrush-cropland habitat with the exception of the wetland and open water species.

The predominant big game species are scattered mule deer (*Odocoileus hemionus*) and pronghorn (*Antilocarpa americana*). Mule deer are both resident and migratory, with numbers increasing during severe winters (Reclamation 2004a). Terrestrial furbearing mammals likely to occur include coyote (*Canis latrans*), red fox (*Vulpes vulpes*), and badger (*Taxidea taxus*). Wetland and open water furbearers likely include raccoons (*Procyo lotor*), muskrats (*Ondatra zibethica*), long-tailed weasels (*Mustela frenata*), and mink (*Mustela vison*). Black-tailed jackrabbits (*Lepus californicus*) and deer mice (*Peromyscus maniculatus*) are common small mammals.

Birds are the most common wildlife in the APE. These include nongame birds that breed on sagebrush parcels such as common nighthawks (*Chordeiles minor*), western kingbirds (*Tyrannus verticalis*), sage thrashers (*Oreoscoptes montanus*), loggerhead shrikes (*Lanius ludovicianus*), and Brewer’s sparrows (*Spizella breweri*) (Reclamation 2004a). Common game birds include pheasant (*Phasianus colchicus*), gray partridge (*Perdix perdix*), and mourning dove (*Zenaida macroura*).

More than 230 species of birds have been observed at the Minidoka NWR since 1950, according to USFWS (2002). The more common breeding raptors are northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo Jamaicensis*), American kestrel (*Falco sparverius*), and burrowing owl (*Athene cunicularia*). Less common raptors that are present during migration or summer include prairie falcon (*E. mexicanus*), Swainson’s hawk (*B. swainsoni*), ferruginous
hawk (*B. regalis*), turkey vulture (*Cathartes aura*), short-eared owl (*Asio flammeus*), and great horned owl (*Bubo virginianus*) (Reclamation 2004a). The most abundant wintering raptors are the rough-legged hawk (*Buteo lagopus*), red-tailed hawk, and prairie falcon. Northern goshawks (*Accipiter gentilis*) may be present in the winter, especially near the Snake River, and golden eagles (*Aquila chrysaetos*) may also be present during winter (Reclamation 2004a). A red-tailed hawk was exhibiting nest protection behavior during the 2013 field visit adjacent to the Pump Station #2 location.

Migrating and nesting waterfowl habitat is present along the Snake River and in wetlands and open water habitat in the APE. Although specific surveys to document wildlife use were not conducted, it is likely that species that use the nearby Minidoka NWR would also use the APE. Waterfowl species most likely to use the APE include mallards (*Anas platyrhynchos*), gadwalls (*A. strepera*), and cinnamon teal (*A. cyanoptera*) (Reclamation 2004a; USFWS 2002). Limited numbers of redheads (*Aythya americana*), ruddy ducks (*Oxyura jamaicensis*), pintails (*Anas acuta*), American wigeon (*Anas americana*), and northern shovelers (*Anas clypeata*) breed in the Minidoka NWR and may occasionally use wetlands in the APE. Wintering waterfowl including Canada geese (*Branta canadensis*), mallards, pintails, gadwalls, American wigeon, northern shovelers, and green-winged teal (i) and tundra swans (*Cygnus columbianus*) forage in grain fields in relatively low numbers during migration (Reclamation 2004a).

Shorebirds potentially found along the Snake River and other APE wetlands include great blue herons (*Ardea herodias*), American avocets (*Recurvirostra americana*), long-billed curlews (*Numenius americanus*), and killdeer (*Charadrius vociferous*). Red-winged blackbirds (*Agelaius phoeniceous*) and white-faced ibis (*Plegadis chihi*) were observed during the 2013 field visit.

In recent years, pheasants have declined drastically (Rybarczyk and Connelly 1985) compared to historical conditions. Much of the decline is due to loss of permanent and carry-over wintering and nesting habitat that resulted from changes in farming practices. Conversion of rangelands to agriculture, more efficient farming, loss of roadside cover, removal of riparian vegetation, increased use of herbicides and insecticides, and burning of fence rows and ditch banks have also contributed to the decline. In addition to pheasants, other upland game species in the project area include gray partridge (*Perdix perdix*), mourning dove (*Zenaida macroura*), and Nuttall’s cottontail (*Sylvilagus nuttallii*) (Reclamation 2004a).

Amphibians and reptiles expected to occur include long-toed salamanders (*Ambystoma macrodactylum*), pacific treefrogs (*Hyla regilla*), western chorus frogs (*Pseudacris triseriata*), longnose leopard lizards (*Gambelia wislizenii*), side-blotched lizard (*Uta stansburiana*), racers (*Coluber constrictor*), gopher snakes (*Pituophis melanoleucus*), garter snakes (*Thamnophis spp.*), and western rattlesnakes (*Crotalus viridis*) (Reclamation 2004a).
Federal agencies are required to protect migratory birds under the four Migratory Bird Treaties (MBT) Conventions to which the United States is a signatory (EO 13186). Many North American birds are considered migratory under one or more of the MBT Conventions. There are likely migratory birds nesting in the APE including raptors, waterfowl, and songbirds.

There are no known occurrences of threatened or endangered species in the APE (IDFG 2012).

### 3.9.2 Environmental Consequences

Wildlife is found throughout the APE and is an important resource for ecological, recreational, and aesthetic purposes. Game species are pursued during recreational hunting seasons and bird watching is a popular activity where public access is permitted. Nesting habitat along the Snake River and foraging habitat in agricultural fields provides an important resource to support migratory birds and the food chain above them.

**Methods and Assumptions**

Wildlife impacts are directly related to vegetation (habitat) loss described in Section 3.7 – Vegetation and indirectly to construction-related activities such as noise, vehicle collisions, and human presence. There are no known special status wildlife species in the APE and therefore no impacts are anticipated to special status wildlife species. For purposes of the following analysis, the criterion for a significant adverse impact is one that endangers the long-term viability of local or regional wildlife populations. A significant beneficial impact is one that substantially increases the size or viability of local or regional wildlife populations.

**Alternative 1 (No Action)**

**Short-term Impacts**

Current conditions would continue under the No Action alternative. There would be no additional short-term impacts.

**Long-term Impacts**

There would be beneficial and adverse wildlife impacts over the long term resulting from no action. Aquifer drawdown will eventually result in an unknown acreage of irrigated areas reverting to a fallow condition. Wildlife habitat for nesting and foraging will improve where the abandoned cropland reverts to native shrub and herbaceous species. Abandoned cropland that is colonized by invasive and non-native vegetation will provide poor habitat conditions and not benefit most wildlife species. Loss of irrigated grain fields will reduce forage available to certain migratory species such as tundra swans and geese. The magnitude of these effects cannot be determined with confidence, as it is not known how much or at what rate irrigated land will go fallow from lack of water.
Alternative 2

Short-term Impacts

Temporary removal of vegetation and construction activity would result in short-term wildlife impacts. Approximately 139.51 cropland/pasture acres, 13.33 rangeland acres, and 65.63 acres of property boundary areas would be cleared for construction of the pipeline. This habitat would be lost for breeding and foraging during construction and for up to one growing season following construction as vegetation recovers. Minimal short-term impacts related to the construction of the pipeline from the common point to the project’s end are the same for all action alternatives.

Construction activities could result in limited mortality of small mammals, reptiles, and amphibians that cannot quickly move out of the ROW prior to clearing. Wildlife/vehicle collisions during construction could also possibly result in mortality. The small number of individuals affected relative to the size of the local and regional populations would not result in an adverse impact.

Construction is anticipated as taking place during the fall and winter months, but may continue into the spring. Construction during spring and early summer would disrupt migratory bird nesting activity, particularly in wetland and woody habitats. Sound will startle nesting wildlife within the APE’s buffer and potentially result in nest abandonment. Raptors are especially sensitive to human disturbance around nests. Mitigation measures would reduce this effect, but not entirely, particularly for waterfowl. There would be no effect to birds protected under the MBT Conventions following implementation of mitigation.

Long-term Impacts

Habitat along the pipeline ROW would be restored following construction to the same habitat type as existed prior to disturbance. The exception is in the 65.63 acres of property boundary areas where revegetation would use native plant species to replace the previous condition of non-native and invasive plant species. This will be beneficial, as the new habitat would be a higher quality than that removed.

Approximately 1.6 acres of shoreline habitat would be permanently lost at the pump station location. The habitat includes herbaceous vegetation and a few scattered cottonwood and Russian olive trees. Trees are scattered and in clumps along the shoreline adjacent to the site and do not have a continuous canopy. Therefore, the removal of the trees would not be disrupting any wildlife travel corridor. The short statured nature of the herbaceous vegetation does not provide waterfowl or shorebird nesting habitat, although migratory birds could nest in the trees. The trees would be permanently lost, but herbaceous vegetation would be replanted. There will be no adverse impact as no local or regional wildlife populations are threatened by
this action. Mitigation measures described below would avoid long-term impacts to migratory birds at the pumping station.

Approximately 2.4 acres of primarily crop/pasture land would be lost with construction of access roads. There will be no adverse impact as no local or regional wildlife populations are threatened by this action. No habitat would be lost to transmission line construction.

There is the possibility for avian/power line interaction on the electric transmission power poles constructed to supply power to the pumps. Birds, especially raptors, utilize power poles for nesting and perching, resulting in an electrocution risk. Implementation of the guidelines to protect birds published by the Edison Electric Institute’s, Avian Power Lines Interaction Committee (APLIC) would reduce this risk to non-significance (APLIC 2006).

**Mitigation**

The following mitigation measures would be implemented to reduce any potential impacts.

- Land disturbed by construction would be the minimum needed to minimize habitat disruption.
- Areas disturbed during construction would be restored following construction to avoid long-term effects on wildlife habitat.
- Construction and laborer vehicle speed would be kept low to minimize vehicle/wildlife collisions.
- Construction would be confined to daylight hours to avoid light pollution impacts on wildlife.
- Vegetation clearing would be completed during the non-breeding season (mid-summer to late winter) to avoid disturbance to nesting migratory species.
- Pre-construction breeding bird surveys would be conducted to ensure there are no active nests.
- Construction would not be allowed adjacent to active migratory bird nests until the young have fledged from the nest.
- The pump station would be sound insulated to avoid disturbing wildlife during operation.
- The avian protection measures published by APLIC shall be included in the power line design specification.
- Public access would be prohibited to the pipeline corridor and pumping station after construction to minimize disturbance.
**Alternative 3 (Preferred Alternative)**

All impacts to and mitigation measures for wildlife resources related to Alternative 3 would be essentially the same as identified above for Alternative 2 with the exceptions below.

**Short-term Impacts**

Approximately 144.04 cropland/pasture acres, 15.85 rangeland acres, and 60.74 property boundary lands would be cleared for construction of the pipeline. Some short-term impacts may occur as this habitat would be lost for breeding and foraging during construction and possibly through one growing season following construction as vegetation recovers.

**Long-term Impacts**

Based on behavior observed during field surveys, a red-tailed hawk was believed to be nesting at this location, although the nest was not located. Operation of the pumping station may result in this hawk relocating its nest to another location along the shoreline, depending on the level of human use for maintenance. There would be no adverse impact as there are numerous alternative nesting locations available. No additional migratory bird impacts would be anticipated.

Of the approximate 1.6 acres permanently impacted by the pump station, a greater amount (0.74 acres) of rangeland would be impacted, as compared to Alternative 2. Approximately 2.6 acres of primarily crop/pasture land would be lost with construction of the access road to the pumping station. There would be no impact as no local or regional wildlife populations are threatened by this action.

Approximately 8.8 square feet of habitat would be permanently lost due to power pole footprints. No long-term impacts to any regional or local wildlife population will occur. Nesting and foraging activities would resume as before construction.

**Mitigation**

Mitigation measures as discussed under Alternative 2 would be implemented to reduce any potential impacts.

**Alternative 4**

All impacts to and mitigation measures for wildlife resources related to Alternative 4 would be the same as identified above for Alternative 2, except as follows.
3.10 Threatened and Endangered Species

**Short-term Impacts**

Approximately 154.96 cropland/pasture acres, 14.23 rangeland acres and 62.96 acres of property boundary land would be cleared for construction of the pipeline. Some short-term impacts may occur as this habitat would be lost for breeding and foraging during construction and possibly through one growing season following construction as vegetation recovers.

**Long-term Impacts**

Of the approximate 1.6 acres permanently impacted by the pump station, a greater amount (0.74 acres) of rangeland would be impacted, as compared to Alternative 2. Approximately 3.79 acres of crop/pasture and property boundary land would be lost with construction of the access road to the pumping station. There would be no impact as no local or regional wildlife populations are threatened by this action. There would be no habitat lost due to power pole footprints as the poles would be in the access road ROW.

**Mitigation**

Mitigation measures as discussed under Alternative 2 would be implemented to reduce any potential impacts.

**Cumulative Impacts**

No cumulative impacts to Wildlife would occur as a result of the proposed project.

3.10 Threatened and Endangered Species

The area of impact is located within southwestern Minidoka County extending from the Snake River north approximately 8 miles. The USFWS web site for Idaho identifies all the listed, proposed, and candidate species for each county (USFWS 2014). Species that are known or expected to occur in the area of impact or that occur near the area of impact are the Snake River physa (endangered), Bliss Rapids Snail (threatened), greater sage-grouse (candidate), and Yellow-billed Cuckoo (threatened). Expected presence in the area of impact is based on habitat suitability, occurrence of similar habitats, and available literature.

Additionally, Reclamation’s actions in the upper Snake include the provision of flow augmentation to benefit migrating salmon and steelhead in the Snake and Columbia River systems. Therefore, this analysis will identify potential impacts in Reclamation’s ability to provide salmon flow augmentation water as a result of implementation of the action alternatives.
3.10 Threatened and Endangered Species

3.10.1 Affected Environment

Aquatic Mollusks

Five species of aquatic mollusks in the middle Snake River were listed as endangered or threatened in 1992 (57 FR 59244). The Banbury Springs lanx (*Lanx sp.*), the Idaho springsnail (*Pyrgulopsis idahoensis*), the Snake River physa (*Physa natricina*), and the Utah valvata (*Valvata utahensis*) were listed as endangered. The Bliss Rapids snail (*Taylorconcha serpenticola*) was listed as threatened. The Federal Register notice provided summary information for the species. All five species are endemic to the Snake River and/or some springs and tributaries, and all are thought to be generally intolerant of pollution. These species were listed due to declining distribution within the Snake River, adverse habitat modification and deteriorating water quality from hydroelectric development, peak-loading effects from water and power operations, water withdrawal and storage, water pollution, and inadequate government regulatory mechanisms.

The USFWS (1995) recovery plan for these species includes short- and long-term multi-agency objectives to restore viable, self-reproducing colonies of the listed snails. Downlisting or delisting will depend on the detection of increasing, self-reproducing colonies at monitoring sites within each species’ recovery area for at least a 5-year period. The Idaho springsnail (2007) and Utah valvata (2010) have been delisted. The recovery area for the existing listed species extends from American Falls Dam (river mile [RM] 709) downstream to C.J. Strike Reservoir (RM 518) (USFWS 1995). For the purpose of the aquatic mollusk analysis, the area of potential impact will extend from the proposed intake construction sites downstream to Brownlee Reservoir. Two of the three listed mollusks are known to occur within the area of impact: Snake River physa and Bliss Rapids snail. This EA focuses on these two species.

Snake River Physa

Prior to 2006, live verified specimens of the Snake River physa (*Physa natricina*) had not been collected during invertebrate surveys conducted on the Snake River for over 10 years; however, there were 2 unverified suspected sightings near Bliss, Idaho (Stephensen and Cazier 1999). In 2004, Keebaugh (2004) at the Orma J. Smith Museum of Natural History discovered 4 Snake River physa (alive when sampled) and 12 empty Snake River physa shells. The Orma J. Smith Museum of Natural History, located at the College of Idaho (formerly Albertsons College) in Caldwell, Idaho, is the federal depository for federal Snake River snail collections. Reclamation consultants collected the potential Snake River physa specimens during samplings in 1996 below Minidoka Dam. The specimens were verified as Snake River physa by the late Dr. Terrance Frest, a regional malacologist.

Very little is known about the general life history of Snake River physa. Lifespan is likely 2 years (USFWS 1994). Taylor (1982) reported finding live snails on boulders in the deepest
accessible portion of the Snake River near rapid margins. Additionally, Pentec Environmental (1991) reported finding several snails on substrate ranging from 0.7 to 5 centimeters (m) in diameter at several locations 30 meters (m) offshore during low-water periods (46 and 52 centimeters per second, dissolved oxygen 7.7 to 8 mg/L) (Pentec Environmental 1991). Snake River physa is thought to require clean, cold, well-oxygenated, swift water with low turbidity (USFWS 1995) but the specific environmental conditions necessary for Snake River physa reproduction and recruitment are unknown. Known distribution of Snake River physa is based on several empty shell and live specimen collections. Prior to 2006, less than fifty specimens of Snake River physa had ever been collected thus, population densities throughout much of the suspected range are not available. Historically, Snake River physa was thought to have existed on the Snake River in Idaho from Grandview (RM 486.5) upstream through the Hagerman Reach (RM 569.5) (USFWS 1995).

In 2005, Reclamation finalized Section 7 ESA consultation with USFWS for future Reclamation operations on 12 Federal projects located in the Snake River basin above Brownlee Reservoir (Reclamation 2004b, 2005; USFWS 2005). One of Reclamation’s proposed actions was to conduct 3 years (during a 5-year period) of Snake River physa surveys from below Minidoka Dam downstream to above Milner Pool. Data collection for the study began in 2006 and was completed in 2008. Two hundred seventy four live Snake River physa were collected throughout the study. Snake River physa was found predominantly in permanently wetted habitat greater than 1.2-meter depth on substrate 16-64 mm diameter.

Snake River physa are not known to occur in the Snake River above Minidoka Dam. Reclamation conducted extensive surveys for Snake River physa in the Snake River above Minidoka Dam from below Massacre Rocks State Park upstream to the Vista boat ramp in 2002, 2010, and 2011. No Snake River physa were encountered. Although snails from the family Physidae were encountered, no Snake River physa were found. It should be noted that all snails from the family Physidae were retained for final identification verification by malcologists.

Existing populations of the Snake River physa are known only from the Snake River in central and south-southwest Idaho, with the exception of two (live-when-collected) specimens recovered in 2002 from the Bruneau River arm of C.J. Strike Reservoir (Keebaugh 2009). Within the species current known range (RM 675 to RM 368), Snake River physa have been recovered live from the reach below Lower Salmon Falls Dam (RM 573) downstream to RM 368 (and including the Bruneau Arm of C.J. Strike Reservoir) and in the Minidoka Reach (RM 675 to RM 663.5). They have not been found in the reaches between Lower Salmon Falls Dam and the Minidoka Reach (RM 573 to RM 663.5), although surveys in this area have been sporadic. While the presence of the species in this area cannot be ruled out, the occupied range of Snake River physa consists of the Minidoka Reach and the reach between Lower Salmon Falls Dam to RM 368.
### Bliss Rapids Snail

The Bliss Rapids snail distribution was described as the middle Snake River from approximately RM 525 to RM 610, based on mollusk surveys dating back to 1884 (USFWS 1995). Known populations of the Bliss Rapids snail are discontinuously distributed throughout the Snake River within this reach; primarily concentrated in the Hagerman, Idaho area, below several dams, and in cold-water springs and spring-fed tributaries from approximately RM 546 to RM 599.

The current system of dams in the Hagerman area divides the Bliss Rapids snail’s range into three major river segments: Bliss Reach from Clover Creek (RM 547) to Bliss Dam (RM 560); Hagerman Reach from upper Bliss Reservoir (RM 565) to Lower Salmon Falls Dam (RM 573); and the Shoshone Reach from the upper end of Upper Salmon Falls Reservoir (RM 587.2) to Shoshone Falls (RM 614). The river reach between Upper and Lower Salmon Falls Dams consists entirely of impounded waters from Idaho Power’s Lower Salmon Falls Project, and Bliss Rapids snails do not occur there. The Bliss Reach and the Hagerman Reach have the greatest number of Bliss Rapids snails, although populations in the Bliss Reach are believed to be restricted to a few locations (Bliss tailrace, Bancroft Springs, and Clover Creek). Within each of the isolated river segments, most if not all of the sizable populations are within major cold-water springs and spring tributaries. Any connection between these tributary populations is probably only possible during high flows that might transport snails and attenuate, through dilution, the relatively poor water quality in the mainstem Snake River. However, even under such a scenario, dispersing snails are unlikely to find suitable habitat with adequate water quality in the mainstem due to the presence of reservoirs, which do not support Bliss Rapids snails (Hershler et al. 1994).

The Bliss Rapids snail is most abundant in tributaries and spring complexes in the Hagerman area of the Snake River, and the species’ occurrence decreases both upstream and downstream from this reach.

### Avian Species

#### Yellow-billed Cuckoo

The Yellow-billed Cuckoo (*Coccyzus americanus*) is a neotropical species that breeds in North America and winters primarily south of the U.S.-Mexico border. Cuckoos may go unnoticed because they are slow moving, use few vocalizations and prefer dense vegetation. In the West, they favor areas with a dense understory of willow (*salix spp.*) combined with mature cottonwoods (*Populus spp.*) and generally within 100 meters of slow or standing water (Gaines 1974; Gaines 1977; Gaines and Laymon 1984). It feeds on insects, mostly caterpillars, but also beetles, fall webworms, cicadas, and fruit (primarily berries). Populations
3.10 Threatened and Endangered Species

seem to fluctuate dramatically in response to fluctuations in caterpillar abundance. These fluctuations are erratic, but not necessarily cyclic (Kingery 1981).

A petition to list the Yellow-billed Cuckoo was filed in 1998. The petitioners stated that “habitat loss, overgrazing, tamarisk invasion of riparian areas, river management, logging, and pesticides have caused declines in yellow-billed cuckoo.” In the 90-day finding published on February 17, 2000, USFWS indicated that these factors may have caused loss, degradation, and fragmentation of riparian habitat in the western United States, and that loss of wintering habitat may be adversely affecting the cuckoo. In December 2013, the USFWS proposed to list the Western Distinct Population Segment (DPS) of the Yellow-billed Cuckoo as threatened and initiated the 12-month review period. The Yellow-billed Cuckoo was subsequently listed as threatened in November 2014 (79 FR 67154).

Most Idaho records are of isolated, non-breeding individuals (USFWS 1985). Although occasional reports of this bird are noted, including several birds at Lawyers Creek in Lewis County in 1979, six sightings in the vicinity of Lake Walcott State Park between 1978 and 2005, and six at Cartier Slough Wildlife Management Area on the Henry’s Fork of the Snake River, in 1980, nesting attempts or young have only been observed in southeastern Idaho. Although it has been suggested breeding populations of Yellow-billed cuckoos in Idaho are extirpated (Reese and Melquist 1985) suitable habitat exists in multiple locations in southeastern Idaho where limited breeding is thought to occur.

Greater Sage-grouse

The greater sage-grouse is a large, rounded-winged, ground-dwelling bird, up to 30 inches long and 2 feet tall, weighing from 2 to 7 pounds. It has a long, pointed tail with legs feathered to the base of the toes. Females are a mottled brown, black, and white. Males are larger and have a large white ruff around their neck and bright yellow air sacks on their breasts, which they inflate during their mating display. The birds are found at elevations ranging from 4,000 to over 9,000 feet and are highly dependent on sagebrush for cover and food.

Currently, greater sage-grouse are found in Washington, Oregon, Idaho, Montana, North Dakota, eastern California, Nevada, Utah, western Colorado, South Dakota and Wyoming and the Canadian provinces of Alberta and Saskatchewan and occupy approximately 56 percent of their historical range.

After a thorough analysis of the best available scientific information, the USFWS concluded that the greater sage-grouse warranted protection under the ESA. However, the USFWS also determined that proposing the species for protection is precluded by the need to take action on other species facing more immediate and severe extinction threats. As a result, the greater sage-grouse will be placed on the list of species that are candidates for ESA protection. As part of a court-approved settlement, the USFWS published certain ESA listing actions –
petition findings, listing determinations, critical habitat designations – in Fiscal Years (FY) 2013 through 2018. The USFWS will review the status of the greater sage-grouse in FY-2015, and will propose the species for protection when funding and workload priorities for other listing actions allow.

Evidence suggests that habitat fragmentation and destruction across much of the species’ range has contributed to significant population declines over the past century. If current trends persist, many local populations may disappear in the next several decades, with the remaining fragmented population vulnerable to extinction. However, the sage-grouse population as a whole remains large enough and is distributed across such a large portion of the western United States that the needs of other species facing more immediate and severe threat of extinction are taking priority. Additionally, much attention has been given by State and Federal land and resource management agencies to the management of lands so as to benefit greater sage grouse.

Although sage-grouse are located across southern Idaho, their distribution is related to habitat availability and suitability. In Minidoka and Jerome Counties, sage grouse have been documented in multiple locations, including lands managed by Reclamation. Surveys conducted by Reclamation and the USFWS have documented sage grouse use of native sage in each county, although the numbers remain low due to the quality of habitat, range damage as a result of fire, invasive species and the lack of connectivity with larger, higher-quality native sage parcels.

**Flow Augmentation for Snake and Columbia River System ESA-listed Salmon and Steelhead.**

Under NOAA Fisheries 2008 Biological Opinion (BiOp) on the O&M of Reclamation projects in the Snake River Basin above Brownlee Reservoir and in accordance with the Snake River Water Rights Act of 2004 (P.L. 108-447), Reclamation provides up to 487,000 acre-feet of flow augmentation to benefit salmon and steelhead stocks listed under the ESA. Under previous NOAA Fisheries BiOps, Reclamation started releasing up to 427,000 acre-feet of water in 1991 from upper Snake River projects for flow augmentation. The sources of flow augmentation water include uncontracted storage in Reclamation reservoirs, annual water rentals, powerhead space and natural flow water rights acquired permanently by Reclamation. Longstanding disputes over water allocation were addressed by the 2004 Nez Perce Water Rights Settlement and the Snake River Water Rights Act of 2004 (P.L. 108-447), which includes provisions to allow Reclamation’s continued delivery of flow augmentation water for a 30-year period (through 2034). These agreements increased the amount of water acquired annually to up to 487,000 acre-feet. In addition these agreements made it easier to acquire water from willing sellers.
3.10 Threatened and Endangered Species

In the 2008 BiOp issued to Reclamation, NOAA indicated, “Because the USBR’s salmon flow augmentation program is heavily dependent on annual water rentals from Idaho’s water rental pools, which is a variable and insecure source, the USBR must consult with NMFS whenever a new contract would reduce streamflows or reduce USBR’s ability to meet salmon flow augmentation commitments, as described in its {proposed action}, or whenever Reclamation otherwise determines that listed salmon or steelhead species or critical habitat may be affected.” NOAA Fisheries’ criterion in conducting such a review is to ensure that there either be an improvement or “zero net impact” on Snake River flows and on Reclamation’s ability to provide up to 487,000 acre feet for salmon flow augmentation. Replacement supplies should have at least an equal probability of being available for salmon flow augmentation as the storage space or streamflows that are being committed. Reclamation therefore conducted an analysis on the effects of the action alternatives on Reclamation’s ability to provide water for the purpose of benefitting migrating salmon and steelhead in the Snake and Columbia River systems.

3.10.2 Environmental Consequences

This section describes, assesses, and discusses the environmental consequences of the range of alternatives on threatened, endangered, proposed and candidate species located within the area of impact. This analysis is broken down by alternative, species, and impact type (i.e., construction activities or total system operations).

Most of Reclamation’s storage above Milner Dam is used as a supplemental water supply for irrigation. As a result, most irrigators relying on surface water use a combination of storage and natural flows, including reach gains. Providing a sufficient amount of water in the river for out-of-stream diversion requires a high degree of coordination among irrigators, storage operators, and the State watermaster. Essentially, this involves storing water as physically high (upstream) in the system as possible, then moving water downstream only when required. In general, demands are met from the nearest storage reservoir upstream from the point of diversion, then from reservoirs progressively upstream as the water supply diminishes.

This operations analysis of potential impacts resulting from the four proposed alternatives will focus on the Snake River corridor and extend from the point of diversion and extend downstream to above Brownlee Reservoir. The construction analysis of potential impacts resulting from the four proposed alternatives will focus on the construction footprint of the pumping plant and pipeline. It is not anticipated that any of the proposed alternatives will impact ESA-listed species within or outside of the area of impact.
Alternative 1 (No Action)

Aquatic Mollusks & Avian Species

System Operations Impacts

In the absence of the proposed diversion and associated distribution system, the Snake River will continue to be operated consistent with current river operations as described in the Operations Description of the Upper Snake River Biological Assessment and resultant USFWS Biological Opinion (Reclamation 2004b, 2005; USFWS 2005). All potential impacts associated with this ongoing action will not change, as described in the above-referenced documents.

Construction Impacts

In the absence of the proposed construction project, no impacts will occur as a result of construction activities. The three locations identified as potential construction locations will continue to exist in their current state with no impacts. Additionally, as previously described, lands experiencing periodic water shortages will continue to be operated and managed consistent with current land-management practices.

Alternative 2

Aquatic Mollusks, Avian, and Species

System Operations Impacts

Reclamation would continue to operate the upper Snake River system under Alternative 2 consistent with the operations description identified in Reclamation 2004b, 2005, and USFWS 2005. The new pumping plant is intended to utilize flows previously pumped through the existing pumping plant in an effort to reduce annual conveyance loss through the current system and reduce conveyance distance. Cumulative diversion between the two plants will remain at 270 cfs with the exception of very dry years. On occasion, during dry years, total diversion may be as high as 325 cfs for a maximum of 30 days during peak demand (late June to early July). The diversion of this additional 55 cfs would result in very small changes to river flow which translates to immeasurable change in stage below Milner Dam. Although an additional 55 cfs may be diverted through implementation of Alternative 2, this 55 cfs will come from the existing A&B water rights or through the Water District 01 rental pool. This additional diversion will not result in an additional appropriation of water in Water District 01. Although, no additional appropriation of water will exist, this would result in an additional cumulative diversion from the system during dry years. The amount of total increase in diversion is unknown; however, reduction in conveyance loss throughout the entire irrigation season may save enough water to balance the short-term increase in diversion during most...
years and possibly during peak diversion in dry years. Since conveyance loss is currently unquantified, the actual balance is unknown.

