RECLAMATION

Managing Water in the West

Boise River Basin Feasibility Study
Scoping Summary Report
Environmental Impact Statement – Scoping Period
Boise Project, Idaho

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

October 2019

U.S. DEPARTMENT OF THE INTERIOR

PROTECTING AMERICA'S GREAT OUTDOORS AND POWERING OUR FUTURE

The U.S. Department of the Interior protects America's natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future.

MISSION OF THE BUREAU OF RECLAMATION

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

Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
CSR	Certified Stenotype Reporter
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
NOI	Notice of Intent
Reclamation	Bureau of Reclamation

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1 Introduction

1.1 Purpose of a Scoping Report

The purpose of this Scoping Summary Report is to document the scoping process for the Boise River Basin Feasibility Study and to identify and categorize the findings. The findings include an overview of identified issues that will be addressed in an environmental impact statement (EIS).

Scoping is a collaborative public involvement process implemented early in the National Environmental Policy Act process. The purpose of the scoping process is to identify the issues to be addressed and to identify potentially significant issues related to the proposed action.

1.2 Project Overview

The Bureau of Reclamation (Reclamation) is exploring the feasibility of increased water storage opportunities behind Anderson Ranch Dam (Figure 1.1). Under the Omnibus Public Land Management Act of 2009, Public Law 111-11, Section 9001, Congress authorized Reclamation to conduct feasibility studies on projects that address water shortages within the Boise River Basin system. Multiple areas within the system were analyzed for further study within Reclamation's 2006 Boise/Payette Water Storage Assessment Report (Bureau of Reclamation, 2006). The result of prior studies is Reclamation's proposed action of raising Anderson Dam six feet, raising the top of the pool from the current elevation of 4,196 feet to 4,202 feet, and allowing the ability to capture and store approximately 29,000 additional acre-feet of water. This new space would allow Reclamation to capture additional water when available during wet years for supplemental supply and to hold over for use during dry years. Potential space holders include existing Reclamation contractors and the Idaho Water Resource Board, which could, in turn, contract water to existing Water District 63 water users and/or may offer water through the Idaho water supply bank's Water District 63 rental pool.

The proposed action includes the following dam structure modifications.

- Raising the earthen embankment dam crest by six feet
- Demolishing the existing spillway crest structure and bridge
- Removing, rehabilitating, and re-installing the existing radial gates
- Constructing a new spillway crest structure and bridge
- Constructing a new two-lane road across the dam

The existing road across the dam would be closed during construction. An alternative route for safe public passage has been identified.

Scoping is a public involvement process used to identify issues related to a proposed action and to determine the scope of issues to be addressed. Comments received in response to this action will be used to assist in the following.

1. Identify potential environmental issues related to the proposed action.
2. Identify those elements of the environment that could be affected by the proposed action.
3. Formulate new or modifying current alternatives for the proposed action.

Proposed action and alternative(s) analyses are ongoing and will be documented in a draft EIS scheduled to be published for public comment in February 2020. The final EIS is scheduled to be published in July 2020.

1.3 Description of the Scoping Process

As part of the scoping process for the Boise River Basin Feasibility Study, Reclamation posted a Notice of Intent (NOI) in the Federal Register and held three open houses to identify public concerns. The open houses were held in and around the study area in Pine, Boise, and Mountain Home, Idaho. These meetings were advertised in a press release, through the project mailing list, on the project website, and by flyers. Notification materials are described in the sections below and included in **Appendix A**.

Notice of Intent

On August 9, 2019, Reclamation published an NOI to Prepare an Environmental Impact Statement in the Federal Register. The NOI identified the dates for the open houses and solicited comments on the scope of the draft EIS.

Project Website

Reclamation has developed a website to provide updated information on the project: www.usbr.gov/pn/studies/boisefeasibility/index.html. It provides background information, a description of the project, and information on public involvement. The website also allowed visitors to submit a comment on the scope of the draft EIS.