To illustrate this, Reclamation conducted a modeling effort to identify overall system impacts resulting from this diversion. This section discusses this modeling effort. In order to assess the river system under different operating schemes or hydrologic conditions, a previously constructed model of the Snake River system was utilized. The model output of river flows provides a basis for comparative analyses of the range of possible conditions resulting from the new pumping plant and the potential to divert an additional 55 cfs under Alternative 2. The analysis utilized the Snake River MODSIM Model, version 8.3, a general-purpose river and reservoir operations computer simulation model.

Varying hydrologic conditions and numerous other factors influence the way reservoir projects operate. Daily operations of the projects are influenced by many factors, including the amount of recent precipitation influencing project inflow, reservoir carryover at the end of the storage season, spatial water supply distribution, temperature, amount of irrigation demand, special operating requests, or emergency situations. These types of circumstances are difficult to predict or simulate in modeling activities. Therefore, it is important to note that when model output is compared to historical data, differences would be apparent as the model is incapable of predicting the day-to-day decisions made on a real-time basis.

This surface water distribution model was structured with a monthly time-step. While the monthly time-step of the model output does not capture the variations of day-to-day circumstances and real-time operational decisions, it does provide a means to make relative comparisons between operational scenarios under different hydrologic conditions and system constraints.

Reclamation modeled a 20 percent (i.e., 55 cfs) increase in peak demand under two separate scenarios and compared the two scenarios to current operations. Reclamation looked at increasing demand by 55 cfs for A&B in MODSIM. A 30-year period of record using historic data from 1971 through 2000 was utilized for presenting the results. For the current operations component, no modifications were made to the model. Scenario 1 was a more conservative look at the increase in demand for A&B. This scenario assumed that the 55 cfs increase in demand would only be needed when demand was at its historic peak, and for a 16 day duration during late June and early July. To account for this in the monthly model, 8 days of 55 cfs increased demand was added for the month of June and 8 days for the month of July (16 days total increase of 55 cfs per day split between the 2 months or 1,744 acre-feet). Scenario 2 illustrates the maximum likelihood diversion scenario, where the 55 cfs increase would be for 30-day duration (3,273 acre-feet). Therefore, the 55 cfs was added to current demands for 15 days in June and 15 days in July. Although this is not a likely operational scenario, it represents the maximum operation under which A&B expects to operate.
flows, in acre-feet, were modeled at Milner Dam, King Hill and Brownlee Reservoir (Figure 3-1, Figure 3-2, and Figure 3-3).

The results of the modeling show little to no measurable change between current system operations and the two scenarios. Scenario 1, 16 day duration at an increase of 55 cfs, represents the most likely scenario as demands typically reach their peak for a 10-15 day period in late June through early July. The increased diversion of the 55 cfs is nearly undetectable below Milner Dam and results in only a 0.1 percent change in river stage on average below Milner Dam.

Additionally, Reclamation modeled the impacts of the additional diversion on Reclamation’s ability to provide water for flow augmentation purposes. The additional 1,744 acre-feet of diversion has a very small probability of impacting Reclamation’s ability to provide flow augmentation water in subsequent years (Figure 3-4). NOAA Fisheries’ criteria of “zero net impact” is satisfied through the implementation of the action alternatives. In years when flows beyond A&B’s 270 cfs natural flow water right are required to meet system demands, A&B will utilize Water District 01 rental pool to meet the respective demands. As this will result in a very small reduction in carryover water, this has a very low probability of having any impact to Reclamation’s ability to provide flow augmentation in successive years. In some years the decrease in carryover will result in a very minor reduction in flood releases.

![Modeled Snake River at Milner Average Monthly Flows](image)

**Figure 3-1.** Average Snake River flows (in acre-feet) by month at Milner Dam.
Figure 3-2. Average Snake River flows (in acre-feet) by month at King Hill.

Figure 3-3. Average Snake River flows (in acre-feet) by month at Brownlee Reservoir.
It needs to be noted that although the MODSIM model was run using the proposed increase diversion of 55 cfs, this may not always be the case. The modeled scenarios represent the most extreme scenarios. During scenarios where portions or all of the additional 55 cfs are delivered from storage in either American Falls or Palisades Reservoirs, any changes in Snake River flow past Milner Dam will occur during flood control operations in subsequent years. This can be seen in Figure 3-1 in the month of June where lower flows are released because space already has been evacuated for flood control; this flow was modeled to be less than 1,178 acre-feet on average (0.1 percent of the average monthly flow) in scenario #2.

Additionally, implementation of Alternative 2 would result in an increase in flows to the upper Snake River both via groundwater discharge and a reduction in diversion during most years. The construction of the new pipeline would reduce the conveyance loss that currently occurs with the existing system, thereby reducing the total diversion volume necessary to meet the point-of-use delivery requirements. This would result in a net reduction in diversion rate throughout the irrigation season to meet system demands associated with the action alternatives. As a benefit, the delivery of surface water to lands currently utilizing groundwater will reduce the demand on the ESPA, providing for greater groundwater return flows to the Snake River below Milner Dam.

Figure 3-4. Average monthly volume of flow augmentation water delivered from the upper Snake River.
Based on the above-described scenarios, Reclamation does not anticipate any measureable impacts to ESA-listed species as a result of river operations under Alternative 2. Reclamation therefore, finds there will be No Affect to the Snake River physa or Bliss Rapids Snail, or salmon or steelhead in the lower Snake and Columbia rivers, as a result of the implementation of Alternative 2.

**Construction Impacts**

Construction activities under Alternative 2, as previously discussed would impact approximately 100 linear foot of river bank and extend approximately 100 feet inland from the shoreline. Based on past survey results, Snake River physa and the Bliss Rapids snail are not known to occur within or adjacent to the construction site. The proposed pumping location is located within the Milner Pool. Since each species is a flow-dependent species, site-specific attributes preclude their establishment within the pool.

Additionally, approximately 50,100 feet of pipeline would be buried to a minimum depth of approximately 2.5 feet, extending north from the Snake River. The construction corridor for this activity would be approximately 50 feet wide and will be temporary in nature. The pipeline will be located in conjunction with previously disturbed grounds (i.e., road ROWs, fields, etc.) with the exception of one isolated parcel of land owned and managed by Reclamation. Much of the parcel burned in 2007 and consists primarily of cheat grass with some native sage on the southern and western portions. Due to the isolated nature of this parcel and the lack of connectivity to larger native sage communities, it is not anticipated the greater sage-grouse will occupy this area. Further, as part of the preparation of Reclamation’s Minidoka North Side Resource Management Plan, surveys for sage grouse did not locate any grouse, grouse sign, or identify suitable habitat in this location.

Operation of the pumping plant and associated water conveyance system would result in no changes in land use, land-use conversions or disturbance of previously undisturbed lands within the action area. Water would be delivered to lands currently being managed for agricultural production. The delivery of the additional (up to) 55 cfs during very dry years would simply augment existing deliveries.

No Yellow-billed Cuckoo habitat is located within or adjacent to the proposed project footprint. The closest documented Yellow-billed Cuckoo sighting occurred along Lake Walcott State Park in 2005. No Yellow-billed Cuckoo has been documented along the Snake River near the proposed construction site and pipeline corridor. Based on this and the previously-identified factors, Reclamation does not anticipate any impacts to ESA-listed species as a result of the construction or long-term operation of the pumping plant and pipeline under Alternative 2. Reclamation therefore finds there will be No Affect to the greater sage-grouse, Yellow-billed Cuckoo, Snake River physa, or Bliss Rapids snail as a result of construction and system operations associated with the implementation of Alternative 2.
3.10.3 Alternative 3 (Preferred Alternative)

Aquatic Mollusks & Avian Species

System Operations Impacts

Overall system operations and respective impacts under the implementation of Alternative 3 will be the same as described under Alternative 2. The proposed diversion and total system operations are the same for each action alternative. Reclamation therefore finds there will be No Affect to the Snake River physa or Bliss Rapids Snail as a result of the implementation of Alternative 3.

Construction Impacts

Overall system design and the proposed water conveyance system are the same under each alternative. The only change is minor changes in plant location and final length of pipeline installed. Although there are slight changes in pumping plant locations, they are all within the same general area within Milner Pool. Each specific site possesses the same physical and biological attributes. Additionally, pipeline construction will occur within the same general areas, leading to the same final point of distribution for each alternative. Reclamation, therefore, finds there will be No Affect to the greater sage-grouse, Yellow-billed Cuckoo, Snake River physa, or Bliss Rapids snail as a result of construction and system operations associated with the implementation of Alternative 3.

3.10.4 Alternative 4

System Operations Impacts

Overall system operations and respective impacts under the implementation of Alternative 4 would be the same described under Alternative 2.

Construction Impacts

Overall system design and the proposed water conveyance system are the same under each alternative.
3.11 Cultural Resources

Study and Analysis Methodology

The primary sources of information used for this analysis are Reclamation’s RMP (Reclamation 2005), Reclamation’s Minidoka Northside Resource Management Plan Environmental Assessment (Reclamation 2004a), and an Idaho SHPO records search. The first two documents address lands owned by Reclamation in Minidoka County, Idaho, which includes the project area. The project would be constructed primarily on private land; however, these lands are adjacent to or in some cases, surrounded by Reclamation lands. As such, the data in the RMP and associated Minidoka EA was extended to include the private lands within the proposed project area. The SHPO record search addressed all known cultural resources within ½-mile of the project area. A Class III Archaeological Survey was also conducted throughout the entire project area to locate and record all cultural resources, consistent with the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716).

Area of Potential Effect

Because this is a primarily linear project, the APE for cultural resources is a ½-mile-wide band centered on the project footprint. This footprint includes the proposed pipeline ROWs, pumping station, booster pump stations, and additional areas associated with project construction and operation.

3.11.1 Affected Environment

The earliest evidence of human occupation in south-central Idaho dates to approximately 14,500 years before present (B.P.) Three major prehistoric cultural periods have been identified for southern Idaho:

- Early Prehistoric Period (15,000 to 7,500 B.P.)
- Middle Prehistoric Period (7,500 to 1,300 B.P.)
- Late Prehistoric Period (1,300 to 150 B.P.)

These three periods reflect a transition over time from a highly mobile lifestyle of hunting and gathering (roots, seeds, fish, and mammals) to a reduced mobility and increased use of specific highly productive resources (salmon and camas). Numerous archaeological sites located adjacent to the project APE have yielded extensive diagnostic artifacts, indicating that the area was in use during all three prehistoric periods.

Groups using the area included the Shoshone and Bannock Tribes. The extent and length of time these Tribes have occupied southern Idaho is a subject of debate among anthropologists.
and other scholars. Both Tribes’ lifestyles and subsistence practices were very similar to other Great Basin cultural populations. Due to the fact that the environment could not sustain large populations, people moved from resource to resource relying on a wide variety of items, including berries, nuts, roots, rabbits, squirrels, marmots, insects, large game, and fish. By the time of the first Euro-American contact in the early 1800s, the Shoshone and Bannock Tribes had acquired the use of the horse, making it easier to acquire resources and hunt large game, such as bison, which could also be used for trade (Reclamation 2004a). Euro-Americans arrived in south-central Idaho to explore and survey the region, as well as expand the fur trade. The preferred east-west travel routes for these early explorers passed through the region along the Snake River. Sections of the route later became the Oregon Trail, but were first used by these emigrants in 1841 and the alternative trails known as the Northside Alternate Oregon Trail and the California Trail. As a part of the expansion of Mormon communities out of Utah, emigrants began to settle in south-central Idaho in 1870. The arrival of the railroad in the 1880s was vital to the development of south-central Idaho, with multiple Union Pacific Railroad branch lines constructed near the proposed project. In the late 19th and early 20th centuries, agriculture served as the staple of the economy, and associated irrigation systems were of primary importance to overall development. Congress passed the Carey Act in 1894 to encourage private and state cooperation in further developing agriculture, and 8 years later it created the Reclamation Service to help federalize the expanding irrigation systems in the west. The Minidoka Project of 1904 was one of the earliest federal reclamation projects in Idaho, resulting in the construction of Minidoka Dam, which was finished in 1906, along with other dams and thousands of miles of canal systems.

In the middle and late 1800s, as emigrant populations increased in south-central Idaho, Euro-American and Indian relationships began to deteriorate. Treaties with the United States Government in 1863 and 1868, combined with the establishment of the Fort Hall Indian reservation in 1867, confined the Shoshone-Bannock Tribes and opened the area for further Euro-American settlement. However, increasing hostilities led to military action by the U.S. military and eventually to the Bannock War of 1878. As a result of the Bannock War, the area of the Fort Hall Indian Reservation was reduced several times (Reclamation 2004a).

There are a total of 11 previously recorded cultural resource sites within 1/2 mile of the project APE. The sites include four archaeological sites, one historical property site, and six linear sites. Two of the archaeological sites are small prehistoric lithic flake scatters produced during tool manufacture or repair. Small open sites such as lithic scatters, composed of multiple materials such as cryptocrystalline silicate (chalcedony, jasper, chert), ignimbrite, and obsidian, are representative of many of the site types found in this region. Archaeological excavations near the proposed project APE (but not in the APE) contain cultural deposits providing circumstantial evidence for an intensive prehistoric use of the area over a long range of time.
The other two archaeological sites are historic dump sites comprised of multiple cans, glass, and other associated objects that can be traced back to the residential activities associated with emigrant settlement and land use.

The historical property site and the six linear sites are historical period sites representing a variety of resources pertaining to irrigation in the form of canals and transportation in the form of emigrant trails, railroads and ferries.

A Class I inventory of existing data for the proposed project APE portrays lands within the project area as containing a small number of resources representing both prehistoric and historic use of the area. Of the 11 previously recorded cultural resources within the project APE, those listed below in Table 3-5 are considered eligible for listing in the NRHP. These sites have been recommended as eligible because they meet National Register Evaluation Criterion D and have the potential to offer key information pertaining to the historic use of the project area.

**Table 3-5. Cultural resources within the project APE and considered eligible for listing in the NRHP (SHPO 2013).**

<table>
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<th>Attributes</th>
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<tbody>
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<td>10CA654</td>
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</tr>
<tr>
<td>10CA655</td>
<td>Historic G Canal</td>
</tr>
<tr>
<td>10MA24</td>
<td>Historic Dump</td>
</tr>
<tr>
<td>10MA27</td>
<td>Historic Dump</td>
</tr>
<tr>
<td>10MA144</td>
<td>Oregon Short Line Railroad – Northside Branch EIRR</td>
</tr>
<tr>
<td>31-13644</td>
<td>Union Pacific Railroad</td>
</tr>
</tbody>
</table>

As previously mentioned, in addition to the Class I records search, an intensive Class III archaeological survey was conducted across the entire project APE. As a result of the survey, no new cultural resources eligible for listing in the NRHP or otherwise, were recorded or noted. However, through the public scoping process, a property was identified by a landowner as having historical value. The Schodde property as it is known, included 320 acres homesteaded in 1874 by Henry Schodde. Mr. Schodde was the first settler in southern Idaho to build and use water wheels to help irrigate farm lands. He built between 10 and 14 water wheels along the Snake River and adjacent to his property to help irrigate approximately 160 acres of land where he grew primarily grain and hay. With the construction of the Milner Dam in 1904, the waters of the Snake River calmed and eventually rose, making Mr. Schodde’s water wheels inoperable.

In addition to constructing the first water wheels in southern Idaho, Mr. Schodde was also involved with operating one of only two ferries along this section of the Snake River. Starrh Ferry, as it was known, was constructed by George Starrh in 1880 on the south side of the Snake River across from the Schodde property with the northern end of the ferry located on the Schodde property. Ferry operations slowed down in 1905 with the introduction of the railroad,
and all but stopped in 1910 with the construction of a toll bridge in the vicinity (South Idaho Press 2006).

As pointed out by Henry Lynn Schodde in his letter during public scoping, in 1989 the Schodde property was listed as the only Century Farm in Minidoka County. In addition to this, Mr. Henry Lynn Schodde states that “The heritage of the ranch is very important to the Schodde family. It is important that the ranch remains unchanged. By cutting a road through the middle of the property and putting power lines and a pumping station at Site 1, A&B is changing the operation and appearance of the Ranch forever” (Schodde 2013).

It is important to note that the Class I records search showed that neither the Schodde property and associated water wheels nor the Starrh Ferry meet the criteria as outlined in the NHPA to be listed as or recommended as eligible for listing on the NRHP. Additionally, during the Class III Archaeological Survey, no new data was recorded for the Schodde Property and associated water wheels, or the Starrh Ferry. As a result, of a meeting with SHPO staff, it has been determined that due to the lack of physical evidence from the Class III Archaeological Survey and the lack of record search information pertaining to the Schodde Ranch and the Starrh Ferry, there is insufficient information to determine historic integrity and, therefore, eligibility for either property.

Upon review of the survey report submitted to Reclamation, an additional cultural resource was found to exist within the APE. Though no documentation of this historic property was revealed during the SHPO record search, and no surface evidence was found during the intensive on-the-ground survey work, it turns out that a portion of the pipeline transects the land on which Camp Rupert, a World War II prisoner of war camp, once stood. Consultation with SHPO revealed that the camp is considered an eligible historic property, and while it has not yet been fully documented, additional research and a brief narrative will be required to be submitted during the consultation process. Fortunately, the pipeline through this area will be run in an existing ditch, which is elevated in the area of the camp. There should be little to no disturbance of the existing ground surface within the footprint of the camp, and a recommendation of no adverse effect was presented to the SHPO during consultation.

Tribal members are generally reluctant to provide detailed locational information where traditional economic, artistic, or other cultural practices were conducted within the study area. Nevertheless, some natural resources near, but not necessarily within the project area, are still used by members of the Shoshone-Bannock Tribes, as well as other Tribes claiming sovereign rights to the area. Access to some of these resources has been limited over time due to both historic and modern development, particularly in regards to agriculture and irrigation. Some identified resources include round rocks found near the river for use in ceremonies such as sweats; sagebrush, chokecherries, pine nuts, and roots used for medicine, food, and trading; animals such as groundhogs and deer used for both clothing and food; and fish from the Snake River.
Within the project APE closest to the Snake River alluvium (gravels, sands, and lake beds), there is a high potential for finding fossils. Although there are no known fossils within the project APE, all of the fossils found to date within proximity of the project boundaries have been found during construction of the Minidoka Dam and in association with gravel quarrying along the Snake River. The well-preserved fossils include many late Pleistocene species such as horses, camels, musk ox, ground sloth, and mammoth (Reclamation 2004).

### 3.11.2 Environmental Consequences

#### Methods and Assumptions

Cultural resources are subject to review under both federal and state laws and regulations. Section 106 of the NHPA empowers the ACHP to comment on federally initiated, licensed, or permitted projects affecting cultural sites listed in, or eligible for listing in, the NRHP. Eligibility evaluation is the process by which resources are assessed relative to the NRHP eligibility criteria. Cultural resources that are determined to be eligible for the NRHP are known as historic properties and are protected under NHPA. Impacts are considered significant if they adversely affect the NRHP eligibility of historic properties.

Under federal law, impacts to cultural resources could be considered adverse if the resources have been determined eligible for listing in the NRHP or have been identified as important to Native Americans as outlined in the American Indian Religious Freedom Act and EO 13007 Indian sacred sites. Agencies are required to assess resource significance, evaluate impacts on significant sites, and select resource management actions in consultation with the SHPO, the ACHP, and other interested parties. In addition to this, Native Americans must be consulted where cultural resources of concern to a Tribe could be present, or where human burials and other Native American Graves Protection and Repatriation (NAGPRA) cultural items affiliated with Tribes could be affected by agencies actions.

Analysis of potential impacts to cultural resources considers both direct and indirect impacts. Direct impacts may occur by physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to the resource’s significance; introducing visual or audible elements that are out of character with the property or alter its setting; or neglecting the resource to the extent that it deteriorates or it is destroyed. The direct impacts associated with this project were assessed by identifying the types and locations of the proposed project activities and then determining the exact location of known cultural resources that could be affected. Indirect impacts generally result from the residual effects related to the project. These can include increased use of newly developed infrastructure such as access roads for maintenance purposes. As mentioned in the Affected Environment section of this report, a Class I Records Search and a Class III Intensive Archaeological survey were conducted to determine, to the extent possible, the location of cultural resources.
**Alternative 1 (No Action)**

Under the No Action alternative there would be no direct, indirect, short-term, long-term, or cumulative effects to cultural resources. None of the alternatives would be constructed and there would be no need for ground disturbance for any potential excavation, equipment staging areas, deposit areas, or new roads. The existing conditions would remain intact and would not be affected.

**Alternative 2**

For the APE, a 100 percent intensive survey for cultural resources has been completed by Great Basin CRM and no new cultural resources were identified. Documentation of the APE for action alternatives, including maps and photographs and a determination of effect to cultural resources are included in a report sent to the Idaho SHPO (SHPO 2013). There are a total of 11 previously recorded cultural resource sites within the APE. The sites include four archaeological sites, one historical property site, and six linear sites. Camp Rupert, the World War prisoner of war camp, also exists within the APE, and though currently not documented, is considered eligible.

As outlined in Table 3-5 and the narrative above, per National Register Criteria 36, Code of Federal Regulations (CFR) Part 63, only six of the 11 sites located within the APE meet the criteria to be considered eligible for listing in the NRHP. Per NRHP criteria, particularly 36 CFR Part 63, the pumping plant and associated pipeline would be sited so that it would avoid eligible cultural resources to the extent possible.

No effects to known cultural resources within the construction footprint of the pumping plant would occur. Nonetheless, under all of the alternatives excluding the No Action alternative, the proposed pipeline associated with the pumping plant would cross the Oregon Trail Northside Alternative and the Oregon Short Line Railroad – Northside Branch Eastern Idaho Railroad (EIRR). However, because of farming, ranching, and other Euro-American developmental practices in previous years, the segment of the Oregon Trail Northside Alternative located in the project APE, is no longer visible. As a result, the original trail has been destroyed and the trail is no longer of historic value. Under all of the proposed project alternatives excluding the No Action alternative, project impacts could possibly affect the Oregon Short Line Railroad – Northside Branch EIRR. However, because boring technology would be used to install the pipeline under the railroad, there would be no impact to this resource. At the site of Camp Rupert, the pipe will be laid within an existing raised ditch and may or may not require any deepening of the ditch to achieve the necessary elevation for the pipeline. This is recommended by Reclamation to constitute a No Adverse Effect to the historic property of the camp.
3.11 Cultural Resources

Under this and all of the action alternatives, the five remaining eligible cultural resources, which include one historic railroad, two historic dumps, and two historic canals, would be protected by avoidance; therefore, there would be no effect to these resources.

**Short-term Impacts**

No short-term impacts to cultural resources located within the project APE would occur as a result of this or any other action alternative.

**Long-term Impacts**

Direct and/or indirect impacts extending beyond the construction period of the project fall into the category of long-term impacts. Long-term impacts can adversely affect a cultural resource to the point that its integrity has been compromised and it is no longer eligible for listing in the NRHP.

No long-term impacts to cultural resources located within the project APE would occur as a result of this or any other action alternative.

**Mitigation**

As a part of this alternative and all of the action alternatives, avoidance would be used to mitigate impacts to the eligible cultural resources located within the project APE. It is highly recommended under this and all of the action alternatives, that if project construction reveals any additional cultural resources, then A&B would contact a qualified archaeologist to evaluate these resources using Section 106 criteria. If the resource(s) is eligible for listing on the NRHP, or if other conditions require it, then A&B would develop a mitigation plan in consultation with Reclamation and the Idaho SHPO.

**Alternative 3 (Preferred Alternative)**

All impacts to and mitigation measures for cultural resources related to Alternative 3 would be the same as identified for Alternative 2.

**Alternative 4**

All impacts to and mitigation measures for cultural resources related to Alternative 4 would be the same as identified for Alternative 2.

**Cumulative Impacts**

No known cumulative impacts to cultural resources would occur as a result of the proposed project.
3.12 Sacred Sites

3.12.1 Affected Environment

This section discusses sacred sites as defined by EO 13007 and the potential of the projects impacts on sacred sites, as well as the Memorandum of Understanding (MOU) signed by the ACHP and numerous participating federal agencies which further identifies federal agencies responsibilities to identify and protect Indian sacred sites.

Sacred sites are defined by EO 13007 as specific, discrete, narrowly delineated locations on federally-owned land that is identified by an Indian individual or Tribe determined to be an identified and appropriate representative of an Indian religion, as sacred by virtue of its established religious importance to, or ceremonial use by, an Indian religion. As a part of EO 13007 and the MOU between ACHP and multiple federal agencies, federal agencies must accommodate access to and ceremonial use of all Indian sacred sites by Indian religious practitioners, and avoid any adverse effects to the physical integrity of sacred sites. In addition to this, federal agencies must also make a good faith effort to improve the protection of tribal access to Indian sacred sites through enhanced and improved interdepartmental coordination and collaboration.

There is no information on any specific Indian sacred sites within the proposed project APE. However, as identified in the Minidoka North Side RMP Final EA, there are certain ceremonial practices and activities with possible religious or sacred components that continue to be practiced in the vicinity of the APE. For example, Shoshone-Bannock Tribal members collect rocks for ceremonial purposes within the greater project area. Certain physical and natural features that could be located near the project area (buttes, foothills, lakes, springs, and rivers) obtain their power and sacredness from an undisturbed natural state. Additionally, specific cultural sites may be regarded as sacred to Tribes. Examples include petroglyph and pictograph sites, burials, battle or massacre sites, and travel routes (Reclamation 2004a).

3.12.2 Environmental Consequences

Alternative 1 (No Action)

Under the No Action alternative there would be no direct, indirect, short term, long term, or cumulative effects to Indian sacred sites. None of the alternatives would be constructed and there would be no need for ground disturbance for any potential excavation, equipment staging areas, deposit areas, or new roads. The existing conditions would remain intact and would not be affected.
Alternatives 2

Possible impacts to Indian sacred sites can only be dealt with in a generalized fashion due to the fact that the specific location and nature of sacred sites within the proposed project APE is unknown. If Indian sacred sites are located within the proposed project APE, their integrity can be compromised not only by physical disturbances, but also audio or visual intrusions that change the association, feeling or character of the site. If this is the case, their “sacredness” and overall importance as a sacred or religious site can be reduced.

Short-term Impacts

No short-term impacts to Indian sacred sites would occur as a result of this or any other action alternative.

Long-term Impacts

Direct and/or indirect impacts extending beyond the construction period of the project fall into the category of long-term impacts. Long-term impacts can adversely affect an Indian sacred site to the point that its integrity has been compromised and it is no longer eligible for listing in the NRHP.

No long-term impacts to cultural resources located within the project APE would occur as a result of this or any other action alternative.

Mitigation

EO13007 does not authorize federal agencies to mitigate the impacts of their own actions upon Indian sacred sites. Nevertheless, it does direct them to avoid adverse impacts to the extent possible. Reclamation will consult with Tribes in conjunction with any 36 CFR 800 consultations. As a part of these consultations, Reclamation will seek to further identify and avoid adversely impacting sacred sites.

Alternative 3 (Preferred Alternative)

All impacts to and mitigation measures for Indian sacred sites related to Alternative 3 would be the same as identified for Alternative 2.

Alternative 4

All impacts to and mitigation measures for Indian sacred sites related to Alternative 4 would be the same as identified for Alternative 2.
Cumulative Impacts

No known cumulative impacts to Indian sacred sites would occur as a result of the proposed project.

3.13 Indian Trust Assets

3.13.1 Affected Environment

ITAs are legal interests in property that are held in trust by the United States Government for Indian Tribes or individuals. Acting as the trustee, the Secretary of the Interior holds many assets in trust such as, minerals, lands, water rights and hunting and fishing rights. Most ITAs are located on Indian Reservations; however, they may be found off-reservation as well.

The United States Government has a trust responsibility to Indians to protect and maintain rights granted to or reserved by Indian individuals or Indian Tribes by treaties, statutes, and EOs. At times, these trusts are further interpreted by regulations and court decisions.

The Shoshone-Bannock Tribes are a federally-recognized Tribe located at Fort Hall Indian Reservation in southeastern Idaho who has trust assets both on and off of the reservation. The Fort Bridger Treaty was agreed to and signed by Shoshone and Bannock leaders on July 3, 1868. In Article 4 of the treaty, it states that all members of the Shoshone-Bannock Tribes “shall have the right to hunt on the unoccupied lands of the United States…”

Tribal members believe their rights extend to the right to fish. The Fort Bridger Treaty for the Shoshone-Bannock Tribes has been interpreted in the case of State of Idaho v. Tinno, an off-reservation fishing case. The Idaho Supreme court determined that the Shoshone word for “hunt” could also be interpreted to include “fish.” Under this court case, the Idaho Supreme Court reaffirmed Shoshone-Bannock Tribal members’ right to fish off-reservation pursuant to the Fort Bridger Treaty (Reclamation 2004a).

The Nez Perce Tribe is another federally-recognized Tribe and is located on the Nez Perce Reservation in northern Idaho. Pursuant to the Treaty of 1855, Treaty of 1863, Treaty of 1868, and the Agreement of 1893, the rights of the Nez Perce Tribe include the right to hunt, gather, and graze livestock on unclaimed and open lands and the right to fish in all of the usual and accustomed places (Reclamation 2004a).

The Northwestern Band of the Shoshone Indians, a federally recognized Tribe with no reservation, also possess protected hunting and fishing rights on unoccupied lands within the area acquired by the United States Government pursuant to the 1868 Fort Bridger Treaty.
Other federally-recognized Tribes that do not have designated off-reservation ITAs may have cultural and religious interests in the lands containing the proposed project APE and surrounding areas. These additional tribal interests may be protected under other historic preservation laws including the NAGPRA (Reclamation 2004a)

### 3.13.2 Environmental Consequences

**Alternative 1 (No Action)**

Under the No Action alternative there would be no direct, indirect, short term, long term, or cumulative effects to ITAs. None of the alternatives would be constructed and there would be no need for ground disturbance for any potential excavation, equipment staging areas, deposit areas, or new roads. The existing conditions would remain intact and would not be affected.

**Alternative 2**

*Short-term Impacts*

No short-term impacts to ITAs within the project APE would occur as a result of this or any other action alternative.

*Long-term Impacts*

Direct and/or indirect impacts extending beyond the construction period of the project fall into the category of long-term impacts. No long-term impacts to ITAs located within the project APE would occur as a result of this or any other action alternative.

**Mitigation**

If it is determined that treaty rights to hunt and fish are adversely impacted by the proposed project, the Reclamation will work with the affected Tribes to minimize these or altogether avoid these impacts.

**Alternative 3 (Preferred Alternative)**

All impacts to and mitigation measures for ITAs related to Alternative 3 would be the same as identified for Alternative 2.

**Alternative 4**

All impacts to and mitigation measures for ITAs related to Alternative 4 would be the same as identified for Alternative 2. Other impacts to resources that may be associated with hunting
3.14 Transportation

Cumulative Impacts

No known cumulative impacts to ITAs would occur as a result of the proposed project.

3.14 Transportation

Study and Analysis Methodology

The Comprehensive Plan was reviewed. Data are provided for Minidoka County as a whole.

Area of Potential Effect

The APE for transportation is the local roads providing access to the land where the project facilities would be constructed, as well as the highways and freeways within Minidoka County that provides access to those roads.

3.14.1 Affected Environment

There are approximately 15 miles of interstate highways, 72 miles of state highways, and 608 miles of local roads within the county. The Minidoka County Highway District (Highway District) serves the unincorporated areas of the county with respect to road and bridge construction and maintenance. The Highway District has responsibility for the maintenance of all roads outside the limits of all incorporated cities. City streets are developed and maintained by the individual cities and the Idaho Transportation Department maintains all federal and state highways and roads.

The area where the three pumping plant sites and pipeline alignment would be constructed is primarily agricultural with associated rural residences and a small amount of undeveloped open space. There are few roads in the area, including North Road, South Road, West Road, West Baseline Road, State Route 25, and Interstate 84. The Union Pacific Railroad traverses the area in an east-west direction approximately mid-way along the pipeline route (i.e., the pipeline would cross the rail line in this location) and also to the south of the alternative pump station sites on the south side of the Snake River (i.e., the project would not affect this rail line).

The Highway District has created standards for construction of both gravel and paved roadways in the county. These standards address new construction, maintenance, and upgrade of roads. Any roads to be constructed must meet these standards prior to the Highway District
accepting them for maintenance. The Highway District has also addressed policies for the building of new roads (i.e., their necessity and placement).

There currently is no rail passenger service to the county. A mainline of the Union Pacific Railroad runs through the northern part of the county with a primary switching facility depot in the City of Minidoka. An Eastern Idaho Railroad spur line takes off at Minidoka and travels through Acequia, Rupert, Paul, Burley, Jerome, Twin Falls, and Wendell. The railroad transports agricultural products (Minidoka County 2010).

The following Comprehensive Plan objectives are applicable to the project:

- Transportation Objective #2: To reduce any hazards that may impair the people’s safety.
- Transportation Objective #9 (c): A policy concerning the acceptance of private roads, placement, construction and maintenance within the county or cities should be developed.
- Transportation Objective #9 (d): The inclusion of utility corridors and easements within streets and ROW should be encouraged.
- Transportation Objective #9 (g): The Highway District shall be encouraged to continue coordination with IDR and the cities to maintain continuity and safety in the maintenance of existing roads and the development of new roads within the county.
- Transportation Objective #9 (j): It is recommended that any new highways or roads constructed in the county be carefully located to give minimum disruption to farming practices.
- Transportation Objective #9 (q): The Highway District, utility companies and the cities should continue to cooperate and exchange future development and expansion plans by written agreement.
- Transportation Objective #9 (r): A policy concerning the construction of new roads within the county will be developed to determine when new roads will be constructed and who will bear the responsibility for such (Minidoka County 2010).

### 3.14.2 Environmental Consequences

#### Methods and Assumptions

Aerial photographs of the project facilities locations and the project vicinity were reviewed to determine the roads in the area. In addition, the Comprehensive Plan was reviewed to determine if the proposed project (all alternatives) would be consistent with the Comprehensive Plan’s goals and objectives.
**Alternative 1 (No Action)**

**Short-term Impacts**

If Alternative 1 is implemented, no project facilities would be constructed, so no construction vehicles, equipment, and workers would be at the project sites and no construction activities would occur. Therefore, there would be no short-term impact on transportation from construction activities. If the short-term falling of agricultural land occurs, there would be fewer farm trucks and farm equipment traveling on the local roads, when compared to what currently occurs, resulting in a positive impact (i.e., a benefit) to transportation (i.e., less traffic) along those roads from implementation of Alternative 1.

**Long-term Impacts**

If the long-term falling of agricultural land occurs due to the current water delivery system not having sufficient capacity to meet crop demands, there would be fewer farm trucks and farm equipment traveling on the local roads, when compared to what currently occurs, resulting in a positive impact (i.e., a benefit) to transportation (i.e., less traffic) along those roads from implementation of Alternative 1.

**Alternative 2**

Alternative 2 would result in short-term and long-term impacts to transportation, which differ from that described for No Action.

**Short-term Impacts**

During Alternative 2’s construction activities, the traffic on the existing roads is expected to change. The construction of a pumping plant, pipeline, transmission line, and new access roads would likely result in increased traffic on roads that would provide access to those sites. During times of project materials deliveries or when construction workers are arriving or leaving the project sites, speeds on the roads used to access the project facility sites is expected to decrease as traffic increases. Access to some properties could be affected by some construction activities. Temporary road closures would be required during pipeline placement; however, the redundancy of the local road network should not result in lack of ingress or egress from the project area. These impacts would be short-term, occurring only during the construction period and therefore not considered an adverse impact on transportation.

**Long-term Impacts**

O&M of the pumping plant, pipeline, and transmission line would consist of periodic inspections and repairs, if necessary, by inspectors via truck. Maintenance would require only periodic visits to the site and alignments and would require few vehicles. Traffic disruptions
are expected to be infrequent and minor, if at all. Inspectors would use the access roads, the
gates to which would be locked to prevent public access to private property. There would be
no long-term impacts to transportation associated with Alternative 2. In addition, Alternative
2 would not be inconsistent with the Comprehensive Plan.

**Mitigation**

Although impacts were determined to be minimal, the following mitigation measures shall be
implemented to minimize the impacts to transportation from construction, operation, and
maintenance of Alternatives 2 through 4:

- Prior to the start of project construction (all alternatives), a Transportation Management
  Plan (TMP) shall be prepared. There are several purposes and objectives of the TMP:
  (1) to identify which roads will be used to construct and operate the proposed project
  (all alternatives), (2) to coordinate with the applicable agencies that have jurisdiction
  over those roads and that use the roads for emergency purposes, and (3) to minimize
  the potential impacts on traffic circulation, transportation modes, roadway condition,
  and emergency service providers (law enforcement, fire, and medical). The TMP may
  include, but not be limited to, the following items:

  - Include a list of roads that shall be designated as transportation routes for
    construction equipment, materials, and construction workers.
  - Include an inventory of the roads that comprise the proposed transportation routes,
    including a description of the road, the designated speed limit, and roadway
    condition; improve the roads that comprise the proposed routes, as necessary, to
    enable them to withstand the expected construction traffic.
  - Provide a traffic flag person to direct traffic at roadway locations that are identified
    as being potentially problematic during project construction and/or operation.
  - Identify traffic detours around work sites.
  - Maintain access to all residences in the project work site vicinity.
  - Schedule project vehicles during peak construction periods to arrive at intervals
    considered suitable to provide smooth traffic flow patterns.
  - Schedule materials and equipment deliveries so that they do not arrive during peak
    hour traffic periods for the area.
  - Schedule construction worker shifts so that they do not require workers to arrive at
    project site during peak hour traffic periods for the area.
  - Schedule construction worker shifts and materials and equipment deliveries so that
    they do not coincide with morning or afternoon school bus routes.
  - Set up carpools, van pools, or shuttles for construction workers.
- Stagger work shifts to reduce the number of construction workers commuting to the work sites at a given time.
- Use construction techniques that will not affect railroad or interstate highway operations.

**Alternative 3 (Preferred Alternative)**

This alternative would result in the transportation impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in similar transportation impacts as were discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and transmission line, a longer road, and a new road. Therefore, its construction duration is expected to be longer than for Alternative 2, so that its impacts on transportation are expected to be longer than for Alternative 2.

**Long-term Impacts**

This alternative would result in the transportation impacts as were discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and transmission line than Alternative 2, as well as a new road, so that more access points to the project facilities would be needed from the local roads. Because O&M of the pumping plant, pipeline, and transmission line would require only periodic visits to the site and alignments and would require few vehicles, traffic disruptions are expected to be non-existent to infrequent and minor.

**Mitigation**

The mitigation for Alternative 3 is the same as described for Alternative 2.

**Alternative 4**

This alternative would result in the transportation impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same less-than-significant transportation impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline line than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. The construction duration for Alternative 4 is expected to be longer than for Alternative 2, so that its impacts on transportation are expected to be longer than for Alternative 2.
3.15 Public Services and Utilities

**Long-term Impacts**

This alternative would result in the transportation impacts as were discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. Because O&M of the pumping plant, pipeline, and transmission line would require only periodic visits to the site and alignments and would require few vehicles, traffic disruptions are expected to be infrequent and minor, if at all.

**Mitigation**

The mitigation for Alternative 4 is the same as described for Alternative 2.

**Cumulative Impacts**

No cumulative impacts to transportation would occur as a result of the proposed project.

### 3.15 Public Services and Utilities

This section describes the existing the applicable public services and utilities provided within Minidoka County. It also lists the applicable goals and policies that are listed in the Comprehensive Plan.

**Study and Analysis Methodology**

The Comprehensive Plan and IDWR water rights database (IDWR 2014) whereas reviewed. Data are provided for Minidoka County as a whole. Domestic and irrigation water supplies are the only public services and utilities that may be affected by the proposed project. Therefore, other public services and utilities are not discussed further.

**Area of Potential Effect**

The APE for public services and utilities is the land where the project facilities would be constructed and the lands surrounding those facilities within Minidoka County.

#### 3.15.1 Affected Environment

Utilities addressed in this discussion include domestic water only.

Domestic and irrigation water needs within Minidoka County are supplied by the ESPA and the Snake River, including Reclamation’s Upper Snake River Reservoir System. With the exception of the City of Burley that has two surface water rights for irrigation and water
quality improvement, the major towns and cities in the county draw municipal water from the ESPA. A&B and the Minidoka Irrigation District deliver surface water for their respective landowners within the county. A&B also delivers groundwater to its landowners. In addition, rural private residences and some farmlands are irrigated or supplied domestic water through private wells. Many of the private wells however, are located within a shallow groundwater aquifer.

The following Comprehensive Plan objectives are applicable to the project:

- Public Utilities Objective #2: To consult and plan with utility companies so that facilities installed may be located and designed to minimize the impact on the environment and surrounding uses where practical.

### 3.15.2 Environmental Consequences

**Alternative 1 (No Action)**

**Short-term Impacts**

If Alternative 1 is implemented, no project facilities would be constructed; therefore, there would be no short-term impact on public services and utilities from project construction activities.

If the No Action alternative is implemented and groundwater levels continue to drop, domestic water users will need to drill deeper wells or find alternative sources in order to continue to supply water. This may result in short-term water rationing until alternative sources are developed.

Implementation of the No Action alternative could also result in water becoming unavailable for crop irrigation, resulting in lands being forced out of agricultural production (short-term fallowing) until another water source or delivery option is developed, or a different (less water intensive) crop is planted. There would be a short-term impact on utilities that provide irrigation water from short-term fallowing of agricultural lands.

**Long-term Impacts**

The long-term impact on public services and utilities of implementing the No Action alternative would be the same as described for the short-term, but the impacts would continue indefinitely until another water source, water delivery option, or crop change occurs.
**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, and pipelines, a transmission line, and access road within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water from the Snake River to various locations along the pipeline alignment. The short-term and long-term activities would not result in an adverse impact to public services and utilities impact.

**Short-term Impacts**

Construction activities associated with Alternative 2 facilities would include material deliveries, vegetation removal, grading and other land preparation activities, pumping plant construction (in water and on land), pipeline trenching and installation, installation of transmission line poles and stringing conductor on the poles, waste pickup, and land restoration. A pre-construction background check would locate all buried underground utilities, resulting in no adverse impact.

**Long-term Impacts**

Once Alternative 2 is constructed, the project facilities would be unmanned. Visits to the facilities would consist of regular periodic inspections, and repairs, as necessary. These visits are expected to be performed using few vehicles and personnel. As such, no impacts on law enforcement, fire protection, ambulance services, school buses, libraries, and utilities are expected. Operation of Alternative 2 would require electricity; the electricity required to operate the project is not considered an adverse impact.

**Mitigation**

The following mitigation measure would be implemented to minimize the impacts to local utilities from constructing Alternative 2:

- Prior to starting any ground-disturbing activity during project construction, the construction contractor would confirm that no underground utilities are located in the path of disturbance.

**Alternative 3 (Preferred Alternative)**

This alternative would result in the same public services and utilities impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same public services and utilities impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and
transmission line, a longer road, and a new road. Therefore, its construction duration is expected to be longer than for Alternative 2, so that its impacts on public services and utilities are expected to be longer than for Alternative 2.

**Long-term Impacts**

This alternative would result in the same public services and utilities impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

**Mitigation**

The mitigation for Alternative 3 is the same as described for Alternative 2.

**Alternative 4**

This alternative would result in the same public services and utilities impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same public services and utilities impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline line than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. The construction duration for Alternative 4 is expected to be longer than for Alternative 2.

**Long-term Impacts**

This alternative would result in the same public services and utilities impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

**Mitigation**

The mitigation for Alternative 4 is the same as described for Alternative 2.

**Cumulative Impacts**

No cumulative impacts to public services and utilities would occur as a result of the proposed project.
3.16 Energy

This section describes the existing Reclamation Minidoka Project North Side Pumping Division facilities that are operated by the A&B.

Study and Analysis Methodology (Approach)

Qualitative information regarding the North Side Pumping Division facilities and lands were reviewed.

Area of Potential Effect

The APE for energy use is the Minidoka Project North Side Pumping Division.

3.16.1 Affected Environment

A total of approximately 82,600 acres of irrigable private land within Jerome and Minidoka counties are irrigated by the Minidoka Project North Side Pumping Division. An existing pumping plant located approximately 8 miles west of Burley, pumps water from the Snake River (i.e., surface water) for Unit A’s 15,900 acres of land. In addition, water is pumped from approximately 180 wells (i.e., groundwater) for Unit B’s 66,700 acres of land. The Unit A Main Canal is approximately 4.4 miles long (Reclamation 2014).

The Minidoka Powerplant serves large irrigation pumping requirements on and near the Minidoka Project in southern Idaho. Power not needed for Reclamation project purposes is marketed in the Federal Southern Idaho Power System administered by the Bonneville Power Administration (Reclamation 2014).

3.16.2 Environmental Consequences

This section describes the change in energy use by A&B to operate Reclamation’s Minidoka Project North Side Pumping Division from implementation of the alternatives.

Methods and Assumptions

Qualitative information regarding the North Side Pumping Division and the four alternatives described in this EA (the No Action alternative plus three action alternatives) were compared. It is expected that the vehicles and equipment for construction would be used only on Mondays through Fridays during daylight hours (approximately 7:00 a.m. to 7:00 p.m.). Nighttime and weekend construction is not planned, but may be needed at times. Construction will start in the fall, and continue during the winter months, depending on weather conditions.
**Alternative 1 (No Action)**

*Short-term Impacts*

If the No Action alternative is implemented and water is pumped and conveyed over longer distances or pumped from deeper wells, the amount of energy (i.e., electricity) that would be required to operate the pumps to irrigate the agricultural lands could increase. If water becomes unavailable, agricultural lands may be forced out of production until another water source or delivery option is developed, or a different (less water intensive) crop is planted. If the lands are fallowed, then energy use (i.e., electricity) would be expected to decline because the pumps would not be used.

*Long-term Impacts*

The long-term impact of implementing the No Action alternative would be the same as described for the short term, but the impacts would continue indefinitely until another water source, water delivery option, crop change, or land use change occurs.

**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, and pipelines, a transmission line, and access road within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water; therefore, it would require the use of electricity to operate the pump(s). Any short-term impacts are not considered adverse because the project construction period would be relatively short, and the short-term energy impacts would then cease. There would not be any long-term adverse impacts to energy because the project would add only a small increment of energy requirement to A&B’s energy consumption for its existing facilities, and the new facilities are expected to be state-of-the-art and energy efficient.

*Short-term Impacts*

Energy would be required to construct the pipelines and pump station. The types of energy expected to be needed include gasoline and diesel to fuel vehicles and equipment and portable generators. A tie into an existing electrical distribution line may become necessary. Not all vehicles and pieces of equipment are expected to be used simultaneously, but would be used intermittently throughout the entire construction phase of the project; therefore, Alternative 2 would result in no effect.

*Long-term Impacts*

Energy would be required to operate the project. On the approximately 1,500 acres being supplied by the 6 to 8 deep wells, the average pumping lift is 270 feet. The lift from the new
The approximately 4,500 acres of surface water lands the new pumping plant would serve are the same total acreage currently being served by the original Unit A Pumping Plant that has the same 165 feet of lift. Therefore, there would be no net increase in power usage by using both pumping plants. The only time there could be a small increase in power usage between the two pumping plants would be during peak season irrigation demands, when the District may possibly pump approximately 20 percent more than it currently has the ability to pump. However, the power savings between the deep wells and the new pumping plant reduced lift would offset this increase.

The overall savings in power usage would be a small positive impact to energy.

**Mitigation**

Although impacts were determined to negligible, the following mitigation measures would be implemented to reduce energy use from construction, operation, and maintenance of Alternative 2:

- Vehicles and equipment to be used during project construction would be relatively new, in good working order, properly maintained, and would not be left to idle.
- Pumps and other energy-using project facilities to be used during project operation would reflect current technology, be energy efficient, in good working order, properly maintained, and replaced with energy efficient models, when replacement is needed.

**Alternative 3 (Preferred Alternative)**

This alternative would result in the energy use impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same energy use impacts as were discussed for Alternative 2. The only difference is that this alternative has a longer pipeline, so that its construction duration is expected to be longer than for Alternative 2.

**Long-term Impacts**

This alternative would result in the same energy use impacts as were discussed for Alternative 2. The only difference is that this alternative has a longer pipeline than Alternative 2, so that it may require more energy to pump the water.
Mitigation

The mitigation for Alternative 3 is the same as described for Alternative 2.

Alternative 4

This alternative would result in the same energy use impacts as were discussed for Alternative 2.

Short-term Impacts

This alternative would result in the same energy use impacts as were discussed for Alternative 2. The only difference is that this alternative has a longer pipeline, so that its construction duration is expected to be longer than for Alternative 2.

Long-term Impacts

This alternative would result in the same energy use impacts as were discussed for Alternative 2. The only difference is that this alternative has a longer pipeline than Alternative 2, so that it may require more energy to pump the water.

Mitigation

The mitigation for Alternative 4 is the same as described for Alternative 2.

Cumulative Impacts

Although the proposed project (all alternatives) would require energy during its construction and its operation, this planned energy use is not considered a major increase in electrical load for A&B, and therefore, would not result in an adverse impact. No cumulative impacts are anticipated on this resource as a result of the proposed project.

3.17 Recreation

Study and Analysis Methodology

Aerial photographs of the project facilities locations and the project vicinity, as well as the Comprehensive Plan and the Minidoka North Side Resource Management Plan and Final Environmental Assessment and Finding of No Significant Impact were reviewed. Data are provided for Minidoka County as a whole.
**Area of Potential Effect**

The APE for recreation resources is the land where the project facilities would be constructed and the lands surrounding those facilities within Minidoka County.

### 3.17.1 Affected Environment

The primary water bodies in the vicinity of project facilities are the Snake River and Milner Lake. The Snake River spans the southern boundary of the County, and it would be the water source for the project. The three alternative pumping plant sites would be located on the north side of the river. Much of the property along the river corridor is privately owned. Milner Lake, managed by Reclamation, is located adjacent to the project facilities. Recreation opportunities associated with the Snake River include camping, boating, hiking, picnicking, hunting, and fishing.

Recreation providers in the area include Idaho Department of Parks and Recreation (IDPR), BLM, IDFG, Idaho Power, Inc., and various local agencies.

The following Comprehensive Plan objectives are applicable to the project:

- Recreation Objective #3: Expand recreational opportunities through both public and private means.
- Recreation Objective #8: Need, design and maintenance of public recreation accesses to the Snake River reviewed and established in development and approval processes.

### 3.17.2 Environmental Consequences

**Alternative 1 (No Action)**

**Short-term Impacts**

If Alternative 1 is implemented, no project facilities would be constructed. In addition, if the No Action alternative is implemented and water becomes unavailable for crop irrigation, then lands may be temporarily forced out of agricultural production (short-term fallowing) until another water source or delivery option is developed, or a different (less water intensive) crop is planted. No impacts on recreation resources would occur as a result of either of these scenarios.

**Long-term Impacts**

The long-term impact on recreation resources of implementing the No Action alternative would be the same as described for the short term, but the impacts would continue indefinitely until another water source, water delivery option, crop change, or fallowing occurs.
**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, and pipelines, a transmission line, and access road within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water from the Snake River to various locations along the pipeline alignment. None of these activities would result in an adverse impact on recreation resources.

**Short-term Impacts**

Construction activities associated with Alternative 2 facilities would include materials deliveries, vegetation removal, grading and other land preparation activities, pumping plant construction (in water and on land), pipeline trenching and installation, installation of transmission line poles and stringing conductor on the poles, waste pickup, and land restoration. These activities would have no impact on recreation resources.

**Long-term Impacts**

Operation of the Alternative 2 pumping plant, pipeline, transmission line, and road would have no impact on recreation resources.

**Mitigation**

The following mitigation measure would be implemented to minimize the impacts to recreation from constructing Alternative 2:

- Warning signs or other safety devices will be placed on the water side of the pumping plant to warn boaters of a potential hazard.

**Alternative 3 (Preferred Alternative)**

This alternative would result in the same recreation resources impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same recreation resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and transmission line, a longer road, and a new road. Therefore, its construction duration is expected to be longer than for Alternative 2.
Long-term Impacts

This alternative would result in the same recreation resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

Mitigation

The mitigation for Alternative 3 is the same as described for Alternative 2.

Alternative 4

This alternative would result in the same recreation resources impacts as were discussed for Alternative 2.

Short-term Impacts

This alternative would result in the same recreation resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline line than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. The construction duration for Alternative 4 is expected to be longer than for Alternative 2.

Long-term Impacts

This alternative would result in the same recreation resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

Mitigation

The mitigation for Alternative 4 is the same as described for Alternative 2.

Cumulative Impacts

No known cumulative impacts to recreation would occur as a result of the proposed project.
3.18 Visual Resources

Study and Analysis Methodology

Aerial photographs of the project facilities locations and the project vicinity, site visit notes, and the Comprehensive Plan were reviewed.

Area of Potential Effect

The APE for visual resources is the land where the project facilities would be constructed and the lands surrounding those facilities within Minidoka County.

3.18.1 Affected Environment

The land use at and in the vicinity of the three pumping plant sites and along the pipeline alignment is primarily agricultural with associated rural residences and a small amount of undeveloped open space. There are few roads, highways, and railroads in the area. An aerial view of the landscape reveals it is not a natural appearing landscape, but instead, individual crop fields and pasture, section lines, residences, and roads are apparent. The pipeline alignment would be routed through a relatively flat area except in a couple of locations where there are rolling hills.

The following Comprehensive Plan Goal and Objectives are applicable to the project:

- Transportation Objective #5: To increase concern for the scenic quality along transportation routes.
- Hazardous Areas Goal: To create a setting in Minidoka County and the City of Rupert which protects, maintains and conserves the county’s natural beauty and countless resources and reduce the areas of both natural and man-made hazards.
- Special Areas or Sites Objective #4: Preserve and maintain access to scenic and recreational areas of interest within the county and city.
- Special Areas or Sites Objective #8: Preserve and protect the scenic and recreational areas of the county and city and to contribute to the quality of life enjoyed by present residents of Minidoka County and the City of Rupert and undoubtedly contribute to the local economy. This objective stresses the preservation of this quality of life and opportunities for future generations (Minidoka County 2010).

3.18.2 Environmental Consequences

Implementation of the alternatives has the potential to alter the landscape in the project area, resulting in potential impacts to visual resources.
Methods and Assumptions

The visual resources assessment is a multistep process, including:

- Describing the visual change that is expected from project construction and operation.
- Determining the degree of visual impact by considering:
  - The consistency of the visual changes from the project with the Comprehensive Plan; the Comprehensive Plan’s Community Design Goal is: To encourage the development of an aesthetically pleasing community and to protect the quality of life Minidoka County and the City of Rupert residents currently enjoy.
  - The compatibility of the visual changes from the project with the nearby landscape; whether the project would substantially degrade the existing visual quality of the project facility sites or their surrounding landscapes.
  - The number of people who would have views of the proposed facilities, their typical sensitivity to landscape change, and the duration of their views.
  - Whether project facilities would introduce a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
- Developing mitigation for identified impacts on visual resources, as necessary.

Alternative 1 (No Action)

Short-term Impacts

If Alternative 1 is implemented, no project facilities would be constructed, so no construction vehicles, equipment, and workers would be at the project sites and no construction activities would occur. Therefore, there would be no short-term impact on visual resources from construction activities. If the short-term fallowing of agricultural land occurs, there would be a change to the landscape from what currently occurs, resulting in an impact on visual resources from implementation of Alternative 1.

Long-term Impacts

If Alternative 1 is implemented, the District’s existing delivery of irrigation water, both from the river and from available groundwater wells, would remain unchanged. No significant improvements would be made in the efficiency and equity of the Unit A acreage, and no additional acreage historically irrigated only with groundwater would be supported when possible with surface water (i.e., via a “soft conversion” water rights system). This condition would likely result in the 6,000 acres proposed for soft conversion under the action alternatives to eventually (time uncertain) either transition to crops requiring less water or be fallowed. Such a change to a 6,000 acre area would represent an impact to the visual environment.
However, this change may be considered positive by some observers and adverse/negative by other observers.

In addition, the District would continue to deliver groundwater to Unit B lands. Assuming continued decline in groundwater levels, progressive fallowing of this agricultural land would be a long-term change to the landscape, resulting in an impact on visual resources from implementation of Alternative 1.

**Alternative 2**

Alternative 2 would result in short-term impacts to visual resources, which differ from that described for Alternative 1. Alternative 2 would result in different long-term changes to the landscape (and also different long-term impacts to visual resources) than were described for Alternative 1.

**Short-term Impacts**

During construction activities for Alternative 2, the existing visual character of the area would temporarily change. The construction of a pumping plant, pipeline, transmission line and new access roads would temporarily change the views from, and visual character of, the area due to the presence of construction equipment, vehicles, and workers, removal of vegetation, construction activities, and generation of dust. During construction, motorists and residents in the area would see construction vehicles driving within their viewsheds during the construction period; however, the vehicles and equipment used may be similar to those used in the transport of agricultural goods along the same roads. Construction of Alternative 2 would not result in an adverse impact.

**Long-term Impacts**

The long-term changes in the landscape from implementation of Alternative 2 would include the presence of the aboveground project facilities: a pumping plant and an overhead electrical transmission line that would be aligned along a 25-foot-wide permanent dirt access road that would extend along the pipeline ROW.

A few rural residences are located approximately 0.5 to 0.9 mile away (to the west, northwest, north, northeast, and east). The Snake River is on the south side of the pumping plant site. The nearest residence is located approximately 0.2 mile to the south of the pumping plant site, on the south side of the Snake River. The proposed transmission line would be moderately visible by motorists and residents due to lack of topography and mature vegetation along the alignment. It would not likely impair views or visually dominate the viewshed due to the poles’ expected wide spacing and small diameters. The transmission line and roads would appear similar to other existing local transmission lines and roads. O&M activities of the pumping plant, pipeline, transmission line, and roads would consist of periodic inspections by
inspectors via truck, and repairs, as necessary. Maintenance activities at the project facilities are expected to be short term, creating low visual contrast. Due to the expected periodic timing and short duration at any given location, this would be considered a low visual change and a negligible impact. In addition, Alternative 2 would not be inconsistent with the Comprehensive Plan.

**Mitigation**

Although impacts were determined to be minor, the following mitigation measures would be implemented to minimize the impacts to visual resources from construction and O&M of Alternative 2.

- Water areas where dust is generated, particularly along unpaved haul routes and during earth moving activities, to reduce impacts to views and the landscape caused by dust.
- Prohibit unnecessary ground disturbance outside of the construction disturbance area.
- Revegetate and restore disturbed ground surfaces at each project facility to their original condition to the extent feasible.
- Minimize light scatter and glare from portable temporary light sources that would be used for nighttime construction (if nighttime construction is needed) by using shielded and directional lighting, and install temporary visual barriers, as needed, to prevent light spill from equipment lighting in areas with sensitive receptors.
- Design, construct, and finish all new and structures using non reflective materials, non-glare finishes, and colors that would blend with the natural environment and not create a new source of glare.
- Design the transmission line structures to be similar in appearance to the existing transmission lines in the project vicinity to the extent feasible. Use non-specular conductors and non-reflective and non-refractive insulators.
- Use minimal project construction signs; signs that would be installed shall be made of non-glare materials, finishes, and unobtrusive colors to the extent possible. The design of any signs required by safety regulations shall conform to the criteria established by those regulations.
- Use native trees, bushes, and shrubs for screening at project facilities that may generate new sources of light or glare, in a manner that does not compromise facility safety and access.
- Minimize nighttime lighting to areas required for safety, security, and operations, and shield lighting from public view to the extent possible. Timers and sensors shall be used to minimize the amount of time that lights are on in areas where lighting is not normally needed for safety, security, or operation. Use shielded and directional permanent lighting.
- Use minimal project signs; signs that would be installed shall be made of non-glare materials, finishes, and unobtrusive colors to the extent possible. The design of any
signs required by safety regulations shall conform to the criteria established by those regulations.

**Alternative 3 (Preferred Alternative)**

Alternative 3 would result in the same visual resource impacts that were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same visual resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and transmission line, a longer road, and a new road, so that its construction duration is expected to be longer than for Alternative 2, so that its impacts on visual resources is expected to be longer than for Alternative 2.

**Long-term Impacts**

This alternative would result in the same visual resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and transmission line and road than Alternative 2, as well as a new road, so that a larger landscape (more agricultural fields) would be affected, including having more poles and a longer access road. The nearest rural residences are located approximately 0.4 mile to the northeast and approximately 0.4 mile to the southeast on the south side of the Snake River.

**Mitigation**

The mitigation for Alternative 3 is the same as described for Alternative 2.

**Alternative 4**

Alternative 4 would result in the same visual resource impacts that were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same visual resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline line than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. The construction duration for Alternative 4 is expected to be longer than for Alternative 2.
**Long-term Impacts**

This alternative would result in the same visual resources impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. There are a few rural residences located approximately 0.7 to 1.25 miles to the northwest, north, and northeast. The nearest residences are located approximately 0.6 mile to the south of the pumping plant site, on the south side of the Snake River. It is expected that a larger landscape (adjacent to more agricultural fields) would be affected by more poles and a longer access road.