Press Release

On August 9, 2019, Reclamation distributed a press release titled "Reclamation seeks public comment on the potential changes to water storage in the Boise River system" to media outlets in and around the project area. Figure 1 shows the proposed project area. The press release provided the dates and venues for the scoping open houses, briefly described the project, and explained the various methods for submitting comments. This press release was picked up by a local public radio station, which advertised the meeting.

Flyers

Reclamation posted flyers in and near the communities of Pine and Prairie, ID.

Mailing List

On August 9, 2019, Reclamation sent a letter to interested parties to announce the open houses and request for public comment regarding the feasibility of increasing water storage opportunities behind Anderson Ranch Dam.

Open Houses

The three open houses were held at the following dates, times and locations:

1. August 27, 2019, 1:00 p.m. to 3:00 p.m., Boise River Senior Center, 350 North Pine Featherville Road, Pine, Idaho 83647
2. August 28, 2019, 6:00 p.m. to 8:00 p.m., Wyndham Garden Boise Airport Hotel, 3300 South Vista Avenue, Boise, Idaho 83705

3. August 29, 2019, 6:00 p.m. to 8:00 p.m., American Legion, 515 East 2nd South Street, Mountain Home, Idaho 83647

Notification materials requesting public comment are in Appendix A and all comments received as of the date of this scoping summary report are included in Appendix B. Appendix C includes a list of comments organized by resource area.