**Mitigation**

The mitigation for Alternative 4 is the same as described for Alternative 2.

**Cumulative Impacts**

No known cumulative impacts to visual resources would occur as a result of the proposed project.

### 3.19 Socioeconomics

**Study and Analysis Methodology**

The Idaho Department of Labor (IDL) and U.S. Census Bureau (USCB) websites were consulted for current population, employment, unemployment, and housing data for Minidoka County.

**Area of Potential Effect**

The APE for socioeconomics is Minidoka County.

### 3.19.1 Affected Environment

The population of Minidoka County has been increasing since 2005. The 2012 estimated population in Minidoka County is provided in Table 3-6.

The County’s economy is heavily dependent on agriculture and food processing; however, the economy has diversified to include durable manufacturing and wholesale and retail trade tied to agriculture. Employment in Minidoka County has traditionally been seasonal. The civilian labor force, and number of persons employed and unemployed in 2012 are shown in Table 3-6 for 2012.
Table 3-6. Minidoka County civilian labor force, employment, and unemployment characteristics for 2012 (IDL 2013).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>People in civilian labor force</td>
<td>10,434</td>
</tr>
<tr>
<td>People employed</td>
<td>9,800</td>
</tr>
<tr>
<td>People unemployed</td>
<td>634</td>
</tr>
</tbody>
</table>

Housing statistics for Minidoka County are presented in Table 3-7.

Table 3-7. Minidoka County housing characteristics for 2010 (USCB 2010).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Number/Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total housing units</td>
<td>7,665/100</td>
</tr>
<tr>
<td>Occupied</td>
<td>7,170/93.5</td>
</tr>
<tr>
<td>Owner-occupied</td>
<td>5,333/74.4</td>
</tr>
<tr>
<td>Renter-occupied</td>
<td>1,837/25.6</td>
</tr>
<tr>
<td>Vacant</td>
<td>495/6.5</td>
</tr>
<tr>
<td>Vacant for rent</td>
<td>128/25.8</td>
</tr>
<tr>
<td>Vacant for sale</td>
<td>90/18.1</td>
</tr>
</tbody>
</table>

3.19.2 Environmental Consequences

Methods and Assumptions

Current population, employment, unemployment, and housing data for Minidoka County were reviewed to assess whether the existing local population and housing supply is adequate to construct and operate the proposed project (all alternatives).

Alternative 1 (No Action)

Short-term Impacts

If Alternative 1 is implemented, no project facilities would be constructed. In addition, if the No Action alternative is implemented and water becomes unavailable for crop irrigation, then lands may be forced out of agricultural production (short-term fallowing) until another water source or delivery option is developed, or a different (less water intensive) crop is planted. No impacts on the population and housing parameters of socioeconomics would occur as a result of either of these scenarios. If lands are fallowed, then farm workers could be expected to be
laid off, which would affect the unemployment and unemployment parameters of socioeconomics, and is not expected to affect housing.

**Long-term Impacts**

The long-term impact on socioeconomics of implementing the No Action alternative would be the same as described for the short-term for employment and unemployment, but the impacts would continue indefinitely until another water source, water delivery option, or crop change occurs. If farm workers are unemployed for extended periods of time, it is anticipated that they may need to relocate from their residence, which could result in additional vacant housing in the area.

**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, and pipelines, a transmission line, and access road within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water from the Snake River to various locations along the pipeline alignment. These activities would not result in an adverse impact on socioeconomics.

**Short-term Impacts**

Construction activities associated with Alternative 2 facilities would include materials deliveries, vegetation removal, grading and other land preparation activities, pumping plant construction (in water and on land), pipeline trenching and installation, installation of transmission line poles and stringing conductor on the poles, waste pickup, and land restoration. These activities would require workers, resulting in a positive impact (i.e., a benefit) on the employment and unemployment parameters of socioeconomics. Because it is anticipated that the construction workers would come from the local area, the project’s construction activities would have no impact on housing.

**Long-term Impacts**

Once Alternative 2 is constructed, the project facilities would be unmanned. Visits to the facilities would consist of regular periodic inspections, and repairs, as necessary. These visits are expected to be performed using few vehicles and personnel. Because it is anticipated that the inspection/maintenance personnel would already be employed by A&B, project O&M would have no impact on the employment, unemployment, and housing parameters of socioeconomics.

It is expected that the agricultural fields located along the pipeline alignment would be irrigated, thus allowing for the regular and continued cropping of the fields and the associated employment of farm workers. Because the farm workers are expected to come from the local
area, there would be no impact on the employment, unemployment, and housing parameters of socioeconomics.

**Mitigation**

No mitigation is needed or recommended.

**Alternative 3 (Preferred Alternative)**

This alternative would result in the same socioeconomics impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same socioeconomics impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and transmission line, a longer road, and a new road. Therefore, its construction duration is expected to be longer than for Alternative 2.

**Long-term Impacts**

This alternative would result in the same socioeconomics impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

**Mitigation**

The mitigation for Alternative 3 is the same as described for Alternative 2.

**Alternative 4**

This alternative would result in the same socioeconomics impacts as were discussed for Alternative 2.

**Short-term Impacts**

This alternative would result in the same socioeconomics impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline line than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road. The construction duration for Alternative 4 is expected to be longer than for Alternative 2.
3.20 Environmental Justice

**Long-term Impacts**

This alternative would result in the same socioeconomics impacts as was discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

**Mitigation**

The mitigation for Alternative 4 is the same as described for Alternative 2.

**Cumulative Impacts**

No known cumulative impacts to socioeconomics would occur as a result of the proposed project.

**3.20 Environmental Justice**

This section describes the ethnic and income characteristics of the populations within Minidoka County and the State of Idaho, for comparison purposes.

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* (59 FR 7629), was signed on February 11, 1994, by President Clinton. EO 12898 requires that each federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations.

The intent of EO 12898 is to assess potential impacts from the implementation of development projects, subject to federal permitting requirements, to confirm that no person in the United States shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. Where possible, measures should be taken to avoid negative impacts to these communities or mitigate the adverse effects.

The USCB provides a definition of minority and low income populations. The term “minority population” includes persons who identify themselves as African American, Asian or Pacific Islander, American Indian or Alaskan Native, or Hispanic (USCB 2009a). Race refers to census respondents’ self-identification of racial background. For example, Hispanic origin refers to ethnicity and language, not race, and may include persons whose heritage is Puerto Rican, Cuban, Mexican, or Central or South American, and other Spanish cultures (OMB 1997).
According to the Council on Environmental Quality (CEQ), to be considered a minority population, the population of the affected area must either exceed 50 percent minority, or the minority population percentage of the affected area must be meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

A minority population also 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 1997). In addition, according to the EPA guidelines, similar to the CEQ, a minority population refers to a minority group that has a population of greater than 50 percent of the affected area’s general population; or the minority population percentage of the affected area must be meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis (EPA 1998).

The USCB does not provide a specific definition for “low income.” Rather, the term “poverty” is used, and poverty thresholds are established each year for statistical purposes (USCB 2009b). To be considered a low income population, the low income population in an affected area should be identified using the annual statistical poverty thresholds from the USCB. The HUD defines a low-income population as one that receives 80 percent of the median family income for the area (HUD 1984). The U.S. Department of Health and Human Services issues poverty guidelines each year that are a simplification of the USCB’s poverty thresholds. The guidelines are another version of the federal poverty measure; they are used for administrative purposes (for example, such as determining financial eligibility for certain federal programs) (IRP 2008).

Study and Analysis Methodology

The USCB website was consulted for current population, race/ethnicity, income, and poverty data for Minidoka County and for the State of Idaho, for comparison purposes.

Area of Potential Effect

The APE for environmental justice is Minidoka County.

3.20.1 Affected Environment

To characterize the population, race, and ethnicity of Minidoka County and the State of Idaho, data from the USCB were obtained and reviewed. Table 3-8 presents the total 2012 population and population breakdown by race and ethnicity for Minidoka County and the State of Idaho, based on the American Community Survey (USCB 2013). Population estimates for 2013 were not available at the time this report was produced.
### Table 3-8. Minidoka County and Idaho race and ethnicity, 2012 estimate (USCB 2013).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Minidoka County</th>
<th>Idaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>20,037</td>
<td>1,595,728</td>
</tr>
<tr>
<td>White (%)</td>
<td>94.9</td>
<td>93.8</td>
</tr>
<tr>
<td>Black or African American (%)</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>American Indian and Alaska Native (%)</td>
<td>2.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Asian (%)</td>
<td>0.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander (%)</td>
<td>*</td>
<td>0.2</td>
</tr>
<tr>
<td>Two or More Races (%)</td>
<td>1.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Hispanic or Latino (any race) (%)</td>
<td>32.6</td>
<td>11.6</td>
</tr>
<tr>
<td>White alone (not Hispanic or Latino) (%)</td>
<td>64.8</td>
<td>83.5</td>
</tr>
</tbody>
</table>

* Value greater than zero, but less than half unit of measure shown.

As shown in Table 3-8, the Hispanic population in Minidoka County is less than the 50 percent CEQ and EPA threshold, indicating that a majority of the County population does not identify itself as a minority population. The Hispanic or Latino percentage is, however, meaningfully greater than the comparable percentage for the State of Idaho, indicating that there is a minority population in Minidoka County.

Table 3-9 provides income, poverty, and unemployment data for Minidoka County and the State of Idaho.

Minidoka County’s median family income is 93.4 percent of Idaho’s median family income. This indicates that Minidoka County does not have a low-income population, as defined by HUD. This is further supported in Table 3-9, in which the individuals below poverty level is indicated as 15 percent, which is not meaningfully different than the comparable statistic for the State of Idaho.

### Table 3-9. Minidoka County and Idaho income, poverty, unemployment, and housing, 2012 estimate (USCB 2012).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Minidoka County</th>
<th>Idaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median family income</td>
<td>$50,879</td>
<td>$54,483</td>
</tr>
<tr>
<td>Per capita income</td>
<td>$19,466</td>
<td>$22,053</td>
</tr>
<tr>
<td>Individuals below poverty level (%)</td>
<td>15.0</td>
<td>15.9</td>
</tr>
<tr>
<td>Percent unemployed</td>
<td>7.1</td>
<td>8.0</td>
</tr>
</tbody>
</table>
3.20.2 Environmental Consequences

Methods and Assumptions

In accordance with CEQ, EPA, and HUD guidelines, the first step undertaken in this environmental justice analysis was to determine if there was a minority and/or low-income population in Minidoka County.

If a minority and/or low-income population were determined to exist in Minidoka County, then the second step undertaken in this environmental justice analysis was to determine if a “high and adverse” impact would occur. The CEQ guidance indicates that, when determining whether the effects are high and adverse, agencies are to consider whether the risks or rates of impact “are significant or above generally accepted norms.” If no minority or low-income population exists in Minidoka County, then the analysis is finished, and the conclusion is no impact.

The final step undertaken in this analysis was to determine if the impact on the minority or low-income population would be disproportionately high and adverse. The CEQ includes a non-quantitative definition stating that an effect is disproportionate if it appreciably exceeds the risk or rate to the general population.

Alternative 1 (No Action)

Short-term Impacts

If the No Action alternative is implemented and water becomes unavailable, then lands may be temporarily forced out of agricultural production until another water source or delivery option is developed, or a different (less water intensive) crop is planted. If the lands are fallowed, then farm workers (minority and non-minorities) would likely become unemployed.

There is a minority population in Minidoka County, as defined by CEQ and EPA guidelines; however, that population would not experience health or environmental impacts from the implementation of the No Action alternative that are greater or different than the other farm workers or the remainder of the local population. In addition, because there is no low-income population in Minidoka County, as defined by HUD, that population would not experience disproportionately high and adverse human health or environmental impacts from implementation of this alternative.

Long-term Impacts

The long-term impact of implementing the No Action alternative would be the same as described for the short-term, but the impacts would continue indefinitely until another water source, water delivery option, or crop change occurs.
**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, pipelines, a transmission line, and access road within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water from the Snake River to various locations along the pipeline alignment. These short-term and long-term activities would not result in adverse impacts to environmental justice as (1) there is no defined low-income population in the area, and (2) the human health and/or environmental impacts from constructing and operating this alternative are not expected to be disproportionately high and adverse to the existing minority population of the area.

**Mitigation**

No mitigation is needed or recommended.

**Alternative 3 (Preferred Alternative)**

This alternative would result in the same impacts as were discussed for Alternative 2.

**Alternative 4**

This alternative would result in the same impacts as were discussed for Alternative 2.

**Cumulative Impacts**

There is a minority population in Minidoka County, as defined by CEQ and EPA guidelines; however, that population would not experience health or environmental impacts from the proposed project (all alternatives) that are greater or different than the remainder of the local population. Because there is no low-income population in Minidoka County, as defined by HUD, that population would not experience disproportionately high and adverse human health or environmental impacts from the project (all alternatives). Therefore, the proposed project (all alternatives) would not contribute to cumulative environmental justice impacts.

### 3.21 Air Quality and Climate Change

**Study and Analysis Methodology**

Aerial photographs of the project facilities locations and the project vicinity, site visit notes, and the Comprehensive Plan were reviewed.
Area of Potential Effect

The APE for air quality and climate change is the land where the project facilities would be constructed and the lands surrounding those facilities within Minidoka County.

### 3.21.1 Affected Environment

Air quality of the project area could be affected by the amount of pollutants released, potentially exceeding acceptable air quality levels, and the surrounding physical and natural environment contributing to the air quality of the area (trees, car traffic, industry, etc.). According to the Comprehensive Plan, air quality in Minidoka County is generally excellent and the greatest sources of air pollution from non-beneficial uses include smoke from grass fires, crop burning and dust. Emissions from the Twin Falls area as it grows may affect the county’s air shed.

The EPA has established air quality standards for six ‘criteria’ air pollutants: ozone, carbon monoxide (CO), lead, nitrogen dioxide, particulate matter (PM-10), and sulfur dioxide. Environmentally, air pollution can: damage soils, water, crops, vegetation, manmade materials, property, animals and wildlife, impair visibility, affect climate and weather, and create transportation hazards. Human health can also be impacted by harmful air quality conditions.

For each of the six criteria pollutants, the EPA has determined a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS), and it is when an area exceeds these standards that it is designated as a nonattainment area. Pollution control measures are mandated for Federal actions in nonattainment areas.

A nonattainment area can be listed for any one, or more, of the criteria pollutants. An area that was once a nonattainment area, but has since improved its air quality enough so that it now meets the EPA established air quality standards, is up-graded to a maintenance area designation. Maintenance areas also have pollution controls imposed on them, but because the air quality is not as poor as in nonattainment areas, the control standards are not as strict in maintenance areas. All other areas not listed by the EPA for air quality degradation are considered attainment areas.

The project area lies within Minidoka County and is not within an EPA-listed nonattainment area or maintenance area for any of the criteria pollutants.
The following Comprehensive Plan goal and objectives are applicable to the project:

- Natural Resources and Hazardous Areas Objective #1: To preserve, maintain and enhance soil, water, air, plants, wildlife, and other natural resources so they may be used by this and later generations.

### 3.21.2 Environmental Consequences

**Methods and Assumptions**

Air quality information for the project area was reviewed to determine the existing air quality status. In addition, the Comprehensive Plan was reviewed to determine if the proposed project (all alternatives) would be consistent with the Comprehensive Plan’s objectives. There are no Non-Attainment Areas, Areas of Concern, Maintenance Areas, or Class 1 areas in or near the project area (IDEQ 2014).

**Alternative 1 (No Action)**

**Short-term Impacts**

If Alternative 1 is implemented, no project facilities would be constructed. In addition, if the No Action alternative is implemented and water becomes unavailable for crop irrigation, then lands may be temporarily forced out of agricultural production (short-term fallowing) until another water source or delivery option is developed, or a different (less water intensive) crop is planted. No short-term impacts on air quality resources would occur as a result of either of these scenarios.

**Long-term Impacts**

The long-term impact on air quality of implementing the No Action alternative would be potential dust being raised by wind from fallowed agricultural land. The impacts would continue indefinitely until another water source, water delivery option, or crop change occurs.

**Alternative 2**

Alternative 2 would require the short-term construction activities associated with a pumping plant, and pipelines, a transmission line, and access road within the pipeline ROW. Alternative 2 would also result in pumping and conveyance of water from the Snake River to various locations along the pipeline alignment. These activities would have a temporary effect on air quality.
3.21 Air Quality and Climate Change

Short-term Impacts

Construction activities associated with Alternative 2 facilities would include materials deliveries, vegetation removal, grading and other land preparation activities, pumping plant construction (in water and on land), pipeline trenching and installation, installation of transmission line poles and stringing conductor on the poles, waste pickup, and land restoration. Emissions of particulate matter (PM2.5 and PM10) would occur during earth-disturbing activities. A 100 percent level of control for fugitive emissions is not attainable as some particulate matter in the form of dust and exhaust emissions would be emitted during construction. Implementation of mitigation measures would result in no violations of air quality standards, as the anticipated emissions impact would be expected to be below the threshold values for PM10 and PM2.5 (15 tons per year and 10 tons per year, respectively) as identified in the Idaho Air Rules Section 006. Mitigation measures would be implemented to reduce potential effects.

Construction equipment emits exhausts which contain greenhouse gases (GHG). The level of GHG emissions in the project area overall are not high and the project would not be expected to increase the total GHG emissions in the project area to a level that would result in an adverse impact.

Long-term Impacts

Operation of the Alternative 2 pumping plant, pipeline, transmission line, and road would have no measureable impact on air quality. Alternative 2 would be consistent with the Comprehensive Plan’s goal to preserve, maintain and enhance soil, water, air, plants, wildlife and other natural resources so they may be used by this and later generations.

Climate Change

Climate change could alter precipitation patterns and river hydrology. This could result in potential increases or decreases in the magnitude and duration of flow events, alter the timing of snowmelt, increase or decrease flow regimes, and change River levels. Increases in velocities and erosive forces along streambanks and impacts on water temperatures also could likely occur. All of these factors could influence physical sites and biological communities - affecting species assemblages, timing, and use of the project area, and could also lead to changes in noxious and invasive weed cover. The factors could also affect the long-term ability of the project to provide a reliable water source.

Climate change could affect soil erosion rates due to more or less precipitation. Restoration of disturbed land and maintenance of project facilities would reduce any potential impact on soil erosion from climate change.
3.21 Air Quality and Climate Change

Mitigation

The following mitigation measures shall be implemented to minimize the impacts to air quality and climate change from constructing Alternative 2:

- All exposed soil surfaces shall be kept damp to reduce dust generation during construction. Water shall be applied as needed to maintain moist surface conditions.
- Dirt will be cleaned from public highways each day to prevent dust from passing traffic.
- Construction equipment and vehicles will be maintained in good operating condition, including regular maintenance of emission control devices.

Alternative 3 (Preferred Alternative)

This alternative would result in the same air quality and climate change impacts as were discussed for Alternative 2.

Short-term Impacts

This alternative would result in the same air quality and climate change impacts as were discussed for Alternative 2. The only differences are that this alternative has a longer pipeline and transmission line, a longer road, and a new road. Therefore, its construction duration is expected to be longer than for Alternative 2.

Long-term Impacts

This alternative would result in the same air quality and climate change impacts as were discussed for Alternative 2. The only differences are that this alternative has a longer pipeline than Alternative 2 and the transmission line and access road would be aligned along an east-west oriented private road.

Mitigation

The mitigation for Alternative 3 is the same as described for Alternative 2.

Alternative 4

This alternative would result in the same air quality and climate change impacts as were discussed for Alternative 2.

Short-term Impacts

This alternative would result in the same air quality and climate change impacts as were discussed for Alternative 2. The only differences are that this alternative has a longer pipeline
3.21 Air Quality and Climate Change

line than Alternative 2 and the transmission line and access road would be aligned along an
east-west oriented private road. The construction duration for Alternative 4 is expected to be
longer than for Alternative 2.

**Long-term Impacts**

This alternative would result in the same air quality and climate change impacts as were
discussed for Alternative 2. The only differences are that this alternative has a longer pipeline
than Alternative 2 and the transmission line and access road would be aligned along an east-
west oriented private road.

**Mitigation**

The mitigation for Alternative 4 is the same as described for Alternative 2.

**Cumulative Impacts**

Vehicular traffic, agricultural activities, and commercial and residential facilities in the project
area have all contributed to air quality impacts and GHG emissions. These emission sources
would continue to occur. The combustion emissions and dust generation from the project are
expected to have a temporary and localized air quality impact. However, given the low level
of emissions from the project and good air quality in the project area, the incremental impact
on air quality and climate change would be low. Therefore, the cumulative impact from the
project on air quality and climate change would be low.
Chapter 4  CONSULTATION AND COORDINATION

4.1  Agency Consultation and Coordination

4.1.1   National Historic Preservation Act

In compliance with Section 106 of the NHPA of 1966 (as amended in 1992), Reclamation consulted with the Idaho SHPO to identify cultural and historic properties in the area of potential effect. A letter was sent to the SHPO on April 23, 2014 initiating consultation (Appendix B). In a letter dated May 23, 2014, SHPO concurred that the project would have no adverse effect on historic properties (Appendix B). In response to comments received on the Draft EA, Reclamation changed its preferred alternative to Alternative 3 and refinements were made to the pipeline alignments. Reclamation consulted with the SHPO on these changes to the project and sent a letter to them on December 16, 2014 (Appendix B). In a letter dated December 23, 2014, SHPO concurred that the changes in the project would have no adverse effect on historic properties (Appendix B).

4.1.2   Endangered Species Act (1973) Section 7 Consultation

The ESA requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or destroy or adversely modify their critical habitat. To comply with this requirement, agencies must consult with USFWS on discretionary actions which may affect listed species. If an action may affect a listed species, the agency must initiate formal or informal consultation. If an action has no effect on listed species, no consultation is necessary.

Reclamation obtained a list threatened and endangered species and critical habitat in Minidoka County, Idaho from the USFWS web site. After review of the best available data regarding the occurrence of these species within areas affected by this project, Reclamation concluded this project would have no effect on listed species because no listed species or designated critical habitat areas are present in the action area. Consequently, no consultation is required for this action (Appendix C).
4.2 Tribal Coordination and Consultation

Scoping letters were sent to the Shoshone-Paiute Tribes and the Shoshone-Bannock Tribes to seek their involvement and address any questions or concerns related to the preferred alternative (Appendix D). Additional letters were sent to the Tribes detailing the cultural resources evaluation and asking for their input. No indication was received from the Tribes that any sacred site existed or if they had any comments or concerns on the preferred alternative.

4.3 Public Involvement

As part of the NEPA process, Reclamation submitted a press release giving the dates of the scoping period. A scoping letter was sent to federal and state agencies, Tribal Government, and local city and county officials soliciting comments, concerns, and issues related to the proposed action. A copy of the scoping letter is included in Appendix A. There were multiple responses to the scoping letter or the press release received during the July 12, 2013 to August 12, 2013 comment period. The letters are included in Appendix A. Issues mentioned in the letters are either addressed in this EA, supported the proposed action, or were outside the scope of the project.

Reclamation issued a Draft EA for public comment on May 2, 2014. The Draft EA was distributed to local, state, and federal agencies, Tribes, landowners, and interested parties for a 30-day public comment period.

Approximately 30 notes, letters, and emails were received during the public review period of the EA. The majority of the concerns expressed in this correspondence focused on the following main categories:

- Cost comparison of the three action alternatives.
- Concerns of nearby residents, including:
  - Noise and potential impacts to residents living across the river to the south of the project site.
  - Water supply and potential impacts to shoreline residents.
  - Wildlife viewing and fishing activities and potential impacts to residents across the river from the proposed pumping plant site.
  - Property values and resident concern that construction of the pumping plant site and operation of the proposed facility would have an adverse effect on their property value.
  - Historical values and Indian sacred sites viewing.
Alternatives 3 or 4 would be preferable to reduce potential impacts for existing residents along the river.

- Concerns of A&B members included:
  - Water rights of Unit A landowners.
  - The 1955 “Definite Plan.”
  - District governance.

- Protected resources and follow-on permit requirements.
  - IDEQ
  - IDWR
  - ITD
  - USFWS

Given these characteristics of the comments received, Reclamation’s responses are organized under the same four main topical headings and associated subheadings and located in Appendix F of the Final EA. The comment letters are also included at the end of Appendix F following Reclamation’s responses to comments. Where appropriate, the Final EA has been revised to reflect comment concerns.
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# Chapter 5 REFERENCES

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APPENDICES
Subject: Request for Public Comments for the A&B Irrigation District – Unit A Pumping Plant #2, Minidoka Project, Idaho

Dear Interested Parties:

The Bureau of Reclamation is asking for your help in identifying issues and concerns associated with the proposed A&B Irrigation District Unit A Pumping Plant #2, with Reclamation retaining ownership of the new facility. Reclamation will use this information to help develop alternative access options and analyze the environmental impacts of the proposal in an Environmental Assessment as required by the National Environmental Policy Act (NEPA).

Reclamation is evaluating several alternatives for the location of the proposed pumping plant and associated pipeline. The alternatives shown on Figure 1 enclosed with this letter include but are not limited to:

- Expansion of the existing pump plant (see Figure 1, enclosed) and construction of the related distribution pipeline.
- The construction of a new pumping plant on the Snake River upstream from the existing plant, along with the construction of the associated pipeline. The location of the new plant will be determined during the NEPA process (see Figure 1, enclosed).

The Environmental Assessment required under NEPA will evaluate the impacts of each alternative on the human and natural environments and consider this evaluation in the decision-making process. Reclamation anticipates the final Environmental Assessment will be distributed for public review in December 2013. Reclamation is asking for your assistance in identifying issues and concerns, developing and refining a range of alternatives, and evaluating potential impacts of implementing the alternatives.

Reclamation invites you to send your written comments on this proposal to Ms. Julia Pierko, Activity Coordinator, Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, Idaho 83702, by August 12, 2013. If you wish to comment via email, you may send comments to: jpierkos@usbr.gov.

Also, please fill out and return the form below or notify us via Ms. Pierko’s email address if you wish to remain on the mailing list to receive a copy of the Environmental Assessment. If
Reclamation does not receive notification, we will assume you do not wish to be on the mailing list.

If you have any questions concerning the Environmental Assessment process, please contact Ms. Pierko at 208-383-2284.

Sincerely,

[Signature]

Jerrold D. Gregg
Area Manager

Enclosure

---

☐ Please keep my name on the mailing list for the A&B Irrigation District – Unit A Pumping Plant Project

☐ Please change my address on your mailing list to:

Name

Address

City, State, Zip Code
Ms. Mary Anne Davis  
Associate State Archaeologist  
Idaho State Historical Society  
210 Main Street  
Boise, ID 83702-7264

Subject: Invitation to Consult on Proposed Pump Plant and Delivery Pipeline Installation  
Project – Minidoka Project, Idaho

Dear Ms. Davis:

The Bureau of Reclamation with the A&B Irrigation District (District), the U.S. Department of Agriculture–Rural Development (RD) and the Natural Resources Conservation Service (NRCS), is proposing to construct a new pump plant and associated pipeline to replace wells in Unit B lands of the District. The long, linear project area is located in Minidoka County, Idaho and extends through the following legal coordinates: T.9S, R.22E, Sections 10, 11, 15, 21, 22, 28 and 33; and T.10S, R.22E, Sections 4, 8, 9, 16, 17, 19, and 20 (see Figures 1 & 2). The U.S. Geological Survey 7.5’ topographic map quadrangles involved include Burley, Burley NW, Burley NE, and Burley SW. The proposed action constitutes an undertaking according to the definition in the National Historic Preservation Act of 1966, as amended, triggering the Section 106 process.

As required at 36 CFR Part 800.5(b), enclosed please find documentation in support of a finding of “No Adverse Effect on Historic Properties,” including that specified in § 800.11(e): (1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary; (2) A description of the steps taken to identify historic properties; (3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register; (4) A description of the undertaking's effects on historic properties; (5) An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and (6) Copies or summaries of any views provided by consulting parties and the public.
Description of the Undertaking

Reclamation developed the North Side Pumping Division of the Minidoka Project in the 1950s and early 1960s. Reclamation entered into a repayment contract with the District and turned over operations to them in 1966. The Minidoka Project facilities for the North Side Pumping Division include a pumping plant on the Snake River for Unit A of the District, known as Unit A Pumping Plant #1 (Figure 3), and 177 deep groundwater wells for Unit B of the District. Currently, 1,500 acres of Unit B are experiencing reduced or failing groundwater supplies and are in need of supplemental or replacement supplies from the District's surface water system. To overcome these existing infrastructure limitations and water delivery problems, the District proposes to develop an additional replacement pump station on the Snake River and an associated distribution pipeline facility. Construction and operation of the facilities would involve Reclamation, NRCS, RD, and the District. Reclamation, which will retain ownership of the proposed pump station when construction is complete, has assumed the lead Federal agency status for the Section 106 process.

Reclamation, the NRCS and RD are conducting an Environmental Assessment (EA) as part of the National Environmental Policy Act requirements to determine the potential for environmental impacts from development and operation, including acquisition of property interests as necessary, of the pumping plant and delivery pipeline proposed by the District. In addition to the project alternative preferred by the District (Alternative 2), the EA also reviews a No Action alternative and two additional, potentially feasible alternatives for the placement of the pump plant (Figure 2). The intent is to confirm an alternative that provides optimum technical and cost feasibility, construction and operation efficiency, and avoidance of significant and immitigable environmental and cultural resource impacts.

Identification and Description of Historic Properties

Reclamation has contracted with CH2M Hill for the development of the EA, which included the performance of on-the-ground cultural resources survey in order to develop the Cultural Resources section of the document. CH2M Hill subcontracted the fieldwork to Great Basin, LLC, who conducted the pedestrian survey and produced a Survey Report enclosed in both hard copy and electronically on CD, (Enclosure #1). Great Basin, LLC investigated all lands associated with every alternative identified for the EA. The Area of Potential Effect (APE) for this project was defined as the 12.25 miles of pipeline corridor, which includes all three alternative routes and a 100 foot corridor (50 ft. on each side of the pipeline) which totals approximately 148.5 acres. All staging and materials storage locations would occur within the proposed 100 foot pipeline right-of-way and all pipeline is planned to be buried. A small potential adjustment to the planned route in T.10S R.22E Section 4 is also included in Figure 2 that may be utilized to take advantage of an existing pipeline trench (and was included in the SHPO Record Search area). The crew found that much of the proposed route is currently in agriculture (Figure 4) or consists of existing open ditches in which pipe will be laid and covered (Figure 5). In addition, all three possible pump plant locations (1.6 acres each) were surveyed,
totaling an additional 4.8 acres. Therefore, the entire project APE comprises approximately 152 acres.

Great Basin, LLC, conducted pre-field research for this survey, including a SHPO records search (Record Search #13258). The records search revealed 11 documented archaeological and historic sites within the one-half-mile radius extending along the APE. These site types included two historic dumps, two prehistoric lithic scatters, two historic canal segments, the site of the Stahrh’s Ferry, segments of two different emigrant trails, and two railroads. Of these properties, only the lithic scatters and the site of the Stahrh’s Ferry are considered not eligible. Of the eligible properties, only one of the emigrant trails and one railroad actually cross through the APE of the proposed project. The North Side Alternate of the Oregon Trail, an eligible historic property, runs east-to-west across the pipeline corridor in T. 10S R. 22E Sections 16, 17 and 19. This portion of the trail, however, is not visible and its exact, original location is not discernable. The Oregon Short Line Railroad – North Side EIRR crosses the project APE in T. 9S R. 22E Sections 27 and 28. The railroad (site numbers 67-14801 and 10MA144) was determined eligible August 31, 2006, and is still in active use.

During the intensive pedestrian survey through the APE, Great Basin, LLC, encountered cultivated farmland in the majority of the area, with greatly reduced visibility (5-15%). As private landowners along the route only gave permission for visual survey, no shovel test pits were conducted. Some undeveloped lands are involved in the APE, and on these the archaeologists had much better ground surface visibility (75-100%). However, no new cultural sites were discovered within the APE. The final survey report is enclosed in both hard copy and electronically on CD (Enclosure #1). It is important to note that because of the large areas of low surface visibility during pedestrian survey work, but with a number of other sites known in the area, Great Basin, LLC recommends that an archaeologist be on-site during construction activities that include ground disturbance to monitor for evidence of subsurface cultural resources as pipeline excavations are ongoing. Reclamation agrees with this recommendation.

During the planning process, private landowners whose property is involved in the pipeline routes (including the alternatives) were notified of that fact and were able to provide feedback. In a letter to Reclamation dated August 9, 2013, (Enclosure #2), Henry Lynn Schodde expressed his concern that the buried pipeline and pump house alternative locations would impact areas of his land that hold historic significance. Mr. Schodde reported that their family takes great pride in the fact that this property has been solely in their ownership for more than one hundred years, and at Idaho’s Centennial in 1990 it was one of only 279 farms in the state that was identified as a “Century Farm.” Near the site of Alternative 2, which is the District’s preferred alternative, Mr. Schodde expressed concern that this was the area where Stahrh’s Ferry was located, and also where his father’s early water wheels had functioned in the river. In short, Mr. Schodde is concerned that the alternative pump house locations, which are all on his property, may negatively impact the long-held heritage of the family’s land.

The pedestrian survey performed by Great Basin, LLC, involved intensive coverage of all pump house alternative areas on the Schodde property. Their investigations did not result in the
discovery of any artifacts or remains of either the Starr’s Ferry or the 14 water wheels once erected by Mr. Schodde’s father (photos of which are included from a newspaper article in Enclosure #2). If those remains still exist, it is believed they are outside the APE and would not be affected by project activities. According to the survey form, no historic documentation of the water wheels was ever created so we do not have the advantage of knowing the wheels’ exact locations.

An additional historic property was found to be involved only after the records search and pedestrian survey work were completed. A photograph by Great Basin, LLC of a road-side historical marker near the project APE spurred research into Camp Rupert, a World War II prisoner of war encampment. The road-side marker is outside the APE, but research revealed that it had been placed a half mile west of the actual camp location, which put the proposed pipeline running through the west side of the camp footprint (Figure 6). The camp has never been documented, so no record of the camp came up in the records search. And almost nothing remains of the camp physically, so the pedestrian survey resulted in no visual surface indications within the pipeline APE. In a meeting with you at the SHPO office on Monday, March 10, the significance of the camp (even without physical remains) was discussed, including the fact that this was the largest POW camp in Idaho. It was determined that Reclamation should proceed under the assumption that the camp is eligible for listing on the National Register. No documentation of the camp is required at this time, but you requested that a brief narrative history of the camp be included with the consultation letter. A hard copy of the narrative and a fact sheet are enclosed (Enclosure #3), and electronic versions were included on the CD (Enclosure #1).

Ms. Jenny Huang, archeologist on my staff, performed a site visit to the camp area on Friday, March 14. The vast majority of the camp area is now in agriculture (Figure 7), with a small parcel at what would have been the northwest of the camp area now being utilized as an A&B Irrigation District storage yard (Figure 8). Ms. Huang had been informed by NRCS proponents that there is an existing open ditch through this area in which the proposed pipe would be laid and covered. The ditch was thought to be deep enough as is, and little to no excavation would be necessary to deepen it for pipe placement. Upon her visit, Ms. Huang discovered that the existing ditch in the area through which buildings may have been present in the camp was actually built into a 3 foot, high berm (Figure 8). The bottom of the ditch exists either above or at the original ground surface level. Thus, activities related to construction of the proposed project would likely have very little impact on possible subsurface camp remains. Dirt to fill the ditch once the pipe is laid would be trucked in and would not be excavated from the site.

No Adverse Effect to Historic Properties

During the course of investigations relating to the Section 106 process of identifying the historic properties involved in a proposed project, three historic properties were located through which the APE would cross. These properties include a non-visible section of the Oregon Trail North Side Alternate route, the North Side EIRR section of the Oregon Short Line railroad, and the west end of Camp Rupert. As we do not know the exact location of the Oregon Trail route, it is
not possible to avoid or mitigate the impact, which essentially negates the impact entirely. As the Oregon Short Line railroad is still active, construction across that resource will be performed through underground boring so as not to affect the function of the line. This can be considered avoidance. And the portion of pipeline to be laid through the west end of Camp Rupert will be laid in an existing above-ground ditch and will be filled with dirt trucked in from another location.

In accordance with procedures specified in 36 CFR Part 800, Reclamation requests your concurrence that the current proposed undertaking will result in "No Adverse Effect to Historic Properties." We request your concurrence with this finding so that the subject project may proceed as planned. We also request your concurrence that a professional archaeologist perform monitoring of all ground disturbance that will occur during construction of this project because of the low surface visibility experienced during pedestrian survey, and the possibility of subsurface cultural resources existing in the area. This monitoring will be of primary importance on the Schodde property and will serve to lessen wanton loss of the property’s history through documentation of any cultural materials that may unexpectedly be turned up during excavation and construction activities.

Please direct any questions to Ms. Jenny Huang, Archeologist, at 208-383-2257 or by email at jhuang@usbr.gov.

Sincerely,

C.J. BEARDSLEY

Christopher J. Beardsley
Deputy Area Manager

Enclosures

cc: Mr. Elliot Traher
District Conservationist
Natural Resources Conservation Service
1361 East 16th St.
Burley, ID 83318
(w/o encls)

Mr. Dan Temple
Manager
A&B Irrigation District
P.O. Box 675
Rupert, ID 83350
(w/o encls)

bc: PN-6515 (Taylor)
SRA-1206 (Petrovsky)
USF-6300 (Boyer)
(w/o encls to each)

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Figure 1. North half of the project area. Green highlighted line represents proposed pipeline routes that will occur in all three alternate actions.
Figure 2. South half of the project area. Green highlighted line represents proposed pipeline that would occur in all three alternative actions. The yellow highlighted lines represent the three alternative pump station locations.
Figure 3. Existing pump plant and an example of what the new plant will entail.

Figure 4. Example of proposed distribution pipeline route corridor currently in agriculture.
Figure 5. Example of an existing open ditch along the proposed distribution route that will have pipe laid inside and will be covered over with dirt (trucked in).
Figure 6. Layout map of Camp Rupert (North at bottom) with estimated location of proposed pipeline route represented in blue.
Figure 7. View from atop road (berm) across existing field where Camp Rupert buildings once stood.

Figure 8. Existing open ditch in raised berm at an area thought to be near old camp storehouses. The existing A&B yard is seen at top of photo. A chunk of cement sits atop the berm at bottom left.
Ms. Mary Anne Davis  
Associate State Archaeologist  
Idaho State Historical Society  
210 Main Street  
Boise, ID 83702-7264

Subject: Invitation to Consult on Proposed Expanded Pump Plant and Delivery Pipeline Installation Project – Minidoka Project, Idaho

Dear Ms. Davis:

The Bureau of Reclamation with the A&B Irrigation District (District), the U.S. Department of Agriculture–Rural Development (RD) and the Natural Resources Conservation Service (NRCS), is proposing to construct a new pump plant and associated pipeline to replace wells in Unit B lands of the District. The long, linear project area is located in Minidoka County, Idaho and extends through the following legal coordinates: T.9S, R.22E, Sections 10, 11, 15, 21, 22, 28 and 33; and T.10S, R.22E, Sections 4, 8, 9, 16, 17, 19, and 20 (see Figures 1 & 2). The U.S. Geological Survey 7.5’ topographic map quadrangles involved include Burley, Burley NW, Burley NE, and Burley SW. The proposed action constitutes an undertaking according to the definition in the National Historic Preservation Act of 1966, as amended, triggering the Section 106 process.

This consultation effort was initially begun with a letter to you dated April 23, 2014 regarding the proposed project as it was planned at that time. Since then, the project proponents expanded the potential project scope and identified additional components, namely laterals, the construction of which would cause additional ground disturbance to what had originally been reported. Some of these proposed laterals would extend beyond the original Area of Potential Effect (APE). Thus, additional consultation to discuss the involvement of laterals on this project is now being undertaken. Please refer to the April 23, 2014 letter for additional information.

As required at 36 CFR Part 800.5(b), enclosed please find documentation in support of a finding of “No Adverse Effect on Historic Properties,” including that specified in § 800.11(c): (1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary; (2) A description of the steps taken to identify historic properties; (3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register; (4) A description of the undertaking’s effects on historic properties; (5) An explanation of why the criteria of

B-13
adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and (6) Copies or summaries of any views provided by consulting parties and the public.

Description of the Undertaking

Reclamation developed the North Side Pumping Division of the Minidoka Project in the 1950s and early 1960s. Reclamation entered into a repayment contract with the District and turned over operations to them in 1966. The Minidoka Project facilities for the North Side Pumping Division include a pumping plant on the Snake River for Unit A of the District, known as Unit A Pumping Plant #1, and 177 deep groundwater wells for Unit B of the District. Currently, 1,500 acres of Unit B are experiencing reduced or failing groundwater supplies and are in need of supplemental or replacement supplies from the District's surface water system. To overcome these existing infrastructure limitations and water delivery problems, the District proposes to develop an additional replacement pump station on the Snake River and an associated distribution pipeline facility. Construction and operation of the facilities would involve Reclamation, NRCS, RD, and the District. Reclamation, which will retain ownership of the proposed pump station when construction is complete, has assumed the lead Federal agency status for the Section 106 process.

Reclamation, the NRCS and RD are conducting an Environmental Assessment (EA) as part of the National Environmental Policy Act requirements to determine the potential for environmental impacts from development and operation, including acquisition of property interests as necessary, of the pumping plant and delivery pipeline proposed by the District. In addition to the project alternative preferred by the District (Alternative 2), the EA also reviews a No Action alternative and two additional, potentially feasible alternatives for the placement of the pump plant. In the latest iteration of the project, Alternatives 3 and 4 now include the proposed locations of a number of laterals that would convey water to lands along the main pipeline. The intent of the EA is still to confirm an alternative that provides optimum technical and cost feasibility, construction and operation efficiency, and avoidance of significant and mitigable environmental and cultural resource impacts.

Identification and Description of Historic Properties

Reclamation has contracted with CH2M Hill for the development of the EA, which included the performance of on-the-ground cultural resources survey in order to develop the Cultural Resources section of the document. CH2M Hill subcontracted the fieldwork to Great Basin, LLC, who conducted the pedestrian survey and produced a second Survey Report enclosed in both hard copy and electronically on CD, (Enclosure #1). Great Basin, LLC investigated the initial pipeline APE for the first round of consultation, and more recently surveyed the additional lands identified with every Alternatives 3 and 4 identified for the updated EA. The APE for this project was initially defined as the 12.25 miles of pipeline corridor, which includes all three alternative routes and a 100 foot corridor (50 ft. on each side of the pipeline) which totals approximately 148.5 acres. The APE area has increased to approximately 16.2 linear miles of
pipeline and lateral rights of way (Figures 1 and 2), but the initial SHPO record search covers the newly added area completely. As stated in the initial report, all staging and materials storage locations would occur within the proposed 100 foot pipeline right-of-way and all pipeline is planned to be buried.

The pedestrian survey performed by Great Basin, LLC, on September 28 and 29 involved intensive coverage of all additional lateral areas. The crew found very similar ground conditions in this second survey effort to what was seen initially in that much of the proposed route is currently in agriculture. The survey resulted in negative findings; no cultural material, isolates, features, or sites were discovered.

No Adverse Effect to Historic Properties

In accordance with procedures specified in 36 CFR Part 800, Reclamation requests your concurrence that the current proposed undertaking will result in “No Adverse Effect to Historic Properties.” We request your concurrence with this finding so that the subject project may proceed as planned. We also ask that you extend your concurrence that a professional archaeologist perform monitoring of all ground disturbance that will occur during construction of this project to the addition of the laterals because of the low surface visibility experienced during pedestrian survey, and the possibility of subsurface cultural resources existing in the area.

Please direct any questions to Ms. Jenny Huang, Archeologist, at 208-383-2257 or by email at jhuang@usbr.gov.

Sincerely,

BRIAN W. SAUER

Christopher J. Beardsley
Deputy Area Manager

Enclosures

cc: Mr. Elliot Traher
    District Conservationist
    Natural Resources Conservation Service
    1361 East 16th St.
    Burley, ID 83318
    (w/o encls)

Mr. Dan Temple
    Manager
    A&B Irrigation District
    P.O. Box 675
    Rupert, ID 83350
    (w/o encls)

bc: PNRO-6515 (Taylor)
SRA-1303 (Petrovsky); SRA-1200 (Paquin); SEA-1218 (Huang)
USF-6300 (Boyer)
    (w/o encls to each)
DATE: May 23, 2014

TO: Christopher Beardsley

FEDERAL AGENCY: Bureau of Reclamation

PROJECT NAME: Minidoka Project – Proposed Pump Plant and Delivery Pipeline Installation

Section 106 Evaluation

X The field work and documentation presented in this report meet the Secretary of the Interior’s Standards.

No additional investigations are recommended; project can proceed as planned.

Additional information is required to complete the project review. (See comments.)

Additional investigations are recommended. (See comments.)

Identification of Historic Properties (36 CFR 800.4):

No historic properties were identified within the project area.

Property is not eligible. Reason:

Property is listed in National Register of Historic Places.

Property is eligible for listing in the National Register of Historic Places.

Criterion: A B C D

Context for evaluation:

No historic properties will be affected within project area.

Assessment of Adverse Effects (36 CFR 800.5):

X Project will have no adverse effect on historic properties.

Project will have an adverse effect on historic properties; further consultation is recommended.

Comments: The location of the Rupert POW may be eligible to the National Register under Criterion D. Since minimal ground disturbance will occur due to placement of the pipe within an existing ditch, the project will have no adverse effect on historic properties. If you have any questions, feel free to contact Mary Anne Davis at 208-334-3847.

Mary Anne Davis, Associate State Archaeologist

State Historic Preservation Office
DATE: December 23, 2014
TO: Christopher Beardsley
FEDERAL AGENCY: Bureau of Reclamation
PROJECT NAME: Proposed Expanded Pump Plant and Delivery Pipeline Installation Project – Minidoka Project, Idaho

Section 106 Evaluation

X The field work and documentation presented in this report meet the Secretary of the Interior’s Standards.
No additional investigations are recommended. Project can proceed as planned.
Additional information is required to complete the project review. (See comments below.)
Additional investigations are recommended. (See comments below).

Identification of Historic Properties (36 CFR 900.4):

X No historic properties were identified within the project area.
Property is not eligible. Reason: Buildings have lost architectural integrity and function
Property is eligible for listing in the National Register of Historic Places.
Criterion: _A_ _B_ _C_ _D_ Context for Evaluation:

X No historic properties will be affected within the project area.

Assessment of Adverse Effects (36 CFR 800.5):

Project will have no adverse effect on historic properties.
Property will have an adverse effect on historic properties. Additional consultation is required.

Comments:

Thank you for providing the project report and site form for review. Please contact me at 208-334-3847 ext. 111 if you have any questions.

Mary Anne Davis, Associate State Archaeologist  Date
State Historic Preservation Office

Mary Anne Davis, Associate State Archaeologist  Date
State Historic Preservation Office

Cc: Jenny Huang, BOR
Ryan,

I have reviewed the pertinent sections of the FONSI/EA for this project relevant to effects determination for non-anadromous candidate, threatened, and endangered species listed under the ESA. The changes made to the Draft EA incorporated into the preferred alternative (Alternative 3) since our office reviewed the Draft EA earlier in 2014 have not resulted in significant impacts to listed species. The Service acknowledges the Bureau of Reclamation's (Reclamation) no effect determination for Snake River physa (*Haitia (Physa) natricina*). We also acknowledge Reclamation's determination that the project will not impact the candidate species yellow-billed cuckoo (*Coccyzus americanus*), and the greater sage-grouse (*Centrocercus urophasianus*).

Let me know if there are further questions.

Dwayne Winslow  
Fish and Wildlife Biologist  
U.S. Fish and Wildlife Service  
Idaho Fish and Wildlife Office  
Boise, Idaho  
208-378-5249  
dwayne_winslow@fws.gov

"This is because that is; this is not because that is not; this is like this because that is like that."
Honorable Lindsey Manning  
Chairman  
Shoshone-Paiute Tribes  
P.O. Box 219  
Owyhee, NV 89832  

Subject: Invitation to Consult on Proposed Expanded Pump Plant and Delivery Pipeline Installation Project – Minidoka Project, Idaho

Dear Chairman:

The Bureau of Reclamation with the A&B Irrigation District (District), the U.S. Department of Agriculture–Rural Development (RD) and the Natural Resources Conservation Service (NRCS), is proposing to construct a new pump plant and associated pipeline to replace wells in Unit B lands of the District. The long, linear project area is located in Minidoka County, Idaho and extends through the following legal coordinates: T.9S, R.22E, Sections 10, 11, 15, 21, 22, 28 and 33; and T.10S, R.22E, Sections 4, 8, 9, 16, 17, 19, and 20 (see Figures 1 & 2). The U.S. Geological Survey 7.5' topographic map quadrangles involved include Burley, Burley NW, Burley NE, and Burley SW. The proposed action constitutes an undertaking according to the definition in the National Historic Preservation Act of 1966, as amended, triggering the Section 106 process.

This consultation effort was initially begun with a letter to you dated April 29, 2014 regarding the proposed project as it was planned at that time. Since then, the project proponents expanded the potential project scope and identified additional components, namely laterals, the construction of which would cause additional ground disturbance to what had originally been reported. Some of these proposed laterals would extend beyond the original Area of Potential Effect (APE). Thus, additional consultation to discuss the involvement of laterals on this project is now being undertaken. Please refer to the April 29, 2014 letter for additional information.

As required at 36 CFR Part 800.5(b), enclosed please find documentation in support of a finding of “No Adverse Effect on Historic Properties,” including that specified in § 800.11(e): (1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary; (2) A description of the steps taken to identify historic properties; (3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register; (4) A description of the undertaking’s effects on historic properties; (5) An explanation of why the criteria of
adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and (6) Copies or summaries of any views provided by consulting parties and the public.

Description of the Undertaking

Reclamation developed the North Side Pumping Division of the Minidoka Project in the 1950s and early 1960s. Reclamation entered into a repayment contract with the District and turned over operations to them in 1966. The Minidoka Project facilities for the North Side Pumping Division include a pumping plant on the Snake River for Unit A of the District, known as Unit A Pumping Plant #1, and 177 deep groundwater wells for Unit B of the District. Currently, 1,500 acres of Unit B are experiencing reduced or failing groundwater supplies and are in need of supplemental or replacement supplies from the District’s surface water system. To overcome these existing infrastructure limitations and water delivery problems, the District proposes to develop an additional replacement pump station on the Snake River and an associated distribution pipeline facility. Construction and operation of the facilities would involve Reclamation, NRCS, RD, and the District. Reclamation, which will retain ownership of the proposed pump station when construction is complete, has assumed the lead Federal agency status for the Section 106 process.

Reclamation, the NRCS and RD are conducting an Environmental Assessment (EA) as part of the National Environmental Policy Act requirements to determine the potential for environmental impacts from development and operation, including acquisition of property interests as necessary, of the pumping plant and delivery pipeline proposed by the District. In addition to the project alternative preferred by the District (Alternative 2), the EA also reviews a No Action alternative and two additional, potentially feasible alternatives for the placement of the pump plant. **In the latest iteration of the project, Alternatives 3 and 4 now include the proposed locations of a number of laterals that would convey water to lands along the main pipeline.** The intent of the EA is still to confirm an alternative that provides optimum technical and cost feasibility, construction and operation efficiency, and avoidance of significant and immitigable environmental and cultural resource impacts.

Identification and Description of Historic Properties

Reclamation has contracted with CH2M Hill for the development of the EA, which included the performance of on-the-ground cultural resources survey in order to develop the Cultural Resources section of the document. CH2M Hill subcontracted the fieldwork to Great Basin, LLC, who conducted the pedestrian survey and produced a second Survey Report (enclosed in hard copy). Great Basin, LLC investigated the initial pipeline APE for the first round of consultation, and more recently surveyed the additional lands identified with every Alternatives 3 and 4 identified for the updated EA. The APE for this project was initially defined as the 12.25 miles of pipeline corridor, which includes all three alternative routes and a 100 foot corridor (50 ft. on each side of the pipeline) which totals approximately 148.5 acres. The APE area has increased to approximately 16.2 linear miles of pipeline and lateral rights of way (Figures 1 and
2), but the initial SHPO record search covers the newly added area completely. As stated in the initial report, all staging and materials storage locations would occur within the proposed 100 foot pipeline right-of-way and all pipeline is planned to be buried.

The pedestrian survey performed by Great Basin, LLC, on September 28 and 29 involved intensive coverage of all additional lateral areas. The crew found very similar ground conditions in this second survey effort to what was seen initially in that much of the proposed route is currently in agriculture. The survey resulted in negative findings; no cultural material, isolates, features, or sites were discovered.

**No Adverse Effect to Historic Properties**

In accordance with procedures specified in 36 CFR Part 800, Reclamation has requested State Historic Preservation Office (SHPO) concurrence that the current proposed undertaking will result in “No Adverse Effect to Historic Properties.” Reclamation has also asked that SHPO extend their concurrence that a professional archaeologist perform monitoring of all ground disturbance that will occur during construction of this project to the addition of the laterals because of the low surface visibility experienced during pedestrian survey, and the possibility of subsurface cultural resources existing in the area.

Please direct any questions to Ms. Jenny Huang, Archeologist, at 208-383-2257 or by email at jhuang@usbr.gov.

Sincerely,

**BRIAN W. SAUER**

*Deputy Area Manager*

Enclosure

cc:  Mr. Elliot Traher  
     District Conservationist  
     Natural Resources Conservation Service  
     1361 East 16th St.  
     Burley, ID 83318  
     (w/o encl)

Mr. Dan Temple  
Manager  
A&B Irrigation District  
P.O. Box 675  
Rupert, ID 83350  
(w/o encl)

be: PNRO-6515 (Taylor)  
    SRA-1303 (Petrovsky); SRA-1200 (Paquin); SEA-1218 (Huang)  
    USF-6300 (Boyer)  
    (w/o encl to each)
Figure 1. North half of the project area APE. Note the new lateral locations.
Figure 2. South half of the project area APE. Note the new lateral locations.
Honorables Nathan Small  
Chairman  
Shoshone-Bannock Tribes  
P.O. Box 306  
Fort Hall, ID 83203

Subject: Invitation to Consult on Proposed Expanded Pump Plant and Delivery Pipeline Installation Project – Minidoka Project, Idaho

Dear Chairman:

The Bureau of Reclamation with the A&B Irrigation District (District), the U.S. Department of Agriculture–Rural Development (RD) and the Natural Resources Conservation Service (NRCS), is proposing to construct a new pump plant and associated pipeline to replace wells in Unit B lands of the District. The long, linear project area is located in Minidoka County, Idaho and extends through the following legal coordinates: T.9S, R.22E, Sections 10, 11, 15, 21, 22, 28 and 33; and T.10S, R.22E, Sections 4, 8, 9, 16, 17, 19, and 20 (see Figures 1 & 2). The U.S. Geological Survey 7.5’ topographic map quadrangles involved include Burley, Burley NW, Burley NE, and Burley SW. The proposed action constitutes an undertaking according to the definition in the National Historic Preservation Act of 1966, as amended, triggering the Section 106 process.

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Please direct any questions to Ms. Jenny Huang, Archeologist, at 208-383-2257 or by email at jhuang@usbr.gov.

Sincerely,

**BRIAN W. SAUER**

ACTING

Christopher J. Beardsley
Deputy Area Manager

Enclosure

cc: Mr. Elliot Traher
   District Conservationist
   Natural Resources Conservation Service
   1361 East 16th St.
   Burley, ID 83318
   (w/o encl)

Mr. Dan Temple
Manager
A&B Irrigation District
P.O. Box 675
Rupert, ID 83350
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bc: PN-6515 (Taylor)
   SRA-1303 (Petrovsky); SRA-1200 (Paquin); SRA-1218 (Huang)
   USF-6300 (Boyer)
   (w/o encl to each)
Mr. Tony Galloway  
Sr. Land Use Commission  
Fort Hall Business Council  
Shoshone-Bannock Tribes  
P.O. Box 306  
Fort Hall, ID 83203  

Subject: Draft Environmental Assessment (EA) for the A&B Irrigation District Pumping Plant #2

Dear Mr. Galloway:

Enclosed for your review and comment is a Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project. The proposed project consists of a replacement pumping plant east of ABID’s existing pumping plant and an associated pipeline distributing ABID surface water to lands in both Unit A and Unit B; in the latter regard, ABID would provide surface supply to lands in Unit B with failing groundwater supply.

The Bureau of Reclamation is serving as lead agency for this Draft EA under the National Environmental Policy Act. The Natural Resources Conservation Service and U.S. Department of Agriculture Rural Development are cooperating agencies in the proposed project and in preparing and processing this Draft EA.

Please send your written comments on the Draft EA to: Mr. John Petrovsky, Activity Coordinator, at Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702 or via email to jpetrovsky@usbr.gov. Comments must be received by Monday, June 2, 2014.

During this Draft EA review period, on May 14 from 6:30 to 8:30 pm, Reclamation will host an informal open house at the Burley Best Western Inn, 800 North Overland Avenue Burley, Idaho for the general public. The purpose of this open house will be to answer questions about the project proposal and to receive written comments on the Draft EA. Mr. Robert Hap Boyer, Natural Resources Manager with the Upper Snake Field Office will be in contact with the
Shoshone-Bannock Tribes Tribal Business Center in Fort Hall, Idaho to schedule a tribal public open house to discuss the project and answer questions.

If you have any questions concerning this matter, please contact Mr. Petrovsky at 208-383-2224 or via email at address provided above.

Sincerely,

Jerrold D. Gregg
Area Manager

Enclosures

cc: Honorable Nathan Small
Chairman
Fort Hall Business Council
Shoshone-Bannock Tribes
P.O. Box 306
Fort Hall, ID 83203

Mr. Arnold Appeney
Land Use Director
Fort Hall Business Council
Shoshone-Bannock Tribes
P.O. Box 306
Fort Hall, ID 83203
(w/encls to each)
Honorable Nathan Small
Chairman
Fort Hall Business Council
Shoshone-Bannock Tribes
P.O. Box 306
Fort Hall, ID 83203

Subject: Draft Environmental Assessment (EA) for the are A&B Irrigation District Pumping Plant #2

Dear Chairman:

Enclosed for your review and comment is a Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project. The proposed project consists of a replacement pumping plant east of ABID’s existing pumping plant and an associated pipeline distributing ABID surface water to lands in both Unit A and Unit B; in the latter regard, ABID would provide surface supply to lands in Unit B with failing groundwater supply.

The Bureau of Reclamation is serving as lead agency for this Draft EA under the National Environmental Policy Act. The Natural Resources Conservation Service and U.S. Department of Agriculture Rural Development are cooperating agencies in the proposed project and in preparing and processing this Draft EA.

Please send your written comments on the Draft EA to: Mr. John Petrovsky, Activity Coordinator, at Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702 or via email to jpetrovsky@usbr.gov. Comments must be received by Monday, June 2, 2014.

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If you have any questions concerning this matter, please contact Mr. Petrovsky at 208-383-2224 or via email at address provided above.

Sincerely,

Jerrold D. Gregg
Area Manager

Enclosures

c: Mr. Tony Galloway
Sr. Land Use Commission
Fort Hall Business Council
Shoshone-Bannock Tribes
P.O. Box 306
Fort Hall, ID 83203

Mr. Arnold Appeney
Land Use Director
Fort Hall Business Council
Shoshone-Bannock Tribes
P.O. Box 306
Fort Hall, ID 83203
(w/encls to each)
Honorable Charlotte Rodrique  
Chairperson  
Burns Paiute General Council  
HC-71, 100 Pasigo St.  
Burns, OR 97720-9303

Subject: Draft Environmental Assessment for the A&B Irrigation District Pumping Plant #2

Dear Chairperson:

Enclosed for your review and comment is a Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project. The proposed project consists of a replacement pumping plant east of ABID’s existing pumping plant and an associated pipeline distributing ABID surface water to lands in both Unit A and Unit B; in the latter regard, ABID would provide surface supply to lands in Unit B with failing groundwater supply.

The Bureau of Reclamation is serving as lead agency for this Draft EA under the National Environmental Policy Act. The Natural Resources Conservation Service and U.S. Department of Agriculture Rural Development are cooperating agencies in the proposed project and in preparing and processing this Draft EA.

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If you have any questions concerning this matter, please contact Mr. Petrovsky at 208-383-2224 or via email at address provided above.