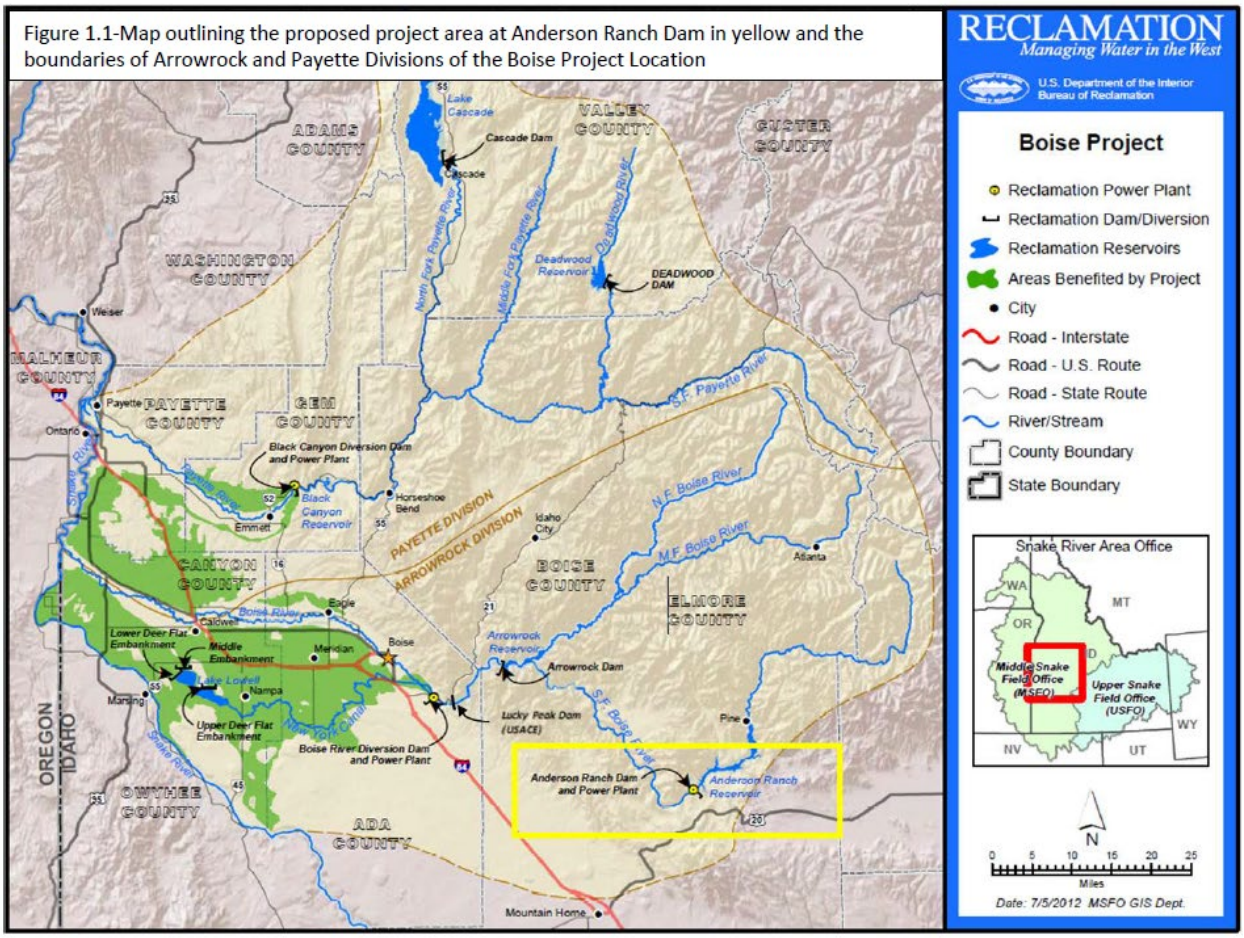


Figure 1. Proposed project area

2 Scoping Results

2.1 Method of Comment Collection and Analysis

Reclamation collected comments about the project through multiple methods.

- Written comments were collected at the three public open houses.
- A Certified Stenotype Reporter (CSR) was present at each of the three public open houses to transcribe verbal comments.
- Comments were mailed or hand delivered to Reclamation offices or team leadership Attn: Mr. Jim Taylor, Environmental/Cultural Resource Manager, Bureau of Reclamation Snake River Area Office, 230 Collins Road, Boise, ID 83702.
- Comments were submitted via email to bor-sra-boifeasibility@usbr.gov. Comments emailed to individual Reclamation staff members were also included in this evaluation.
- Comments were also submitted online on the project website www.usbr.gov/pn/studies/boisefeasibility/index.html.

Comments were accepted through September 9, 2019 although additional late comments were included for review. All comments were reviewed to identify specific issues or concerns. Each comment was categorized based on the primary and secondary resource areas with which the comment was concerned. During the analysis of potential impacts considered in the draft EIS, Reclamation will consider the issues brought forward in these comments.

2.2 Summary of the Public Comments Received

In total, 51 comments were recieved from the public and federal, state, and local organizations.

Comments Received at the Open Houses

Based on the number of attendees on the sign-in sheets, it is estimated that approximately 70 people attended the Pine open house. Three written comments were submitted at the Pine open house, and five verbal comments were transcribed by the CSR.

Approximatley 55 people attended the Boise open house. Two written comments were submitted at the Boise open house, and four verbal comments were transcribed by the CSR.

It is estimated that approximatley 50 people attended the Mountain Home open house. Three written comments were submitted at the Mountain Home open house, and two verbal comments were transcribed by the CSR.

Comments Submitted Outside of the Open Houses

Thirty-two sets of comments were submitted outside of the open houses via the project website, email, U.S. mail, or hand delivery. Twenty comments were submitted by private citizens. Twelve federal, state, or local organizations provided comments through email, the website, or U.S. mail. Most organizations attached a separate document to the email that contained several pages of comments. Organizations that submitted comments electronically include the following.

- Elmore County Board of Commissioners
- Elmore County Farm Bureau
- Idaho Conservation League
- Idaho Department of Environmental Quality
- Idaho Department of Fish and Game
- Idaho Farm Burau Federation
- Idaho Governor's Office of Species Conservation
- Idaho Water Users Association
- Mountain Home Chamber of Commerce
- Prairie, Idaho, Ranchers
- Trout Unlimited
- U.S. Environmental Protection Agency (EPA)

2.3 Summary of Comments and Issues

Comments were reviewed and were categorized by resource area to be addressed in the EIS. Comments were assigned a primary and secondary resource area. It was not uncommon for a single email or letter to have multiple comments included. In this case, each submission was broken down into individual comments, which were then categorized by resource area. Each comment was given a unique comment ID number (1, 2, 3, etc.). In cases where several comments were included in the same submission, an additional decimal was added to the comment number to relate the comments in that submission (e.g., if submission number 25 had 4 comments, those comments would be numbered 25.1, 25.2, 25.3, 25.4). In total, 51 submissions were received and included more than 100 individual comments.