Sincerely,

Jerrold Gregg
Area Manager

Enclosures

Identical Letter Sent To:

Honorable Jason S. Walker
Chairman, Tribal Council
Northwestern Band of the Shoshone Nation
707 N. Main Street
Brigham City, UT 84302

Honorable Lindsey Manning
Chairman
Shoshone-Paiute Tribal Council
P.O. Box 219
Owyhee, NV 89832
(w/encls to each)
United States Department of the Interior
BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

APR 29 2014

Honorable Lindsey Manning
Chairperson
Shoshone-Paiute Tribal Council
P.O. Box 219
Owyhee, NV 89832

Subject: Draft Environmental Assessment for the A&B Irrigation District Pumping Plant #2

Dear Chairperson:

Enclosed for your review and comment is a Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project. The proposed project consists of a replacement pumping plant east of ABID’s existing pumping plant and an associated pipeline distributing ABID surface water to lands in both Unit A and Unit B; in the latter regard, ABID would provide surface supply to lands in Unit B with failing groundwater supply.

The Bureau of Reclamation is serving as lead agency for this Draft EA under the National Environmental Policy Act. The Natural Resources Conservation Service and U.S. Department of Agriculture Rural Development are cooperating agencies in the proposed project and in preparing and processing this Draft EA.

Please send your written comments on the Draft EA to: Mr. John Petrovsky, Activity Coordinator, at Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702 or via email to jpetrovsky@usbr.gov. Comments must be received by Monday, June 2, 2014.

During this Draft EA review period, on May 14 from 6:30 to 8:30 pm, Reclamation will host an informal open house at the Burley Best Western Inn, 800 North Overland Avenue Burley, Idaho for the general public. The purpose of this open house will be to answer questions about the project proposal and to receive written comments on the Draft EA.
If you have any questions concerning this matter, please contact Mr. Petrovsky at 208-383-2224 or via email at address provided above.

Sincerely,

Jerrold Gregg
Area Manager

Enclosures

Identical Letter Sent To:

Honorable Charlotte Rodrique
Chairperson
Burns Paiute General Council
HC-71, 100 Pasigo St.
Burns, OR 97720-9303

Honorable Jason S. Walker
Chairman, Tribal Council
Northwestern Band of the Shoshone Nation
707 N. Main Street
Brigham City, UT 84302
(w/encls to each)
Honorable Jason S. Walker  
Chairman, Tribal Council  
Northwestern Band of the Shoshone Nation  
707 N. Main Street  
Brigham City, UT 84302

Subject: Draft Environmental Assessment for the A&B Irrigation District Pumping Plant #2

Dear Chairman:

Enclosed for your review and comment is a Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project. The proposed project consists of a replacement pumping plant east of ABID’s existing pumping plant and an associated pipeline distributing ABID surface water to lands in both Unit A and Unit B; in the latter regard, ABID would provide surface supply to lands in Unit B with failing groundwater supply.

The Bureau of Reclamation is serving as lead agency for this Draft EA under the National Environmental Policy Act. The Natural Resources Conservation Service and U.S. Department of Agriculture Rural Development are cooperating agencies in the proposed project and in preparing and processing this Draft EA.

Please send your written comments on the Draft EA to: Mr. John Petrovsky, Activity Coordinator, at Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702 or via email to jpetrovsky@usbr.gov. Comments must be received by Monday, June 2, 2014.

During this Draft EA review period, on May 14 from 6:30 to 8:30 pm, Reclamation will host an informal open house at the Burley Best Western Inn, 800 North Overland Avenue Burley, Idaho for the general public. The purpose of this open house will be to answer questions about the project proposal and to receive written comments on the Draft EA.
If you have any questions concerning this matter, please contact Mr. Petrovsky at 208-383-2224 or via email at address provided above.

Sincerely,

Jerrold Gregg
Area Manager

Enclosures

Identical Letter Sent To:

Honorable Charlotte Rodrique
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United States Department of the Interior

BUREAU OF RECLAMATION
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Snake River Area Office
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APR 28 2014

Mr. Arnold Appeney
Land Use Director
Fort Hall Business Council
Shoshone-Bannock Tribes
P.O. Box 306
Fort Hall, ID 83203

Subject: Draft Environmental Assessment (EA) for the A&B Irrigation District Pumping Plant #2

Dear Mr. Appeney:

Enclosed for your review and comment is a Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project. The proposed project consists of a replacement pumping plant east of ABID’s existing pumping plant and an associated pipeline distributing ABID surface water to lands in both Unit A and Unit B; in the latter regard, ABID would provide surface supply to lands in Unit B with failing groundwater supply.

The Bureau of Reclamation is serving as lead agency for this Draft EA under the National Environmental Policy Act. The Natural Resources Conservation Service and U.S. Department of Agriculture Rural Development are cooperating agencies in the proposed project and in preparing and processing this Draft EA.

Please send your written comments on the Draft EA to: Mr. John Petrovsky, Activity Coordinator, at Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702 or via email to jpetrovsky@usbr.gov. Comments must be received by Monday, June 2, 2014.

During this Draft EA review period, on May 14 from 6:30 to 8:30 pm, Reclamation will host an informal open house at the Burley Best Western Inn, 800 North Overland Avenue Burley, Idaho for the general public. The purpose of this open house will be to answer questions about the project proposal and to receive written comments on the Draft EA. Mr. Robert Hap Boyer, Natural Resources Manager with the Upper Snake Field Office will be in contact with the
Shoshone-Bannock Tribes Tribal Business Center in Fort Hall, Idaho to schedule a tribal public open house to discuss the project and answer questions.

If you have any questions concerning this matter, please contact Mr. Petrovsky at 208-383-2224 or via email at address provided above.

Sincerely,

Jerrold D. Gregg
Area Manager

Enclosures

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Shoshone-Bannock Tribes
P.O. Box 306
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Honorable Nathan Small
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Honorable Lindsey Manning  
Chairman  
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Owyhee, NV 89832  

Subject: Invitation to Consult on Proposed Pump Plant and Delivery Pipeline Installation Project – Minidoka Project, Idaho

Dear Chairman:

The Bureau of Reclamation with the A&B Irrigation District (District), the U.S. Department of Agriculture-Rural Development (RD) and the Natural Resources Conservation Service (NRCS), is proposing to construct a new pump plant and associated pipeline to replace wells in Unit B lands of the District. The long, linear project area is located in Minidoka County, Idaho, an area of traditional interest for the Tribes, and extends through the following legal coordinates: T.9S, R.22E, Sections 10, 11, 15, 21, 22, 28 and 33; and T.10S, R.22E, Sections 4, 8, 9, 16, 17, 19, and 20 (see Figures 1 & 2). The U.S. Geological Survey 7.5’ topographic map quadrangles involved include Burley, Burley NW, Burley NE, and Burley SW. The proposed action constitutes an undertaking according to the definition in the National Historic Preservation Act of 1966, as amended, triggering the Section 106 process.

As required at 36 CFR Part 800.5(b), enclosed please find documentation in support of a finding of “No Adverse Effect on Historic Properties,” including that specified in § 800.11(e): (1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary; (2) A description of the steps taken to identify historic properties; (3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register; (4) A description of the undertaking’s effects on historic properties; (5) An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and (6) Copies or summaries of any views provided by consulting parties and the public.
Description of the Undertaking

Reclamation developed the North Side Pumping Division of the Minidoka Project in the 1950s and early 1960s. Reclamation entered into a repayment contract with the District and turned over operations to them in 1966. The Minidoka Project facilities for the North Side Pumping Division include a pumping plant on the Snake River for Unit A of the District, known as Unit A Pumping Plant #1 (Figure 3), and 177 deep groundwater wells for Unit B of the District.

Currently, 1,500 acres of Unit B are experiencing reduced or failing groundwater supplies and are in need of supplemental or replacement supplies from the District’s surface water system. To overcome these existing infrastructure limitations and water delivery problems, the District proposes to develop an additional replacement pump station on the Snake River and an associated distribution pipeline facility. Construction and operation of the facilities would involve Reclamation, NRCS, RD, and the District. Reclamation, which will retain ownership of the proposed pump station when construction is complete, has assumed the lead Federal agency status for the Section 106 process.

Reclamation, the NRCS and RD are conducting an Environmental Assessment (EA) as part of the National Environmental Policy Act requirements to determine the potential for environmental impacts from development and operation, including acquisition of property interests as necessary, of the pumping plant and delivery pipeline proposed by the District. In addition to the project alternative preferred by the District (Alternative 2), the EA also reviews a No Action alternative and two additional, potentially feasible alternatives for the placement of the pump plant (Figure 2). The intent is to confirm an alternative that provides optimum technical and cost feasibility, construction and operation efficiency, and avoidance of significant and immitigable environmental and cultural resource impacts.

Identification and Description of Historic Properties

Reclamation has contracted with CH2M Hill for the development of the EA, which included the performance of on-the-ground cultural resources survey in order to develop the Cultural Resources section of the document. CH2M Hill subcontracted the fieldwork to Great Basin, LLC, who conducted the pedestrian survey and produced a Survey Report enclosed in hard copy, (Enclosure #1). Great Basin, LLC investigated all lands associated with every alternative identified for the EA. The Area of Potential Effect (APE) for this project was defined as the 12.25 miles of pipeline corridor, which includes all three alternative routes and a 100 foot corridor (50 ft. on each side of the pipeline) which totals approximately 148.5 acres. All staging and materials storage locations would occur within the proposed 100 foot pipeline right-of-way and all pipeline is planned to be buried. A small potential adjustment to the planned route in T.10S R.22E Section 4 is also included in Figure 2 that may be utilized to take advantage of an existing pipeline trench (and was included in the SHPO Record Search area). The crew found that much of the proposed route is currently in agriculture (Figure 4) or consists of existing open ditches in which pipe will be laid and covered (Figure 5). In addition, all three possible pump plant locations (1.6 acres each) were surveyed, totaling an additional 4.8 acres. Therefore, the entire project APE comprises approximately 152 acres.
Great Basin, LLC, conducted pre-field research for this survey, including a SHPO records search (Record Search #13258). The records search revealed 11 documented archaeological and historic sites within the one-half-mile radius extending along the APE. These site types included two historic dumps, two prehistoric lithic scatters, two historic canal segments, the site of the Starrh’s Ferry, segments of two different emigrant trails, and two railroads. Of these properties, only the lithic scatters and the site of the Starrh’s Ferry are considered not eligible. Of the eligible properties, only one of the emigrant trails and one railroad actually cross through the APE of the proposed project. The North Side Alternate of the Oregon Trail, an eligible historic property, runs east-to-west across the pipeline corridor in T. 10S R. 22E Sections 16, 17 and 19. This portion of the trail, however, is not visible and its exact, original location is not discernable. The Oregon Short Line Railroad – North Side EIRR crosses the project APE in T. 9S R. 22E Sections 27 and 28. The railroad (site numbers 67-14801 and 10MA144) was determined eligible August 31, 2006, and is still in active use.

During the intensive pedestrian survey through the APE, Great Basin, LLC, encountered cultivated farmland in the majority of the area, with greatly reduced visibility (5-15%). As private landowners along the route only gave permission for visual survey, no shovel test pits were conducted. Some undeveloped lands are involved in the APE, and on these the archaeologists had much better ground surface visibility (75-100%). However, no new cultural sites were discovered within the APE. The final survey report is enclosed in hard copy (Enclosure #1). It is important to note that because of the large areas of low surface visibility during pedestrian survey work, but with a number of other sites known in the area, Great Basin, LLC recommends that an archaeologist be on-site during construction activities that include ground disturbance to monitor for evidence of subsurface cultural resources as pipeline excavations are ongoing. Reclamation agrees with this recommendation.

During the planning process, private landowners whose property is involved in the pipeline routes (including the alternatives) were notified of that fact and were able to provide feedback. In a letter to Reclamation dated August 9, 2013, (Enclosure #2), Henry Lynn Schodde expressed his concern that the buried pipeline and pump house alternative locations would impact areas of his land that hold historic significance. Mr. Schodde reported that their family takes great pride in the fact that this property has been solely in their ownership for more than one hundred years, and at Idaho’s Centennial in 1990 it was one of only 279 farms in the state that was identified as a “Century Farm.” Near the site of Alternative 2, which is the District’s preferred alternative, Mr. Schodde expressed concern that this was the area where Starrh’s Ferry was located, and also where his father’s early water wheels had functioned in the river. In short, Mr. Schodde is concerned that the alternative pump house locations, which are all on his property, may negatively impact the long-held heritage of the family’s land.

The pedestrian survey performed by Great Basin, LLC, involved intensive coverage of all pump house alternative areas on the Schodde property. Their investigations did not result in the discovery of any artifacts or remains of either the Starrh’s Ferry or the 14 water wheels once erected by Mr. Schodde’s father (photos of which are included from a newspaper article in Enclosure #2). If those remains still exist, it is believed they are outside the APE and would not
be affected by project activities. According to the survey form, no historic documentation of the water wheels was ever created so we do not have the advantage of knowing the wheels’ exact locations.

An additional historic property was found to be involved only after the records search and pedestrian survey work were completed. A photograph by Great Basin, LLC of a road-side historical marker near the project APE spurred research into Camp Rupert, a World War II prisoner of war encampment. The road-side marker is outside the APE, but research revealed that it had been placed a half mile west of the actual camp location, which put the proposed pipeline running through the west side of the camp footprint (Figure 6). The camp has never been documented, so no record of the camp came up in the records search. And almost nothing remains of the camp physically, so the pedestrian survey resulted in no visual surface indications within the pipeline APE. In a meeting with you at the SHPO office on Monday, March 10, the significance of the camp (even without physical remains) was discussed, including the fact that this was the largest POW camp in Idaho. It was determined that Reclamation should proceed under the assumption that the camp is eligible for listing on the National Register. No documentation of the camp is required at this time, but you requested that a brief narrative history of the camp be included with the consultation letter. A hard copy of the narrative and a fact sheet are enclosed (Enclosure #3).

Ms. Jenny Huang, archeologist on my staff, performed a site visit to the camp area on Friday, March 14. The vast majority of the camp area is now in agriculture (Figure 7), with a small parcel at what would have been the northwest of the camp area now being utilized as an A&B Irrigation District storage yard (Figure 8). Ms. Huang had been informed by NRCS proponents that there is an existing open ditch through this area in which the proposed pipe would be laid and covered. The ditch was thought to be deep enough as is, and little to no excavation would be necessary to deepen it for pipe placement. Upon her visit, Ms. Huang discovered that the existing ditch in the area through which buildings may have been present in the camp was actually built into a 3 foot high berm (Figure 8). The bottom of the ditch exists either above or at the original ground surface level. Thus, activities related to construction of the proposed project would likely have very little impact on possible subsurface camp remains. Dirt to fill the ditch once the pipe is laid would be trucked in and would not be excavated from the site.

No Adverse Effect to Historic Properties

During the course of investigations relating to the Section 106 process of identifying the historic properties involved in a proposed project, three historic properties were located through which the APE would cross. These properties include a non-visible section of the Oregon Trail North Side Alternate route, the North Side EIRR section of the Oregon Short Line railroad, and the west end of Camp Rupert. As we do not know the exact location of the Oregon Trail route, it is not possible to avoid or mitigate the impact, which essentially negates the impact entirely. As the Oregon Short Line railroad is still active, construction across that resource will be performed
through underground boring so as not to affect the function of the line. This can be considered avoidance. And the portion of pipeline to be laid through the west end of Camp Rupert will be laid in an existing above-ground ditch and will be filled with dirt trucked in from another location.

With all of the above factors taken into consideration, Reclamation recommends that the current proposed undertaking will result in "No Adverse Effect to Historic Properties." Reclamation also recommends that a professional archaeologist perform monitoring of all ground disturbance that will occur during construction of this project because of the low surface visibility experienced during pedestrian survey, and the possibility of subsurface cultural resources existing in the area. Please direct any questions or comments to Ms. Jenny Huang, Archeologist, at 208-383-2257 or by email at jhuang@usbr.gov.

Sincerely,

[Signature]

Jerrol D. Gregg
Area Manager

Enclosures

cc: Mr. Elliot Traher
District Conservationist
Natural Resources Conservation Service
1361 East 16th St.
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(w/o encls)

Mr. Dan Temple
Manager
A&B Irrigation District
P.O. Box 675
Rupert, ID 83350
(w/o encls)
Figure 1. North half of the project area. Green highlighted line represents proposed pipeline routes that will occur in all three alternate actions.
Figure 2. South half of the project area. Green highlighted line represents proposed pipeline that would occur in all three alternative actions. The yellow highlighted lines represent the three alternative pump station locations.
Figure 3. Existing pump plant and an example of what the new plant will entail.

Figure 4. Example of proposed distribution pipeline route corridor currently in agriculture.
Figure 5. Example of an existing open ditch along the proposed distribution route that will have pipe laid inside and will be covered over with dirt (trucked in).
Figure 6. Layout map of Camp Rupert (North at bottom) with estimated location of proposed pipeline route represented in blue.
Figure 7. View from atop road (berm) across existing field where Camp Rupert buildings once stood.

Figure 8. Existing open ditch in raised berm at an area thought to be near old camp storehouses. The existing A&B yard is seen at top of photo. A chunk of cement sits atop the berm at bottom left.
APPENDIX E

EA DISTRIBUTION LIST
Federal Agencies and Elected Officials

Honorable Mike Crapo
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Twin Falls ID 83310

Honorable Jim Risch
United States Senate
Attn: Ms Amy Taylor
901 Pier View Drive, Suite 202A
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Honorable Mike Simpson
Member United States House of Representatives
Attn: Ms Colleen Erickson
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Tribes

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Tony Galloway, Sr.
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APPENDIX F
RECLAMATION’S RESPONSES TO COMMENTS RECEIVED ON THE DRAFT EA
Reclamation’s Response to Comments Received on the Draft EA

Introduction

The Draft EA was published on May 2, 2014 for a 30-day public review and comment period. That review and comment period ended on June 2, 2014. During the Draft EA review period, a public meeting was also held to receive input on the document and answer the public’s questions about the proposed action, the alternatives, and environmental analysis.

This section of the Final EA provides responses to written comments received on the EA during the public review period. A total of approximately 30 notes, letters, and emails were received during the public review period of the EA. The majority of concerns expressed focused on the following four main categories:

- Cost Comparisons of the 3 Action Alternatives
- Concerns of Nearby Residents
  - Noise
  - Water Supply
  - Wildlife Viewing and Fishing Activities
  - Property Values
  - Historical Values and Indian Sacred Sites viewing
  - Build Alternative 3 or 4
- Concerns of A&B Irrigation District Members
  - Water Rights of Unit A Landowners
  - The 1955 “Definite Plan”
  - District Governance
- Protected Resources and Follow-On Permit Requirements
  - Idaho Department of Environmental Quality
  - Idaho Department of Water Resources
  - Idaho Transportation Department (ITD)
  - U.S. Fish and Wildlife Service

Given these characteristics of the comments received, Reclamation’s responses are organized under the same four main topical headings and associated subheadings. This approach allows a more organized and cohesive response to concerns expressed and avoids repetition of responses. Following discussions under the 4 main categories (and associated topics of concern), commentary related to data errors is addressed and errata noted by Reclamation are identified.
Finally, this chapter includes copies of each comment note, letter, or email submitted on the Draft EA.

**Cost Comparisons of the Three Action Alternatives**

**Implementation Costs**

The costs of implementing Alternatives 3 and 4 would be much higher than those associated with Alternative 2. This difference in cost is not reflected in EA analysis, making the cost comparisons inaccurate.

*Response:*

Both facility design and cost estimates have been refined during the process of preparing the Final EA. This refined information is provided in the revisions made to Sections 2.2.3 through 2.2.6. As noted in these sections, the cost estimates now include all major components of project construction, including the complete pumping plant, electrical transmission lines, access roads, legal costs, and all pipeline and appurtenances. The revised Table 2-1 summarizes the estimated cost and other key characteristics for all three action alternatives.

**Insufficient Cost Analysis**

The cost information provided in the EA does not provide sufficient analysis to demonstrate that alternative 2 is really more cost-efficient than alternative 3.

*Response:*

As noted above, clarifications and refinements have been made in the cost estimates for each of the three action alternatives under consideration (i.e., the refined alternatives, resulting from public commentary on the Draft EA). These cost estimates are considered sufficient, combined with other factors, to provide necessary input for a decision on a preferred alternative.

**Costs of Litigation and New Road at Alternative 2**

The cost analysis in the EA does not include the cost of litigation (comment provided by the affected landowner), a new road, and perhaps other costs that would be associated with Alternative 2, but would not be associated with Alternative 3. If the EA showed/estimated these cost elements for Alternative 2, it would likely not be the most cost-effective alternative.
Response:

As noted in the responses to the above two comments, the refined development cost estimates provided in the Final EA are considered adequate to provide necessary cost information for decision-making related to the proposed project. This comment raises the potential for litigation (with associated costs) if Alternative 2 continues to be pursued as the preferred alternative. The potential for litigation could be associated with any of the alternatives being considered. Such a potential may exist, but it must be considered speculative with unknown cost, and cannot be considered as part of an objective comparison among defined and potentially feasible alternatives.

Concerns of Nearby Residents

Noise

Numerous comments were received from residents living across the river to the south of the site of the pumping plant site for project Alternative 2. Each of these commenters expressed concern related to adverse impact on their residential environment from noise generated by the pumping plant of this alternative.

Response:

Additional research was conducted related to regulations, standards, ordinances, etc., that could help define appropriate standards for noise in the study area of the three alternative pump station locations. It was confirmed that there is no noise control regulations in force in the study area. Further, the study area is an agricultural area in which Idaho’s Right to Farm Act (Title 22, Chapter 45) applies. This act says, in part, “No city, county, taxing district or other political subdivision of this state shall adopt any ordinance or resolution that declares any agricultural operation, agricultural facility or expansion thereof that is operated in accordance with generally recognized agricultural practices to be a nuisance, nor shall any zoning ordinance that requires abatement as a nuisance or forces the closure of any such agricultural operation or agricultural facility be adopted.”

Given this law and the circumstances of the study area, implementation and operation of the proposed pumping plant would not be considered a significant impact and no abatement of the noise from farm related activities would be required. Nonetheless, features of the pump station design intended to provide protection for the equipment and, at the District’s initiative, visually blend the facility with the surrounding environment, can be expected to further reduce noise from facility operation. Beyond these factors, the District intends to voluntarily incorporate design features that will reduce noise from the facility to a maximum of 55 dB at the residence nearest the pump station at the time of construction.
**Water Supply**

Potential for impact to shoreline residents’ water supply was raised as a concern by one commenter on the Draft EA.

**Response:**

The proposed project (any of the action alternatives) would have no adverse impact on the water supply to any residents in the area of the pump station.

**Wildlife Viewing and Fishing Activities**

Residents across the river from the proposed pumping plant site for Alternative 2 expressed concern that the proposed facility would drive away wildlife in their area.

**Response:**

Construction, operation, and maintenance of the proposed pumping plant could induce aquatic and/or terrestrial wildlife to relocate temporarily or permanently from currently used habitat areas/features in the project area. However, as noted in Chapter 3, Sections 8, 9, and 10 of the EA (fish, wildlife, and threatened and endangered species, respectively) none of the action alternatives would have a substantial impact on these resources, especially given the design measures included in the project and described in those relevant sections of the Draft EA.

**Property Values**

Several residents across the river from the proposed pumping plant site expressed concern that construction and operation of the proposed facility would have an adverse effect on their property values. The factor most often cited as a cause of this impact was the noise expected to be associated with the pumping plant, as well as the visual impact of the facility on the shore across from these residences.

**Response:**

The District’s response to visual and noise concerns is described above. As noted, these measures are voluntary on the part of the District given the Right to Farm legislation in effect throughout the area in which the proposed project alternatives are located. The same legislation prohibits residential or other, related uses from taking precedence over agriculture in the area. Although it is doubtful that the proposed pumping plant would have a long-term, significant impact on residential property values in the area (especially given the voluntary measures to moderate visual and noise effects from the facility), the Right to
Farm designation would preclude constraining the proposed project with concerns for residential property values.

**Historical Values and Indian Sacred Sites (Executive Order 13007)**

One potentially affected landowner considered the survey and analysis related to cultural resources and Indian sacred sites to be deficient, having missed significant resources present on the shoreline site of the Alternative 2 pumping plant. The correspondence from this landowner cited the lack of a response in the Draft EA from the State Historic Preservation Officer (SHPO) as evidence of an incomplete analysis.

**Response:**

The National Historic Preservation Act outlines federal responsibilities for undertakings that may affect cultural resources, and Reclamation performs its due diligence (and beyond) to ensure that significant historic properties (both archaeological and historic in nature) are not adversely affected. For the A&B Pump Plant and Pipeline Project, Reclamation contracted NEPA and NHPA work to companies with employees that meet professional standards. Great Basin LLC archaeologists, who were provided copies of the Schodde property concerns, conducted pedestrian survey within the defined boundaries of the Area of Potential Effect and reported their findings in a survey report format that fully meets SHPO and Secretary of Interior expectations. Consultation was conducted between Reclamation (the lead federal agency), and the Idaho SHPO, as per the NHPA regulations outlined in 36CFR800. Though the SHPO response had not been received prior to the Draft EA going out for comment, the SHPO made a finding that the project, as outlined, would have “No Adverse Effect to Historic Properties.” Information provided by the Schodde family to Reclamation was fully disclosed to the SHPO during consultation. In short, Reclamation has acted entirely within the bounds of the NHPA on this project and can produce the documentation to support that.

In addition, the Draft EA contains a recommendation under all action alternatives that “if project construction should reveal any additional cultural resources, then A&B should contact a qualified archaeologist to evaluate these resources using Section 106 criteria. If the resource(s) is eligible for listing on the NRHP, or if other conditions require it, then A&B would develop a mitigation plan in consultation with Reclamation and the Idaho SHPO.” This recommendation will be incorporated into the plans for any action alternative approved for implementation.

**Build Alternative 3 or 4**

A number of respondents directly suggested that Alternative 3 or 4 be selected for the project because these alternatives would affect fewer existing residents along the river.
Response:

This comment is noted and will be considered as part of decision-making related to the proposed action.

Concerns of A&B Irrigation District Members

Water Rights of Unit A Landowners

Several comments were received from Unit A landowners expressing concern regarding impacts to their water rights and the security of their water supplies in general as a result of the proposed action (any of the action alternatives). The range of concerns expressed in these comments focused on potential impacts to existing Unit A farmers in terms of loss or reduction in carryover supplies and increased potential for occasions when full allotments would not be available/delivered to Unit A farmers. Representative concerns expressed in these comments include:

- Continuing to receive full allotments of water, and whether or not compensation would be provided if full allotments are not delivered;
- Potential impact on carryover supply for Unit A;
- Violation of senior water rights;
- Authority under which Unit B could receive surface water when (1) all Unit B water rights are for groundwater, not surface water, and (2) Unit B does not hold any storage rights in the Snake River system;
- Statement attributed to Mike Beus, water operations manager for the Upper Snake field office: most water used in the pumping plant will come from storage or from rental pool. The new plant could put more demands on storage water and possibly “dilute” Unit A’s water availability.
- Some lands being irrigated have no water rights and have illegal land descriptions.

Response:

Some commenters believe the proposed action will result in water right violations or that the analysis concerning water rights is deficient. The A&B Irrigation District’s water rights portfolio is accurately described at pages 42-44 in the Draft EA. No individual farmers within Unit A hold “individual” water rights that will be affected in anyway. The lands (approximately 4,500 acres) that currently receive surface water from the District’s Pumping Plant #1 will instead receive their water from the Pumping Plant #2. The change in the point of diversion on the Snake River will not violate any individual water rights. Landowners within A&B Irrigation District will continue to receive their surface water delivery. Moreover, the capacity restrictions with the existing Plant #1 and canal system
will be eliminated during the peak of the irrigation season which will enhance water delivery operations throughout all of Unit A.

The District delivers surface water pursuant to its decreed natural flow and storage water rights. The District also delivers ground water pursuant to its decreed groundwater rights. The table below provides detailed information on the District’s surface and groundwater rights.

**A&B Irrigation District – Water Rights and Associated Acreage**

**Surface Water - Decreed Natural Flow and Storage Water Rights**

<table>
<thead>
<tr>
<th>Water Right No</th>
<th>Type</th>
<th>Acres</th>
<th>Priority</th>
<th>Rate of Flow (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-00014</td>
<td>Decree</td>
<td>14,637.0</td>
<td>4/1/1939</td>
<td>267.00</td>
</tr>
<tr>
<td>01-10275</td>
<td>Enlargement</td>
<td>1,120.7</td>
<td>4/1/1984</td>
<td>22.41</td>
</tr>
<tr>
<td>01-10237</td>
<td>Beneficial Use</td>
<td>110.0</td>
<td>7/11/1968</td>
<td>0.19</td>
</tr>
<tr>
<td>01-10238</td>
<td>Beneficial Use</td>
<td>30.9</td>
<td>7/11/1968</td>
<td>0.62</td>
</tr>
<tr>
<td>01-10239</td>
<td>Beneficial Use</td>
<td>11.9</td>
<td>7/11/1968</td>
<td>0.24</td>
</tr>
<tr>
<td>01-10240</td>
<td>Beneficial Use</td>
<td>59.2</td>
<td>7/11/1968</td>
<td>1.18</td>
</tr>
<tr>
<td>01-10241</td>
<td>Enlargement</td>
<td>54.5</td>
<td>4/1/1978</td>
<td>1.09</td>
</tr>
</tbody>
</table>

Total Surface Water Acres: 15,923.9

**Groundwater - Decreed Ground Water Rights**

<table>
<thead>
<tr>
<th>Water Right No</th>
<th>Type</th>
<th>Acres</th>
<th>Priority</th>
<th>Rate of Flow (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36-02080</td>
<td>Decree</td>
<td>62,604.3</td>
<td>9/9/1948</td>
<td>1100.00</td>
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<tr>
<td>36-15127A</td>
<td>Beneficial Use</td>
<td>1,886.4</td>
<td>4/1/1962</td>
<td>31.12</td>
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<tr>
<td>36-15127B</td>
<td>Enlargement</td>
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<td>4/1/1984</td>
<td>28.89</td>
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<tr>
<td>36-15192</td>
<td>Beneficial Use</td>
<td>36.3</td>
<td>4/1/1962</td>
<td>0.60</td>
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<tr>
<td>36-15193A</td>
<td>Beneficial Use</td>
<td>12.5</td>
<td>4/1/1962</td>
<td>0.21</td>
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<tr>
<td>36-15193B</td>
<td>Enlargement</td>
<td>18.9</td>
<td>4/1/1965</td>
<td>0.31</td>
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<tr>
<td>36-15194A</td>
<td>Beneficial Use</td>
<td>13.7</td>
<td>4/1/1962</td>
<td>0.23</td>
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<td>36-15194B</td>
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<td>2.51</td>
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<td>36-15195B</td>
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<td>4/1/1978</td>
<td>2.24</td>
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<td>36-15196A</td>
<td>Beneficial Use</td>
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<td>4/1/1962</td>
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<td>Enlargement</td>
<td>4.7</td>
<td>4/1/1981</td>
<td>0.08</td>
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</tbody>
</table>

Total Ground Water Acres: 66,686.2

Total Acres (Unit A + Unit B): 82,610.1

Although some commenters have questioned the number of acres used in the Draft EA, the document has used the word “approximately” as a general estimate rather than detail the exact acreage only as a matter of convenience. The water right list above shows the exact...
authorized irrigated acres under the District’s water rights. In addition to continuing
delivery of surface water to 1,400 acres previously converted in the 1990s to a surface
water supply, the project proposes to curtail groundwater use on approximately 1,500
additional acres of “soft conversions” in Unit B so that surface water can be used instead.
The District would rent storage water from the Water District 01 Rental Pool (when
available) as the first priority to supply water for these lands. If necessary, other rental
sources to which the District has access could be used as a second priority. Only after all
potential sources of rental water were exhausted would water from District storage be used
to help support these lands. Circumstances which require use of District storage would be
extremely rare (based on historic record). Finally, if rental sources of surface water are not
available, and demand from District storage would be unacceptable, these lands would still
be able to use groundwater through the existing wells and groundwater rights.