Figure 2 illustrates the breakdown of comments by their primary resource concern.

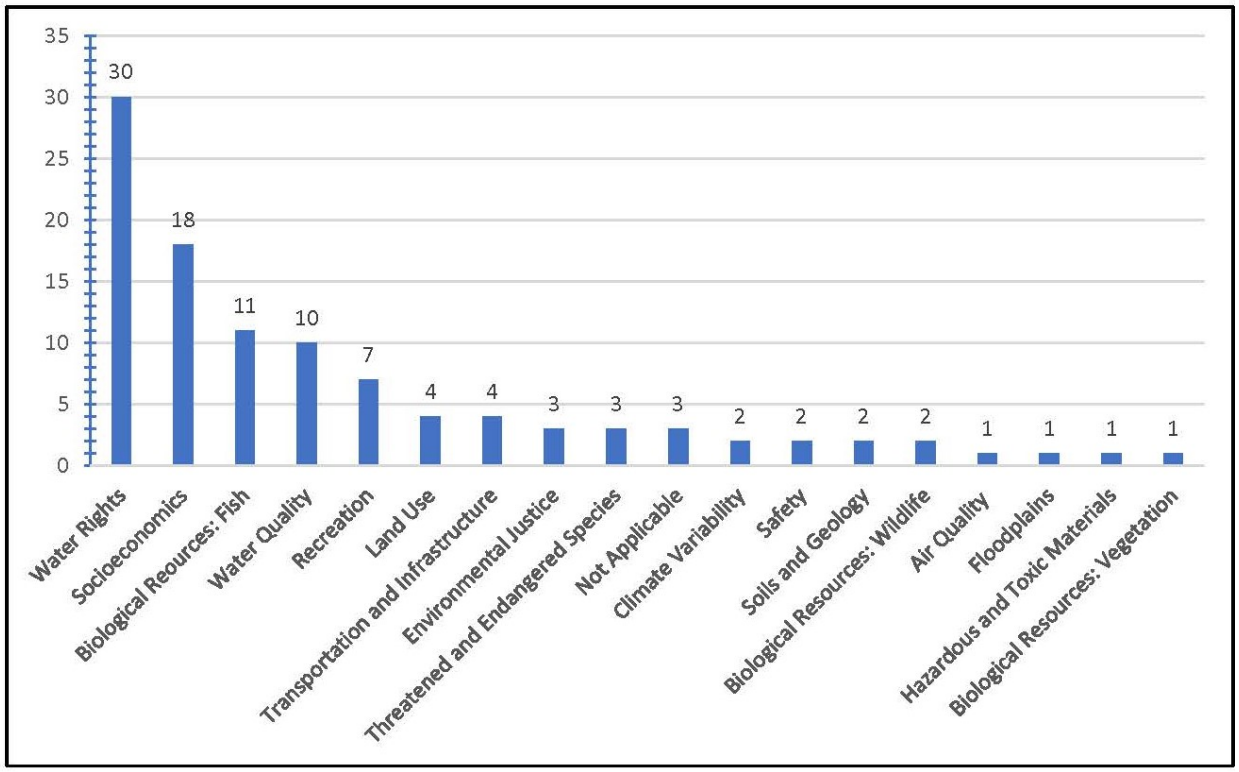


Figure 2. Primary resource concerns

A secondary resource concern was identified for 88 comments. Figure 3 illustrates the breakdown of comments by their secondary resource concern.

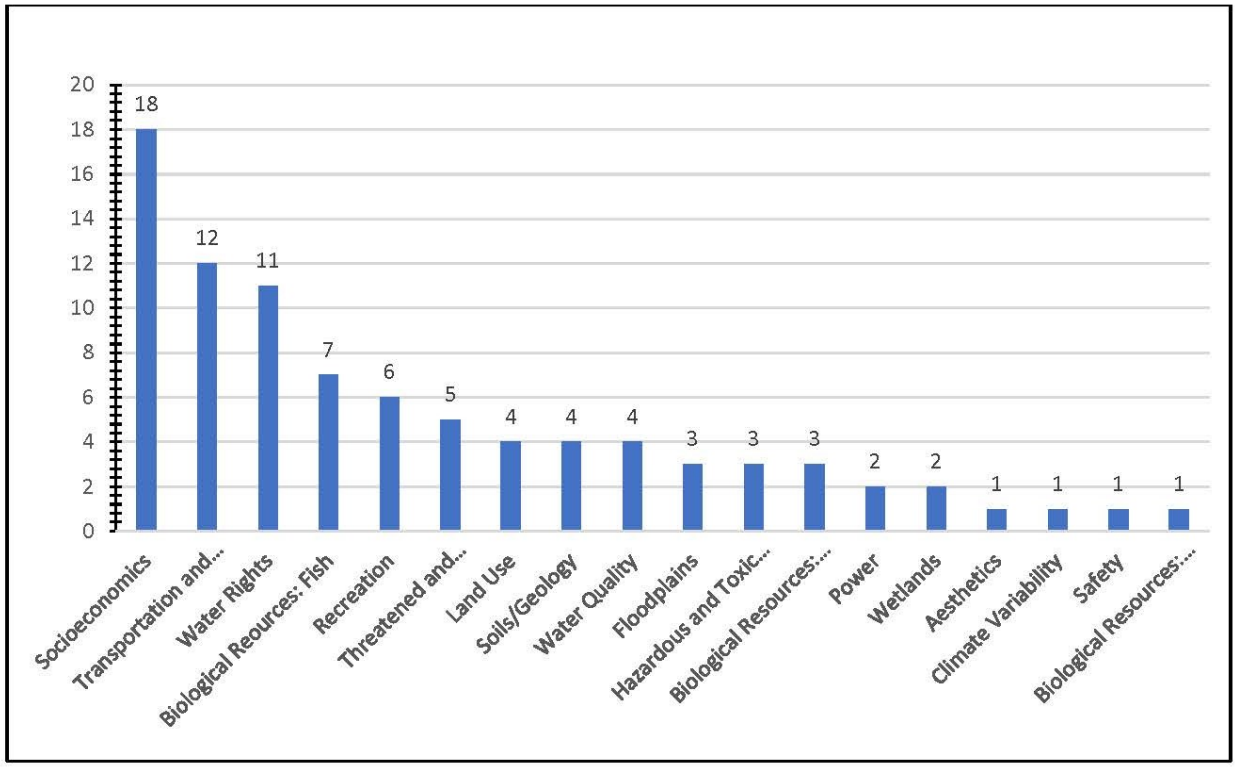


Figure 3. Secondary resource concerns

This section identifies the major comments and issues provided to Reclamation as part of the scoping process. Comments received are included in **Appendix B**. **Appendix C** includes a breakdown of comments by resource area.

Water Rights

Water rights was the most common primary resource concern. Comments about water rights were typically concerned with what groups, organizations, agencies, or citizens would have access to the additional water storage at Anderson Ranch Dam, and how that would be decided. Specific water rights concerns are listed below.

- Supply water to Elmore County/Mountain Home area aquifer for recharge.
- Water rights not being available outside of the Boise River system.
- Are Elmore County water project and the Cat Creek Energy storage project going to be addressed?
- Provide background about other feasibility studies that are occurring in the Boise River Basin watershed related to water storage and discuss the relationship of this proposal to other efforts.
- Water originating in Elmore County watersheds but transferred out of the county.
- How water will be allocated?
- What is the priority over existing vs. proposed water rights in relation to the 29,000 acre-feet?
- Does proposed Cat Creek Energy project have a role in meeting demand for water in the Treasure Valley as proposed in its water right application 63-34652?