After the final alternative is selected, the District will file the appropriate application with
the Idaho Department of Water Resources to identify the additional point of diversion and,
as necessary, adjust the place of use for its natural flow surface water rights.

Discussion provided under the next 2 comment subjects provide information that further
responds to the concerns noted above, as well as addressing more specific topics.

Finally, the assertion that “some lands being irrigated have no water rights and have illegal
land descriptions” is not relevant to the proposed action. All lands involved in the proposed
project have accurate legal descriptions filed with the County assessor and water rights as
described in the document.

**The 1955 “Definite Plan Report”**

Letters received from some Unit A landowners expressed concern that Reclamation was
violating commitments made in the 1955 Definite Plan report (DPR). These owners believe
that the DPR provided them with assurance that they would have storage in Reclamation
reservoirs sufficient to carry them through 3 consecutive years of drought. Now, these
respondents see the provision of District surface water to “rescue” landowners with failed
or failing groundwater rights as a reduction in the District’s ability to fulfill the assurances
provided to them by the DPR.

Response:

Reclamation does not interpret the 1955 DPR to suggest that it was Reclamation’s intent to
“guarantee” 3 years of irrigation supplies during times of drought when determining the
amount of storage space in American Falls and Palisades Reservoirs required for the Unit A
landowners. As indicated in the DPR, it was determined in looking at historical water
supply data that the storage space in American Falls must be supplemented by storage space
in Palisades in order to provide a dependable water supply for Unit A landowners during a
drought period. Operation studies showed that the allotment of 90,000 acre-feet of storage space in Palisades Reservoir, together with the available natural flow and American Falls storage water would have provided a full water supply for Unit A in every year since 1918 except in 1935, when a 25 percent shortage would have occurred. The DPR goes on to indicate that increasing the allotment of Palisades storage to mitigate such an infrequent shortage is not practicable. Thus, Reclamation concludes that such a “guarantee” was not envisioned at the time the DPR was prepared.

The water supply available under the 1962 Repayment Contract (Contract) between the District and the United States comprises water accruing to capacity in American Falls and Palisades Reservoirs, natural flow rights and ground water rights held by the District. The Contract talks in terms of water available to the District and uses terms such as “uniform” and “equitably” with respect to water deliveries and assessments and therefore, Reclamation trusts that the District would not take actions that would jeopardize a water user’s water supply. The Contract also provides that the District, with the approval of the Secretary, may, for purposes of adjustments and matters of its own internal administration, make changes in the basic irrigable area from time to time.

**District Governance**

Some commenters expressed the belief that the overall A&B Irrigation District project is run primarily for the benefit of landowners in Unit B and that the proposed project is biased against (or would provide no benefit to) landowners in Unit A.

Further, some commenters express a belief that information provided by the District about the current proposal is biased and/or inaccurate.

**Response:**

A NEPA document generally does not assess the internal governance or decision-making of a project proponent (in this case, the District’s governance or internal decisions made by the District’s Board of Directors). However, it is notable that the District held a special election on proposed indebtedness for the project on November 5, 2013. The election passed by a vote of 80 percent in favor of the proposed bonding for the project. The election was recently confirmed by the Minidoka County District Court. Accordingly, all landowners were provided with the opportunity to vote on the proposed bonding for the project under state law.

Comments questioning the accuracy or completeness of information provided in the EA are relevant to the NEPA process. In this regard, the District has recently provided updated estimates of acreages in various use/irrigation categories. Overall, Reclamation has seen no indication that the District has provided inaccurate information relative to the Purpose and
Need for action, the District’s authority to carry out action aimed at addressing the Purpose and Need, the range of viable alternatives, or potential effects on District members.

A specific concern regarding the accuracy of the EA asserts that the proposed action would actually provide no benefits to Unit A farmers, that it is being proposed primarily to benefit farmers in Unit B. Related to this concern, the proposed action (as described on pages 3-5 of the EA) would enhance delivery efficiency of the existing Unit A system” and “restore and/or improve reliability of surface water delivery to approximately 4,500 acres of existing Unit A lands. The addition of Plant #2 would eliminate the water delivery capacity restrictions that currently exist at Plant #1 and the existing canal system. It is anticipated that all landowners within Unit A will be able to receive 0.90 to 1 miner’s inch per acre during the peak of the irrigation season when the District goes on allotment. These factors suggest that the proposed project would provide meaningful benefits to landowners in Unit A.

Protected Resources and Follow-On Permit Requirements

Idaho Department of Environmental Quality (IDEQ)

IDEQ provided correspondence listing the array of that agency’s potential regulatory and associated permitting concerns. The correspondence provided citations for potentially applicable regulations and a point of contact within the agency for each of these regulations. The array of potential concerns (to be considered as project planning and design proceed) include: air quality, wastewater and reuse, drinking water, surface water, solid and hazardous waste, water quality standards, groundwater contamination, and underground storage tanks.

Response:

IDEQ’s input and information is much appreciated. The Agency’s relevant regulations and associated permit requirements would be researched and complied with as part of project implementation.

Idaho Department of Water Resources (IDWR)

IDWR notes that the following passage from Section 3.3 of the EA does not give a complete description of the requirements for or limits of a water rights transfer or a point of diversion addition/transfer. The Draft EA states “A&B will only need to file an application for transfer with the IDWR to add a point of diversion to its seven surface water natural flow rights. All of the other elements of surface water rights will remain unchanged.” IDWR notes that, given the specifics of the proposed action, the statement quoted from the EA is incomplete. The State Code also indicates that changes that would constitute an enlargement of use of the original water right, such as an increase in flow rate, or the
addition of acres, are not allowed. Clearly, the District will need to file an application with IDWR to accomplish necessary changes in water rights prior to use of the proposed pumping plant.

**Response:**

The District will comply with all relevant IDWR regulations and requirements. Any relevant provisions of Idaho Code that were inadvertently left out of the EA description are hereby incorporated by reference (as identified in the IDWR comment letter).

**Idaho Transportation Department (ITD)**

ITD notes that the proposed crossing of I-84 will require an encroachment permit. The process of obtaining this permit consists of submitting the appropriate permit application company by plans showing proposed construction within the State Highway right-of-way. The permit and all associated plans must be approved by ITD prior to construction.

**Response:**

The District will comply with all relevant ITD requirements prior to any construction within the State Highway right-of-way.

**U.S. Fish and Wildlife Service – Potential Impact on the Listed Snake River Physa**

Although Milner Reservoir in the vicinity of the project area has never been surveyed for the presence of Snake River physa, suitable habitat is considered unlikely due to reduced water velocities that would allow accumulation of fines on the reservoir bottom. However, Snake River physa colonies do occur in the roughly 10-mile stretch of the Snake River between Minidoka Dam and the upstream end of the Milner Reservoir (the Minidoka Reach), and changes in flow due to proposed action could affect the species in this reach. The proposed action could mean a slight increase in flow from Minidoka Dam that would pass over the Snake River physa colonies in the Minidoka Reach. However, this positive effect is unlikely to be large enough to significantly expand the specie’s habitat due to the consistently wide channel in the Minidoka Reach.

**Response:**

A revised discussion of potential for impact on this species by any of the project alternatives is contained in Section 3.10.2 of this Final EA. The points brought out by the USFWS are reflected in that discussion.
Comments Received on the Draft EA
John,

Below are our comments:

Comment Regarding Alternative Sites:

A&B Irrigation District is concerned that the installation costs were not thoroughly analyzed and considered for the pipeline routes from alternative 3 and 4 to the common point. The significant changes in topography of these pipeline routes verses alternative #1 will require a substantial amount more construction time inflating costs due to the difficulty in creating a pipeline pad to cross the deep ravines.

Comment Regarding Pumping Capacity:

The impacts state an additional 118 cfs will be pumped with development of Pumping Plant #2.

When Plant #2 is in operation it will be an equal cfs reduction off of the original plant #1. Pumping Plant #1 has a pumping capacity of 275 cfs so if we are pumping 118 cfs out of Plant #2 if means we will only be pumping 157 cfs at Plant #1.

The one exception to this no change in overall pumping capacity could occur during the peak irrigation season typically mid-June thru August. Only then could the original total pumping capacity of 275 cfs between the 2 plants be increased by approx. 30 cfs to 305 cfs for a week or two to meet irrigation demands during this peak period.

Please let me know if you have any questions.

Dan Temple
A&B Irrigation District
PO Box 675
Rupert ID 83350
208 436-3152
abid@pmt.org
Our thoughts on A & B irrigation pump Is! Noise —Our surface water—

It will affect our home and property if we ever want to sell.

Sherry Baker
454 W 40 N
Burley, ID 83318
30 May 2014

To Whom It May Concern,

I am writing concerning the proposed Alternative Two pumping station in the A & B Irrigation district. Although I understand the importance of irrigation in our community I would like to urge your committee to choose Alternative routes 3 or 4 as your final choice and design.

I understand your attempt to design the pump in a way that would be appealing and the shortest distance between point A to B, but there are other factors that I feel need to be taken into account. If I could take a moment of your time and express my concerns for the pumping station two I would appreciate at it.

First, we live on one of the few lanes of homes on this part of the river. We chose to buy our home outside of the city limits so that we could have the privacy and quiet that county life provides us. With a pumping station just a few miles down the river we know of the noise that comes from it and what our view from our home would be.

Second, we love the wildlife that we have year round. Each winter we have a couple of Bald Eagles that rest in our trees but nest on the other side of the river. What an amazing site that so very few can enjoy, the thought of not having them visit us anymore is heart breaking. We also have geese that come to enjoy this quiet part of the river. During the summer we enjoy all type of different birds again something that so very few get to enjoy on a daily basis.

Third, this area is a prime bass fishing area, several tournaments are held each year here. Along with personal fishing that we know will be disrupted.

Fourth, our property value will no longer have the value it has now. We have invested a great deal to have a home with a beautiful view that family and friends will want to visit because of the peaceful feeling that is here. My husband and I have always planned to retire here and enjoy our later years relaxing and enjoying the peacefulness of the river. We know with the pumping station that peace and quiet will be gone and we also know that if we chose to move because of the pumping station we would never be able to get the value out of our home that we have invested.

In conclusion, I would ask you to strongly investigation of Alt routes 3 and 4 as they would be a better fit for our area. Thank you for the opportunity to express my opinion and hope that it will be taken seriously.

Sincerely,

Janiece Burgess

440 W 90 N

Burley, Idaho 83318
May 30, 2014

To Whom it May Concern:

I am writing my opinion to your council today against the Alternative Two proposed pumping station in the A & B Irrigation district. Although my family and I understand the imperative importance of irrigation in our community we would like to urge your committee to choose Alternative routes 3 or 4 as your final choice and design.

We appreciate your attempt to design the pump in a way that would be visually appealing, but there are other factors that we feel need to be taken in account in your final decision. In the following portion of this letter I will include reasons that I personally believe that the pumping station would be a better asset outside of our neighborhood.

Reason 1 - Noise. As we know you are aware, there is already a pumping station about a mile down river from us. There is a popular rock close to those pumps that everyone boats down the river to visit and to jump off its ledges in the summer months. We are aware that these pumps can be noisy and the sound carries really well in this particular area due to the rock canyon effect.

Reason 2 – Birds and other Wildlife. In the winter months we have a family of bald Eagles that we love to watch. They perch in our trees, but they nest on the other side of the river. If the pumps were built we fear that we would lose the company of these beautiful birds. Also, the construction is planned to take place during the winter months. It will ultimately affect the migration of geese and other wildlife that we enjoy during those months as well as nesting in the spring. When their migration is interrupted it takes several years for these birds to return, if they do. Nobody can know the other affects that these pumps could have on our animal life until after the pumps are built.

Reason 3 – Fishing. The proposed pumping station is in a prime area of fishing. Although there have been actions, such as fish screens, that will protect the fish from being sucked up into the pumps it doesn’t address the change in flow of the river would ultimately affect area fishing.

Reason 4 – Residential area. If Alt 2 is chosen it is the only route that is close to several homes that enjoy the current view. Alt route 3 and 4 are void of homes and are clearly a better choice for those living in this area and that enjoy the wildlife and scenery.

Conclusion: We would strongly encourage further investigation of Alt routes 3 and 4 as they would be a better fit for our area and those who enjoy the current tranquility, wildlife, and fishing. We appreciate the opportunity to express our opinion and expect that it will be taken seriously.

Sincerely,

Cassia County River Resident
My comments on the A&B Irrigation District Pump Plant #2 are:

There are 20 homes across from where you want to put the pump plant. I am aware there is a better place that will not impact as many lives. I know what your acceptable noise level is and it is not acceptable out here.

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov

If you would like a cd copy of the Draft EA, please check this box. □
We have lived here fifty years and spend

evenings on the river. Our nights and mornings
are quite and peaceful.

Replacing the old pump station or find a better
solution.

I'm not against the water being pumped
just the impact on us and the farmers
whose ground you cross.
Busby, Henry

Comment:

May 28 (2 days ago)

Busby,
Henry <busby.2@osu.edu>
to me

Comments:

1. Noise in pumping systems will be generated by the mechanical motion of the pump components and by the liquid motion in the pump and piping systems. Noise from internal mechanical and liquid sources will then be transmitted to the environment. Since you have (6) 500 hp and (2) 250 hp pumps, this will create a lot of noise that will be carried across the river. Since this is really a residential area the noise level should be between 40 and 45 dB during the day and between 30 and 35 dB at night. I do not think your setup will be this quiet since you can hear people talking from across the river. Based on this alone would make alternative 3 or 4 a better solution for all families concerned.

2. Putting the pump plant across from the housing development would reduce the property value of the homes. Again where alternative 3 or 4 a better solution for all families concerned.

3. From the meeting on May 14, everyone got the impression that no matter what remarks were made on the pumping plant, that alternative 2 was a done deal. Another case of the government doing whatever they want without any regard to the people that are affected by the outcome.

4. Can you guarantee that this project will work and do what is required?

5. Alternatives 3 and 4 would solve all the problems. You will reclaim your money, no matter what, so cost should not be your major concern

Henry R. Busby
430 West 90 North
Burley, ID 83318
678-6892

Response:

1. As stated in the Environmental Assessment (section 3.6.2), a part of project design is to construct the facilities so that existing noise standards for the area are met. This will ensure that the facility does not introduce a major new source of noise that differs from normal equipment operation and general ambient noise conditions characteristic of the area.

2. Property Values: Given measures described in Chapter 2 to control noise and reduce the visual impact of the proposed facilities, little (if any) impact should occur to property values in the area.
3. As stated in the Environmental Assessment, alternative 2 is the preferred alternative of the project proponent, A&B Irrigation District. A decision on the part of the involved agencies regarding whether to approve and assist in building the proposed project has not been made; nor has an alternative been identified as preferred by these agencies. This NEPA process is intended to assist in making these decisions.

4. The proposed project would be constructed using materials and technologies in use in many agricultural areas. Normal equipment guarantees and licensing of design and construction personnel would apply. No extraordinary or absolute guarantees would be appropriate.

5. Comment noted and will be considered.
John Petrovsky
Bureau of Reclamation
230 Collins Rd.
Boise, Idaho 873702

To Whom it May Concern:

30 May 2014

I am writing my opinion to your council today against the Alternative Two proposed pumping station in the A & B Irrigation district. Although my family and I understand the imperative importance of irrigation in our community we would like to urge your committee to choose Alternative routes 3 or 4 as your final choice and design.

We appreciate your attempt to design the pump in a way that would be visually appealing, but there are other factors that we feel that need to be taken in account in your final decision. In the following portion of this letter I will include reasons that I personally believe that the pumping station would be a better asset outside of our neighborhood.

Reason 1 - Noise. As we know you are aware, there is already a pumping station about a mile down river from us. There is a popular rock close to these pumps that everyone boats down the river to visit and to jump off its ledges in the summer months. We are aware that these pumps can be noisy and the sound carries really well in this particular area due to the rock canyon effect.

Reason 2 - Birds and other Wildlife. In the winter months we have a family of bald Eagles that we love to watch. They perch in our trees, but they nest on the other side of the river. If the pumps were built we fear that we would lose the company of these beautiful birds. Also, the construction is planned to take place during the winter months. It will ultimately affect the migration of geese and other wildlife that we enjoy during those months as well as nesting in the spring. When their migration is interrupted it takes several years for these birds to return, if they do. Nobody can know the other affects that these pumps could have on our animal life until after the pumps are built.

Reason 3 - Fishing. The proposed pumping station is in a prime area of fishing. Although there have been actions, such as fish screens, that will protect the fish from being sucked up into the pumps it doesn’t address the change in flow of the river would ultimately affect area fishing.

Reason 4 - Residential area. If Alt 2 is chosen it is the only route that is close to several homes that enjoy the current view. Alt route 3 and 4 are void of homes and are clearly a better choice for those living in this area and that enjoy the wildlife and scenery.

Conclusion: We would strongly encourage further investigation of Alt routes 3 and 4 as they would be a better fit for our area and those who enjoy the current tranquility, wildlife, and fishing. We appreciate the opportunity to express our opinion and expect that it will be taken seriously.

Sincerely,

Cassia County River Resident
**COMMENT FORM**
A&B Irrigation District Pump Plant #2 Draft EA

<table>
<thead>
<tr>
<th>Name (please print legibly):</th>
<th>Douglas E. Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization:</td>
<td>Homesteader A&amp;B project and Grant 4D Farms</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>707 E-Gowen</td>
</tr>
<tr>
<td>City, State, and Zip Code:</td>
<td>Rupert, ID, 83350</td>
</tr>
<tr>
<td>Telephone (optional):</td>
<td>208-431-5610</td>
</tr>
<tr>
<td>E-mail (optional):</td>
<td><a href="mailto:Grant4D@Gmail.com">Grant4D@Gmail.com</a></td>
</tr>
</tbody>
</table>

Please note: Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

My comments on the A&B Irrigation District Pump Plant #2 are:

And B Reclamation project was a Veterans preference project, all recipients of these lands were allowed to win their farm in a drawing in which their name was placed because they served our country in the Armed Services. Most of the vets

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
were from WWII and Korean Conflict. Not a pleasant way to spend from 2 to 4 years of your youth. So these farms were a wonderful way of honoring those who served our great land.

Then through no fault of their own, the irrigation water for these lands started to dry up. So it certainly behooves our nation to allow this project to go forward. I know most of the vets that developed these farms are no longer able to farm but in many cases the heirs have taken over to build on the heritage of the preceding generation.

Also, if you eat food production is kind of important and this water will be used for that purpose. It will not impact the irrigation to any great extent as all the lands where the water will be used is already farmed and A and B has a long-standing river right to this water.

So in closing, I hope the EPA does the right thing in supporting the past decisions of our great country.

Thank you.
Hi John,

I was able to connect with Ryan Newman regarding my questions on the ESA analysis in the draft EA for the A&B Irrigation District Pumping Plant #2 Project. Ryan was very helpful, and so I can provide the U.S. Fish and Wildlife Service’s comments to the draft EA.

As I mentioned in our conversation on May 9, 2014, I suggest clearly stating in the proposed action that the 118 cfs water right, when available (dependent on water year), will only be exercised during the annual irrigation season.

Regarding potential project impacts to the listed species Snake River physa

(*Haitia (Physa) natricina*):

The Milner Reservoir in the vicinity of the project area has never been surveyed for the presence of Snake River physa. However, suitable Snake River physa is considered unlikely to be present in that area of the Milner Reservoir due to reduced water velocities in the reservoir environment that would allow accumulation of fines on the reservoir bottom.

Snake River physa colonies do occur in the roughly ten mile stretch of the Snake River between Minidoka Dam and the upstream end of the Milner Reservoir (the Minidoka Reach), and potential impacts to the species in this reach due to changes in flow proposed in the action were not addressed in the draft EA. Based on my conversation with Ryan, I suggest that the proposed action clearly state that exercising of the 118 cfs water right (drawn from American Falls Reservoir or Palisades Reservoir upstream) would mean an increase in flow from Minidoka Dam that would pass over the Snake River physa colonies in the Minidoka Reach. The increase will be slight. Based on historical mean monthly flows as measured at the U.S. Geological Survey’s Howell’s Ferry gage, a stage change (the most likely route for potential impacts to the species—an increase in flow might increase Snake River physa habitat availability), would likely not be measurable due to the consistently wide channel in the Minidoka Reach. You may wish to model or depict discharge or stage changes in the Minidoka Reach that could result from the 118 cfs increase in flow, and state the results in the Environmental Impacts section.

John, let me know if you have questions or need clarification on any of the above.

Dwayne Winslow
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Idaho Fish and Wildlife Office
Boise, Idaho
"This is because that is; this is not because that is not; this is like this because that is like that."
RECLAMATION
Managing Water in the West

COMMENT FORM
A&B Irrigation District Pump Plant #2 Draft EA

Name (please print legibly): Jack Evans
Organization:
Mailing Address: 460 W. 30 N.
City, State, and Zip Code: Boise, ID 83718
Telephone (optional): 208-235-7601 E-mail (optional): jpetrovsky@usbwr.gov

Please note: Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

My comments on the A&B Irrigation District Pump Plant #2 are:

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbwr.gov

If you would like a cd copy of the Draft EA, please check this box. □
Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
RECLAMATION
Managing Water in the West

COMMENT FORM
A&B Irrigation District Pump Plant #2 Draft EA

Name (please print legibly): Carolyn Pirth

Organization:

Mailing Address:

City, State, and Zip Code:

Telephone (optional): E-mail (optional):

Please note: Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

My comments on the A&B Irrigation District Pump Plant #2 are:

Recalculate Fig. 3-1(p. 45) with Table 3.1 p. 45

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov

If you would like a cd copy of the Draft EA, please check this box. ☐
Name (please print legibly): Greg O'Dell

Organization:

Mailing Address: 17640 SW Neugart Road, Hillsboro OR 97123
City, State, and Zip Code: Hillsboro OR 97123

Telephone (optional):  
E-mail (optional):

Please note: Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

My comments on the A&B Irrigation District Pump Plant #2 are:

My concern is that there was no economic study done as far as the houses across the river and how it would affect property values. Also, the trees at alternative #2 could be preserved.

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov

If you would like a CD copy of the Draft EA, please check this box. ☐
Comments (continued)

When they say there is no significant impact for noise, I find that hard to believe. If I park a truck outside your house and run it 24/7, it is in the legal noise level, but would you think that was significant?
**Name (please print legibly):** Greg O'Dell

**Organization:**

**Mailing Address:** 17640 SW Neugebauer Rd.

**City, State, and Zip Code:** Hillsboro Or. 97123

**Telephone (optional):**

**E-mail (optional):**

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**Please note:** Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

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**My comments on the A&B Irrigation District Pump Plant #2 are:**

We strongly oppose the #2 site for the pumping station. This site is directly across the river from our neighborhood. Building on site #2 will impact the property value of our neighborhood. Site #3 will have less impact on existing homes.

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(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
Comments (continued)

Please consider the impact site #2 will have and select site #3 as an alternative.

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
My comments on the A&B Irrigation District Pump Plant #2 are:

The project area may experience short-term weather conditions including runoff from rainfall leading to the Snake River, riparian and wetland impacts, temporary road closures, and increased dust and noise pollution in areas adjacent to the project.

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
Subject: Draft Environmental Assessment for the A&B Irrigation District Pumping Plant #2

Dear Ladies and Gentlemen:

Enclosed for your review and comment is a Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project. The proposed project consists of a replacement pumping plant east of ABID’s existing pumping plant and an associated pipeline distributing ABID surface water to lands in both Unit A and Unit B; in the latter regard, ABID would provide surface supply to lands in Unit B with failing groundwater supply.

The Bureau of Reclamation is serving as the lead agency for this Draft EA under the National Environmental Policy Act. The Natural Resources Conservation Service and U.S. Department of Agriculture Rural Development are cooperating agencies in the proposed project and in preparing and processing this Draft EA.

Please send your written comments on the Draft EA to: Mr. John Petrovsky, Activity Coordinator, at Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702 or via email to jpetrovsky@usbr.gov. Comments must be received by Monday, June 2, 2014.

During the Draft EA review period, Reclamation will host an open house on May 14 from 6:30 p.m. to 8:30 p.m. at the Burley Best Western Inn, 800 North Overland Avenue Burley, Idaho. People needing sign language interpretation or other accessible accommodations should contact Don Bowden, Environmental Protection Specialist, at 208-678-0461 ext. 13 by May 7.

If you have any questions concerning this document or the National Environmental Policy Act, please contact Mr. Petrovsky at 208-383-2224.

Sincerely,

Jerold D. Gregg
Area Manager

Enclosures
May 28, 2014

Mr. John Petrovsky  
US Department of the Interior – Bureau of Reclamation  
230 Collins Road  
Boise, Idaho 83702

Re: Request for DEQ Comments, A&B Irrigation District - Snake River Surface Water Pump Facility Number Two Installations Project, Minidoka County

Dear Mr. Petrovsky:

This office has received and reviewed the draft environmental assessment relative to the above proposed surface water diversion and pumping facility installations project.

Our office concurs with the suggested impacts noted in the assessment and stipulates that the project area may experience minor short term adverse conditions, including storm water runoff; sediment loading into the Snake River; riparian and wetland impacts; temporary road closures; and increased dust and noise pollution in areas adjacent to the project if construction relative to alternative numbers two, three or four commences. To minimize these effects, we recommend that suitable stormwater BMPs, signage, trained construction personnel and site watering equipment be utilized during construction.

Our evaluation of environmental concerns associated with the project is limited to our review of information provided in the request for comments package and our experience with similar projects. The prolonged affects noted in the draft assessment seem reasonable; however our opinion as to whether stated or any unidentified prolonged or permanent, environmental or historical impacts could result cannot be determined at this time.

It is our understanding from our review of the assessment that a stormwater NPDES discharge permit will be sought and acquired from U.S. EPA Region 10. At this time, we recommend that you contact Maria Lopez, with the U.S. EPA Idaho Operations Office or visit the federal U.S. EPA website for more information.

If you or project personnel have questions during planning, design or construction, please contact the relative regional contact as noted below:

1. Air Quality
   - IDAPA Section 58.01.01 is the rule section which relates to Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), permits to construct (58.01.01.201), and odor control plans (58.01.01.776).

   Regional Contact, Bobby Dye, Regional Manager -Air and Remediation, at 736-2190.

2. Wastewater and Reuse
• IDAPA 58.01.18 and IDAPA 58.01.17 are the rule sections which relate to wastewater and wastewater reuse (recycled water). Please review these rules to determine whether this or future projects will require DEQ approval. All projects require preconstruction approval by DEQ including facilities planning, preliminary engineering reports, plans and specification and other documents unless they meet the provisions of Idaho Code §39-118.2.d. Also note that at the discretion of any city, county, quasi-municipal corporation or regulated public utility, projects that fall within this provision may be referred to DEQ for approval. Wastewater reuse projects require separate permits for operation as well.

Regional Contact, David Anderson, Regional Manager – Engineering, 736-2190.

3. Drinking Water

• IDAPA 58.01.08 is the rule section which relates to drinking water. Please review these rules to determine whether this or future projects will require DEQ approval including facilities planning, preliminary engineering reports, plans and specification and other documents. All projects require preconstruction approval by DEQ unless they meet the provisions of Idaho Code §39-118.2.d. Also note that at the discretion of any city, county, quasi-municipal corporation or regulated public utility, projects that fall within this provision may be referred to DEQ for approval.

Regional Contact, Brian Reed, PE, Technical Engineer I, at 736-2190.

4. Surface Water

• If the project will involve de-watering of ground water during excavation and discharge back into surface water a short term activity exemption (from this office) will be needed which describes treatment of the water from this process to prevent excessive sediment and turbidity from entering surface water.

• The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources for more information.

Regional Contact, Balthasar (Sonny) Buhidar, Regional Manager – Water Quality Protection, at 736-2190.

5. Solid and Hazardous Waste

• Hazardous Waste. The types and number of requirements that must be complied with under the federal Resource Conservation and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of wastes generated, determine whether or not each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.

Regional Contact, Albert Crawshaw, Hazardous Waste Science Officer at 736-2190.

• Solid Waste. No trash or other solid waste should be buried, burned or otherwise disposed at the site. These disposal methods are regulated by various state regulations including Idaho’s Solid Waste Management Regulations and Standards, Rules and Regulations for Hazardous Waste, and Rules and Regulations for the Prevention of Air Pollution.
Mr. John Petrovsky  
May 28, 2014  
Page 3

Regional Contact, Joe Otero, PE, Staff Engineer at 736-2190.

- **Water Quality Standards.** Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters, and the clean-up and reporting of oil filled electrical equipment, hazardous materials, used oil and petroleum releases.

  Regional Contact, Balthasar (Sonny) Buhidar, Regional Manager – Water Quality Protection, at 736-2190

- **Ground Water Contamination.** DEQ requests that this project comply with Idaho’s Ground Water Quality Rules (IDAPA 58.01.11) which states that “No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching or disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in accordance with a permit, consent order or applicable best management practice, best available method or best practical method.”

  Regional Contact, David Anderson, Regional Manager - Engineering, at 736-2190.

6. **Under Ground Storage Tank (UST) / Leaking Underground Storage Tank (LUST) Program**

  - If an underground storage tank is identified at the site, the site should be evaluated for underground tanks and potential contamination.

  Regional Contact, Mike Summers, Regional UST/LUST Coordinator, at 736-2190.

Be aware that we are enclosing the provided comments form for your respective use and project record.

If you have any questions, do not hesitate to contact this office at 736-2190.

Sincerely,

[Signature]

Brian A. Reed, PE  
Technical Engineer I

BAR:gl

Enclosure: Environmental Review Comments Sheet

cc: File: EIID Comment Letter File w/ submittal and copy

cc: David Anderson, DEQ-Twin Falls Regional Office w/ submittal  
Sonny Buhidar, DEQ-Twin Falls Regional Office w/ submittal
**COMMENT FORM**

**A&B Irrigation District Pump Plant #2 Draft EA**

<table>
<thead>
<tr>
<th>Name (please print legibly):</th>
<th>Bill Mills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization:</td>
<td>Idaho Department of Water Resources</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>650 Addison Ave. W., Ste 500</td>
</tr>
<tr>
<td>City, State, and Zip Code:</td>
<td>Twin Falls, ID 83301-5851</td>
</tr>
<tr>
<td>Telephone (optional):</td>
<td>(208) 736-3033</td>
</tr>
<tr>
<td>E-mail (optional):</td>
<td><a href="mailto:william.mills@idwr.idaho.gov">william.mills@idwr.idaho.gov</a></td>
</tr>
</tbody>
</table>

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My comments on the A&B Irrigation District Pump Plant #2 are:

> See attached letter.

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
Reference:
SRA-1206
ENV-6.00

May 7, 2014

United States Department of the Interior
Bureau of Reclamation
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520
Attn: Mr. Petrovsky

Dear Mr. Petrovsky:

After reviewing the Draft Environmental Assessment for the A&B Irrigation District – Unit A Pumping Plant #2, the Department would like to make the following comments:

Section 3.3.2 (pg. 43), Alternative 2 – Proposed Action, of the Draft Environmental Assessment, stated that “A & B will only need to file an application for transfer with the Idaho Department of Water Resources (IDWR) to add a point of diversion to its seven surface water natural flow rights. All of the other elements for the surface water rights will remain unchanged.” It does need to be noted that while an approved transfer does allow for certain elements of a water right to be altered or changed, such as adding a second point of diversion, under IDAHO CODE Section 42-222, changes that would constitute an enlargement of use of the original water right, such as an increased flow rate or the addition of acres, are not allowed.

Additionally, IDAHO CODE Section 42-222 requires holders of water rights to obtain approval from the Department prior to changing elements of a water right by submitting an application for transfer to the Department. In this case, the proposed plan would add a second pumping plant, or point of diversion, in a different 40 acre tract and as noted in the Draft Environmental Assessment, an application for transfer would be required for all affected water rights and would have to be approved by the Department prior to using pumping plant #2 as an authorized point of diversion. It should also be noted that an application for transfer that seeks to change or add a point of diversion is subject to public notice and is also subject to potential protest by any party that believes they may be injured by the changes proposed in the transfer application.

Due to the time required to process, analyze, advertise and the potential for protest of an application for transfer, it is highly recommended that an application be submitted several months prior to the planned use of water through any proposed new points of diversion.

Thank you for the opportunity to provide comments on the proposed project. If you have questions or concerns regarding water right issues associated with this proposal, please feel free to contact me at (208) 736-3033 or via email at William.mills@idwr.idaho.gov.

Sincerely,

Bill Mills
Sr. Water resource Agent
Southern Region
Comment Form
A&B Irrigation District Pump Plant #2 Draft EA

Name (please print legibly): Michael Scott
Organization: IDAHO TRANSPORTATION DEPARTMENT
Mailing Address: 216 S. Date St, Nampa, ID 83652
City, State, and Zip Code:
Telephone (optional): 208-886-7800 E-mail (optional): Mike.Scaife@idaho.gov

Please note: Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

My comments on the A&B Irrigation District Pump Plant #2 are:

Any work planned within STATE HIGHWAY Right of Way (ROW) will require an Encroachment Permit Application with plan sheets of the proposed construction. The permit and all associated plans must be approved by ID before construction.

(Use back of sheet or additional sheets as necessary)
Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
RECLAMATION
Managing Water in the West

COMMENT FORM
A&B Irrigation District Pump Plant #2 Draft EA

Name (please print legibly):  Gay A. Meuleman

Organization:

Mailing Address:  1164 S 2800 E

City, State, and Zip Code:  Hazelton, ID 83335

Telephone (optional):  

E-mail (optional):

Please note: Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

My comments on the A&B Irrigation District Pump Plant #2 are:

I am concerned that the use of the new pumping plant #2 will reduce my water allotment. Will I continue to get my full allotment of water? If I do not get my full allotment of water because of the new pumping plant #2, will I get compensated for my loss?

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
Comments (continued)

I'm not concerned about an Act of God, but by Act of man on taking our carryover water for unit A.
the statement in the ESA states we will not get damaged and will get our full allotment every year.

Question to the Bureau of Reclamation protecting unit A landowner on this.

[Signature]

5-28-14.
**COMMENT FORM**

**A&B Irrigation District Pump Plant #2 Draft EA**

<table>
<thead>
<tr>
<th>Name (please print legibly):</th>
<th>ALAN MOHMA-</th>
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<tbody>
<tr>
<td>Organization:</td>
<td>GRANT 4-D FARMS</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>781 E 600 N</td>
</tr>
<tr>
<td>City, State, and Zip Code:</td>
<td>RUPERT IDAHO 83350</td>
</tr>
<tr>
<td>Telephone (optional):</td>
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<tr>
<td>E-mail (optional):</td>
<td>AMOHMAN @ PM TORG</td>
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My comments on the A&B Irrigation District Pump Plant #2 are:

**The A&B Project #2 is a project that is needed and makes good sense for the area involved. The project has been well thought out and engineered. The area involved is in desperate**

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsy Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsy@usbr.gov
Comments (continued)

**Need of Added Water Support:**
I support this project because it will highly improve the delivery of water.

[Signature]

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov
# COMMENT FORM

## A&B Irrigation District Pump Plant #2 Draft EA

| Name (please print legibly): | Rob & Kayleen Olkes |
| Organization: | |
| Mailing Address: | 422 W. 90 N. |
| City, State, and Zip Code: | Burley, ID 83318 |
| Telephone (optional): | |
| E-mail (optional): | |

**Please note:** Before including your name, address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

My comments on the A&B Irrigation District Pump Plant #2 are:

> See Attached Comment

(Use back of sheet or additional sheets as necessary)

Please mail, fax, or email your comments before June 2, 2014, to: John Petrovsky Bureau of Reclamation, 230 Collins Road, Boise, ID 83702; fax: (208) 383-2224; email: jpetrovsky@usbr.gov

If you would like a CD copy of the Draft EA, please check this box. □
Alternative #3 for the new pumping plant seems to be a far less disruptive alternative than Alternative #2.

The potential noise of the plant, coupled with the obstruction of scenic views would be disruptive to the existing home owners who live across the river from Alternative #2.

This alternative would create a decrease in property values for existing home owners. If new home owners choose to develop the property that exists around Alternative #3, they will do that developing, already knowing that the pump plant exists and make their choice accordingly.

I realize that the pipe line in Alternative #3 would need to be a little longer, and therefore, more costly. It seems to be a fair price to pay in order to do your part as a good steward and citizen in our community.

I realize that agriculture is the life blood of our economy, and I want to see the A&B irrigation district have sufficient water to allow all existing farming to continue their operations. I have many friends and clients who count on the water from the snake river for their livelihood. I would not want to disrupt their progress in this endeavor, however, I do feel that compromise is in order.

Thank you for your consideration in this matter.
Below are my comments for the Bureau of Reclamation A&B Irrigation Districts-Unit A Pumping Plant #2 Draft EA. My comments are describe by sections in the EA.

3.3 Water Rights
Study and Analysis Methodology

This section is not sufficient to understand the basis of the analysis. There is no description of the methodology (documents) use to evaluate the impacts. The Statement of “Personal communication with A&B staff” is not sufficient to describe the methods used by A&B staff to evaluate impacts. Not knowing the methodology used to evaluate impacts make it impossible to determine if the analysis is sufficient to determine if there are significant impacts that would occur from the Proposed Actions.

3.3.2 Water Rights Environmental Consequences
Methods and Assumptions

It is stated in this section that “impacts were quantitatively determined.” The quantitative analysis was not provided comparing existing and proposed water rights. The section states “The total quantity and priority of the existing natural flow surface water rights will be maintained: consequently, there will be no impact to delivery of water to other lands with A&B Unit A.” There is no statement on the impacts to water users in Unit A for storage water rights or carryover water. By not providing the methodology, data, and the results of the quantitatively analysis used to evaluate impacts it is impossible to determine if there are significant impacts to Unit A landowners water rights. The information provided in this section does not support a determination of no direct or indirect, short term and long term or cumulative impacts on water rights. Please provide the information to the questions below and any other information that is need to determine impacts to Unit A landowners water rights from the Proposed Action:

1. What are Unit A water rights
2. What are Unit B water rights
3. Are Unit A water rights belonging to individual landowners senior to Unit B individual water rights
4. Does A&B District have the obligation to deliver Unit A full water to individual landowners by priority date
5. In any given water year if there is not sufficient natural flow or storage water to fulfill Unit A water rights, will Unit B water users using surface water be curtailed to fulfill Unit A water rights
Mr. John Petrovsky,

After mailing you my comments today, I noticed a typographical error. On page 2, section 3.4, line 10, please change the word, qualitatively, to quantitatively.

Thank you,

Patricia Orleans
My comments on the A&B Irrigation District Pump Plant #2 are:

To John Petrovsky,

In regards to the environmental studies, I object to the information supplied by A&B Irrigation because it is misleading and inaccurate!
UNIT B does not hold any
STORAGE RIGHTS on the SNAKE RIVER,
OR TRIBUTARIES.
UNIT A has been under taxation without
representation from the water board.
The Unit A water users have "NO"
voice in water usage policy.
They have spent millions of dollars
drilling dry wells putting in project 2.
We will not benefit from the expense,
furthermore, some lands have NO
WATER RIGHTS and illegal land
descriptions! I object to their
study.

Sincerely,

John M. Ottman
John M. Ottman (landowner Unit A 1957-2014)
Mr. John Petrovsky,
Activity Coordinator
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, Idaho 83702

May 25, 2014

Subject: Comments of Environmental Assessment for the A&B Irrigation District Plant #2

I strongly oppose the Unit A pumping Plant #2, without the consent of the Unit A Individual Landowners. The water proposed for this second pumping plant will Dilute Unit A’s storage water in Palisades and American Falls. According to Mike Bues of the Bureau of Reclamation he stated in the Times News Oct. 30, 2013 [What Happens When The Well Runs Dry] it will put more demand or deplete Unit A’s storage water.

Unit B DOES NOT HAVE STORAGE RIGHTS IN PALISADES OR AMERICAN FALLS.

In conclusion using surface water unequivocally dedicated to Unit A for use on Unit B, without the consent of the Unit A individual farmer, is a invasion of Unit A’s Constitutionally protected property rights.

Sincerely,

Gary Ottman
Unit A Farmer
May 31, 2014

John Petrovsky
Activity Coordinator
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, Idaho 83702

Dear Mr. Petrovsky,

We have reviewed the Draft Environmental Assessment (EA) addressing the proposed A&B Irrigation District (ABID) Unit A Pumping Plant #2 project and find that it does not address management failure issues that we raised in our previous letter to Ms. Pierko. Furthermore, the EA is vague on acreages to be watered and where that water will come from.

The ABID board of directors has made decisions in the past that put the water supply for Unit A farms at risk. In the letter sent to Ms. Pierko (see attached letter) we described how the ABID directors created water shortages by leasing Unit A water to other districts and greatly increasing the number of acres in the A&B district watered by Unit A water. It was the culmination of these decisions that created water shortages that impacted Unit A farmers in 2004 & 2005. These decisions come easily for a five-member board of directors that has only one representative from Unit A.

Why do we feel betrayed? It appears that management of Unit A water has changed greatly since the inception of the ABID. Reading the Minidoka Project Northside Pumping Division Idaho Definite Plan Report, Volume 1, February 1955 (Definite Plan) reveals that Unit A was designed to irrigate 13,842 acres with water stored in American Falls reservoir, Palisades reservoir and supplemented with natural flow rights to ensure adequate quantities of water for three years irrigation through times of drought. This was to guarantee the viability of the Unit A farms. This plan was made based on historical studies of water availability prior to construction of the ABID. Last fall, the district manager told us that the Unit A Pumping plant supplied water to 17,301 acres during the 2013 season and if the proposed #2 Plant is built, they plan to supply water to 18,801 acres. Safety from drought has been greatly diminished with far more water being removed from the reservoirs every season. Unit A farmers now face threat of water shortage every year. After all, what is the maximum number of acres that can be reliably irrigated by Unit A water?
Can we believe a second plan (EA) for our project when the first plan (Definite Plan) is ignored? What about errors in the EA? Why does the EA state on page 1 that 15,000 acres are irrigated by surface water from the Snake River when the A&B manager states that 17,301 acres were watered in the 2013 season? All of this water comes from Unit A water supplies. The district never uses water from other sources. How can we believe the statement on page 43 of the EA “A&B intends to make annual application to the Water District 01 rental pool and lease available storage for delivery to these lands” when they have not done so in the past for any other additional acres watered with surface water. All acres changed to surface water in the district have been irrigated with Unit A water. The district manager listed Unit A water as a source for the new lands at the informational meetings last fall. We believe the EA is in error when it states under Alternative 2 – Proposed Action: “No direct or indirect, short-term, long term, or cumulative effects to water rights would occur as a result of the Proposed Action.” This is counter to what Mike Beus, the United States Bureau of Reclamation water operations manager for the Upper Snake Field Office, acknowledged in a recent newspaper article:

Most water used in the pumping plant will come from storage or from rental pool of water, said Beus of the Bureau of Reclamation. The new plant could put more demands on storage water and possibly “dilute” Unit A’s water availability, he acknowledged. (Times-News October 30, 2013 article “What Happens when the Well Runs Dry” by Laurie Welch)

The Definite Plan was a foundation to ensure viability of the farmland in the ABID. Departing from this plan has spread insecurity to a greater number of acres. If the district had secured more surface water rights to go along with servicing additional acres that could ease problems, but taking water away from successful farms and spreading it farther and farther threatens everyone.

Sincerely yours,

Daniel Paslay
Merrill Paslay
Mr. Petrovsky:

On behalf of Henry Lynn Schodde, Sheila K. Catmull, and Barbara J. Swedell—the co-owners of the so-called “Schodde” property where Alternatives #2 and #3 are located—we submit the following comments on the Draft Environmental Assessment, A&B Irrigation District—Unit A Pumping Plant #2, Minidoka County, Idaho (the “EA”). All three landowners will be hereinafter collectively referred to as the “Owners”.

As the Owners have expressed since the beginning, they are opposed to the pump station being constructed on their property. Nevertheless, in an effort to work a viable resolution, they have previously agreed not to challenge Alternative #3 as long as Alternative #2 was not pursued. Regrettably, Alternative #2 has been chosen as the preferred alternative, and as described below, it has been chosen based on an incomplete and deficient analysis.

1. **Deficient Historical Value Analysis: Starrh’s Ferry and Schodde Water Wheels.**

   The EA contains an incomplete analysis of the impacts to historical resources at Alternative #2. There is no response in the EA to the letter written by Reclamation to Ms. Mary Anne Davis, the Associated State Archaeologist at the Idaho State Historical Society. Given the lack of response, it cannot be said that the EA complies with National Historic Preservation Act of 1966.

   Additionally, despite the August 9, 2013 letter from Schodde outlining the Owners concerns, Reclamation and/or Great Basin, LLC claims to have failed to locate the items referenced in Shodde’s letter. Yet, neither Reclamation nor Great Basin, LLC contacted Mr. Schodde to locate the items of historical significance he identified. The area around Alternative #2 is the site of Starrh’s Ferry and the location of Henry Schodde’s water wheels that were the subject of the U.S. Supreme Court Case of *Schodde v. Twin Falls Land & Water Co.*, 224 U.S. 107, 32 S.Ct. 470, 56 L.Ed. 686 (1912). Remains of these structures are very close to the pump station component of Alternative #2. The letter from Reclamation claims that it and/or Great Basin, LLC engaged in “intensive coverage of all pump house alternative areas on the Schodde property.” Yet, Reclamation and/or Great Basin, LLC missed the remains of these structures, which we believe indicates that their study was not “intensive coverage.” We also infer that “intensive coverage” could not have occurred without some communication and a site visit with the property owners. For example, Mr. Schodde can identify the concrete
embankment associated with Starrh’s Ferry. He can also identify the approximate location of an axle in the river where the water wheels were located.

In light of the above, we request that prior to finalization of the EA, Reclamation perform the appropriate historical analysis under federal law. Schodde is available at your convenience to show Reclamation and/or Great Basin, LLC the historical items on the property. Only then can it be determined if property analysis has been performed under federal law for purpose of the EA.

2. **Deficient Historical Value Analysis and/or Executive Order 13007 (Indian Sacred Sites): Indian Artifacts.**

   Had Reclamation and/or Great Basin, LLC contacted Mr. Schodde, he would have also pointed out an area near Alternative #2 that may be of important Native American significance. A neighboring landowner, Ralph Hill (who is now deceased), frequented the Schodde property near the river and told Schode that he found a number of arrowheads and other items. It was Mr. Hill’s opinion that he thought the area near Alternative #2 was a Native American camp area. Mr. Hill’s vacant home sits near the Schodde property. Reclamation and/or Great Basin, LLC’s failure to properly analyze the property demonstrates their deficient analysis under the National Historic Preservation Act and/or Executive Order 13007. Additional examination of the Schodde property is warranted given these facts.

3. **Deficient Analysis of Decision to Choose Alternative #2.** No explanation of factors going into selection of Alternative #2.

   The difference between Alternative #2 and Alternative #3 is only $425,000.00 and an increase of 100 hp from 3,450 to 3,550 hp. The EA claims the project is primarily for the benefit of 6,000 acres of farmland within A&B. That amounts to only a minute $70.83 per acre of additional cost if Alternative #3 was chosen. Yet, there is no analysis of the impact to the Schodde property’s highest and best use (the standard for evaluation property interests both in an eminent domain proceeding or to compensate a landowner when the United States exercised a reserved easement right (neither of which we believe the United States can exercise)), and assuming the United States can proceed under either authority, there is no analysis of impacts to the property. Given the proximity of the Schodde property to other subdivisions just downriver, directly across the river, the location of the property on the Snake River, the elevated nature of some of the property (with river views and views of Mt. Harrison), it is evident that the highest and best use of the Schodde property is for development. Without an analysis of these factors, the cost estimate fails to capture or compare the hard costs of the project to impacts to landowners to determine an overall cost to all involved, and then a selection of which alternative based on that overall analysis. One would think this would factor into the selection of an alternative that is so close in cost to the other alternative. There is also no analysis of property impacts to the Owners resulting from above-ground power lines. Mr. Schodde was informed that the power lines would be buried, but the EA indicates otherwise.
In a similar vein, there is no part of the analysis that at least preliminarily looks at the costs of obtaining easements/rights-of-way for the project. The cost for obtaining an easement for Alternative #2 should include litigation costs, as the Owners will challenge Reclamation’s attempt to construct the facility at Alternative #2. This is different than Alternative #3, which the Owners will not challenge. The cost estimate is therefore incomplete on these issues. There is also no other analysis of the other landowners’ property where the pipeline will run.

Lastly, there is no analysis of the length of road that may need to be constructed. There is an existing road most of the way down to Alternative #3. It appears that road construction costs will be less than if Alternative #3 is chosen.

Overall, Reclamation needs to better explain its rationale for choosing Alternative #2. It lacks any analysis of easement procurement, road construction, impacts to the Owners’ property, etc., as explained above.

4. **Deficient Noise Analysis (Section 6.2).**

This section of the EA fails to take into account the noise impacts to the highest and best use of the property: residential development. The EA only notes existing structures, not the impacts to future use of the property. The only mitigation offered or explained is that the operations equipment would be state-of-the-art and have mufflers. There is no quantification of the additional noise from the pumping plant if it is completed, or explanation of whether the pumps will be housed. There is also no quantification of the estimated additional noise from maintenance equipment, etc., only that it will exist on the site. Given the development potential of the property, and therefore the negative impacts to the Owners, this analysis needs to be undertaken in more detail.

5. **Deficient Water Right Analysis.**

While Reclamation has correctly identified the water rights held by A&B, it has failed to properly describe whether use of Unit A’s storage water—which is appurtenant to those lands—can legally be used for the benefit of the “B” portion of A&B under Idaho law. In order to perform a thorough EA analysis, we urge Reclamation to carefully and thoroughly review the case of *Bradshaw v. Milner Low Lift Irrigation District*, 85 Idaho 528, 381 P.2d 440 (Idaho 1963). The case stands for the following principles:

**These constitutional provisions apply to irrigation districts.** The defendant district, having acquired by purchase the rights of the original appropriator and having itself made subsequent appropriations and purchases of water, stands in the position of appropriator for distribution to the landowners within the district, within the meaning of Const., Art. 15, § 1. The district holds title to the water rights in trust for the landowners. **The landowners, to whose lands the water has**

The owners of the old lands, through and by means of the irrigation district, acquired, and for many years applied to the irrigation of their lands, valuable water rights, which had become appurtenant and dedicated to their lands, and which were held in trust by the district for their use. They could not thereafter, without their consent, be deprived of the use of that water when needed to irrigate their lands. Const. Art. 15, § 4; I.C. §§ 42-101, 42-914. Further, their use of the water for many years prior to the annexation gave them ‘superiority of right to the use of such water.’ Const. Art. 15, § 5; Gerber v. Nampa & Meridian Irr. Dist., 16 Idaho 1, 100 P. 80; Gerber v. Nampa & Meridian Irr. Dist., 19 Idaho 765, 116 P. 104; Biddick v. Laramie Valley Municipal Irrigation Dist., 76 Wyo. 67, 299 P.2d 1059.

*Id.* at 545-46, 381 P.2d at 449-450 (emphasis added).

The court in *Bradshaw* also made significant constitutional holdings as to the funding of the improvements and purchase of water rights. But as for the surface/storage water rights on Unit A, it is uncontroverted that the surface/storage water acquired by A&B was acquired to be used solely on Unit A lands. Unit A lands therefore have a constitutional right to their storage/surface water, which the A&B board manages in trust for Unit A. The bond facilities, as proposed, will move the storage/surface water from Unit A lands to Unit B or for the benefit of Unit B without the consent of Unit A landowners. Not only has the A&B board violated their fiduciary duty by voting to move forward with this project, but it will also unconstitutionally take Unit A’s valuable property rights:

However, we do not construe the conclusions or judgment of the district court as denying to the owners of the new lands any right or interest whatever in the water rights held by the district prior to their annexation. The irrigation district law regards the irrigation district as a unit, and as a legal entity, holding title to its property and water rights in trust for the uses and purposes set forth in that law. I.C. §§ 43-101, 43-316; Gedney v. Snake River Irr. Dist., 61 Idaho 605, 104 P.2d 909; Yaden v. Gem Irr. Dist., 37 Idaho 300, 216 P. 250; Colburn v. Wilson, 24 Idaho 94, 132 P. 579.

It is the apparent purpose of the provisions of I.C. § 43-1010, above quoted, to make the landowners within an irrigation district equal [except as to any disparity which may be found to exist in benefits received (I.C. § 43-404)] so far as may be
consistent with priority of water rights as recognized and protected by the provisions of the constitution. Harsin v. Pioneer Irr. Dist., 45 Idaho 369, 263 P. 988. Having regard to such purpose of the statute, and the authority of the legislature in the premises as recognized by the constitutional provisions above quoted, we recognize the right acquired by the owners of new lands, by their inclusion within the district, to the use of any water owned by the district when the use thereof is not required for the proper irrigation of the old lands, and when such use is not in conflict with the rights previously acquired by the owners of the old lands, or when such use is not in derogation or impairment of such prior rights.

*Id.* at 547, 381 P.2d at 450-451.

In short, there may not be sufficient storage water for the project given the requirement to obtain Unit A landowner consent. It should not be assumed in the EA that the storage water can be used freely throughout the entire district.

We appreciate your consideration of these comments. Please confirm by email your receipt of these comments, which are being submitted in accordance with your May 2, 2014 letter indicating that comments must be received by June 2, 2014.

Robert L. Harris
HOLDEN, KIDWELL, HAHN & CRAPO, PLLC
1000 Riverwalk Drive, Suite 200
P.O. Box 50130
Idaho Falls, ID 83405-0130
Phone: (208) 523-0620
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Please refer to the attached letter for my comments on the A&B Irrigation District pump plant proposal. If you have any trouble opening the attachment, please contact me at (208) 431-0930 as soon as possible.

I would prefer that my personal information (address, phone number, email address) be excluded on all public views. I do not mind my name being attached to my comments, just my contact information.

Thank you,
Ted Tateoka
May 29, 2014

John Petrovsky  
Bureau of Reclamation  
230 Collins Rd.  
Boise, ID 83702

COMMENT FORM (A&B Irrigation District Pump Plant #2 Draft EA)

Ted Tateoka

Dear Mr. Petrovsky

I am writing in regards to A&B Irrigation District’s pump plant development project. I own and farm land which corresponds to six units on A&B Irrigation District’s Unit A and have given much thought as to the net impact of the pump plant project. In doing so I have determined that the negative effects resulting from a new pump plant far outweigh the advantages that are gained. That said, I must add that I firmly oppose this project for the following reasons:

- The project seems skewed in favor of a few district members rather than the entire district as a whole.
- The senior water rights for Unit A land owners are in jeopardy.
- Unit A landowners are not adequately and reasonably assured of consistent, reliable water supply.

It does not benefit the whole district. My understanding is that some 30 or so district members applied for the EQUIP funding for this project. I can verify that I was never contacted or encouraged to apply; this is because the project will not benefit my farmland at all. However, the proposed project raises all water assessments throughout the district. If this is truly a district project, then why do only the 30-some landowners apply for EQUIP? Why didn’t the district as a unit apply? In all the meetings I have attended concerning this project, I am told, "One for all and all for one". There are programs specifically for whole irrigation districts to apply for available government funding; why did the A&B board choose the individual application option over the entire district option? The A&B board contains three land owners from Unit B and only one land owner from Unit A; this imbalance of representation distorts the board’s decisions. The simple fact that the board went to the individuals that would have a direct benefit from this proposed project is evidence that it not for the “greater good” of the district. Might this have something to do with the board’s Unit B leanings?

Senior water rights of Unit A landowners are in jeopardy. As I attended the meetings concerning this project, I heard how the district will rent water from the state pool to be used on the expanded acres or the imperiled neighboring lands of Unit B. Yet in the same breath they also address the storage of water that Unit A has. I am very confused by the
reasoning here: is the board going to rent from the state pool, or will they draw from the storage of Unit A? Please review the history of the A&B Irrigation District and pay attention to the water allocation of Unit A. If this second pumping station makes Unit A more efficient, shouldn’t there be a legally binding allocation of water supply for Unit A since it holds the senior water rights? When the original A&B project was developed, the water allocation for Unit A was to irrigate 13,600 acres. Last year, over 18,000 acres was irrigated using Unit A allocation; this is a major increase. While Unit A does have some spread acres that caused a small increase in the irrigation acreage, the majority of the increase includes much of the imperiled Unit B ground, not Unit A.

Distribution of Unit A’s water will continue to be threatened as more land is being irrigated. This is a concern for me. I don’t want to have shortages on the farms that I operate, especially during short water years. I disagree with the ability the district has claimed which moves water wherever it is needed throughout the district; this negates Unit A’s senior water rights. Historically, the surface and extra storage water was designated to stay on the lands of Unit A. Once again, please review how the Bureau of Reclamation designed and developed this irrigation district. I fear as this project moves forward, it will lead to other bonds and increased charges to move the designated surface and stored water of the original Unit A land to elsewhere throughout the district. There needs to be an acknowledgement and a written guarantee of how much water is allocated to the land owners of the original Unit A holding the senior water rights in the A&B project.

In conclusion, I hope I have explained myself appropriately and clearly. I do not support this project. I encourage the Bureau of Reclamation to actively investigate and determine what the rights are of the Unit A landowners, the rights of the A&B irrigation district, and what the A&B Board has control over. There is an inequity of voting power on the board: three individuals from Unit B to one individual from Unit A makes the decision process biased. Unit A’s historic and senior water rights are being largely ignored at best, and claimed by Unit B at worst.

I appreciate the opportunity afforded me to express my very real and legitimate concerns over the water allocation in the A&B Irrigation District. If you have any questions, please feel free to contact me at the information above.

Sincerely,

Ted Tateoka
Dear Sir or Madam:

We are writing to inform you of our strong objections to have the currently proposed water pumping plant located across the river of Star Drive, 400 West/90 North (Location Number 2 as indicated on the map). Main reasons for concern is the noise pollution from the pumping station as well as the effect on the land values of the neighbourhood.

When considering the costs of this plant, one should not just look at the financial costs but the costs to the community as a whole in the future. Placing the plant near Star Drive will inevitably cause more damage to the local community than the cost of moving the plant to a location further down the river where no local residents will be affected.

By reducing the value of the properties in the surrounding neighbourhood the city of Burley will consequently collect less property tax and potentially drive some of the residents out of the town. My family has specifically invested in the area due to its natural beauty; others are likely to do the same if this is preserved.

One compromise I would suggest is to ensure that the plant that’s build takes into account the needs of the local people. Noise and visual impact can be addressed by enclosing the pumping station in a soundproof building made to fit in with the local environment. Residential developments have to be set back from the river; the same should apply to the water plant. If there is no ambient noise from the station and the building fits it with the local architecture (and set back from the riverfront) I think it will be a good compromise for all involved parties. Recently we made an addition to our house and had to notify all neighbors within a 1mile radius on both sides of the river. This process is in place to ensure that our plans did not negatively impact anyone else in the community. The same rules have to apply for this commercial development. I want the local farming community to prosper and be successful but not at the expense of others.

The current proposal would have a severe negative impact on the local community. It will be more beneficial to the local area as a whole to have the new pumping station located further down the river and away from residents. This will have a much better social impact to the community over the years.

Yours sincerely,

Vladislav and Shana Vassiliev
Residents/owners of:
434 West 90 North
Burley, ID
83318