- Increase in dam height with low refill probabilities causes a false conception of increased water to satisfy Treasure Valley growth.
- Providing water to Mountain Home Air Force Base and Elmore County is in the best interest of national defense.
- If the project purpose is to augment growth and development, there is a need for federal legislation changing the authorized federal project use.
- Describe the legal environment which will constrain an additional 29,000 acre-feet of storage through a system of water rights and compliance with federal law.
- What is the federal legislative authority to reserve some portion of new storage for undefined federal needs? And what water service contract does Reclamation anticipate using to codify this?
- Is there future use allotment to Elmore County for any increase at Lucky Peak or Arrowrock reservoirs?
- More efficient use of existing water rights could "store" water in the system.
- Where is new agricultural irrigation water needed in the Treasure Valley when population is shifting to urban uses?
- Is the water supply needed to recharge the Treasure Valley aquifer?
- What is the need for raising the dam?

Socioeconomics

Similar to water rights, comments on socioeconomics were concerned with which groups, or citizens, would have access to the additional storage, and how that would be decided. However, these comments also had an added component concerned with how access to the additional water storage, or lack of access, would help, or hinder, economic development.

- Boise Metropolitan Area growth affecting Mountain Home area growth as a bedroom community without plan for increased water supply.
- Perceived negative effects of proposed action upon Elmore County citizens and businesses.
- Define what the water supply needs of the Treasure Valley are.
- Address changing needs and demands of the local communities.
- Address agricultural to urban water use shift.
- Is part of the need for new water supply in the Mountain Home area, and for what purposes and where is water needed there?
- Is there payment for available water to the federal government?
- Identify the potential users of future stored water.
- Hoping for different naming of the project to account for Elmore County.
- Will any agriculture use be charged a subsidized rate per acre-foot of water use?
- Does the proposed action benefit the taxpayer?
- Consider any loss of, or impact to, the full enjoyment of private property with this proposed project.
- Have any monetary losses been calculated for restricted recreation opportunities on Anderson Ranch Reservoir, downstream on the South Fork, and communities of Mountain Home, Fairfield, Pine, and Featherville?

Biological Resources: Fish

Fish habitat was a concern both for private citizens who participate in, or have business related to, the recreational fishing industry in the area, as well as organizations such as Trout Unlimited, which submitted 17 pages of comments largely relating to this resource area. The Idaho Conservation League, Idaho Governor's Office of Species Conservation, EPA, and the Idaho Department of Fish and Game also had comments related to fish as a biological resource. Specific concerns related to fish as a biological resource are listed below.

- Address combined potential impacts to reduction of springtime flows on South Fork Boise River due to proposed Elmore County permit and Cat Creek Summit projects.
- Disclose practices that have been successful at improving flows as well as assess and disclose additional activities that promote fish habitat.
- Discuss Reclamation flow targets for maintaining fisheries.
- Evaluate the potential to allocate storage for the purpose of maintaining base flows during winter to benefit fisheries.
- Could other water sources be found to meet flow obligations so that the need for additional Boise Basin storage would be obviated?
- BOR's analysis should investigate how holding back the additional 29,000 acre-feet will impact agreed-upon flows and practices for salmon flow augmentation in the Columbia-Snake River System.
- How will the extra release affect fisheries and fishing in the S. Fork?
- What mitigation could adequately address any negative impacts not just to amounts of available water but also to river and fishery health?
- Effects of increased winter flows on the Boise River.
- Address flow rates vs. downstream sediment transportation.
- Evaluate the potential to allocate storage for the purpose of maintaining periodic high-flow events to sustain spawning and riparian habitat and moderating extreme high-flow events.
- Examine and disclose practices that have been successful at improving flows as well as assess and disclose additional activities that promote fish habitat.
- Evaluate anticipated temporal patterns of reservoir volume and, specifically, the relationship to fisheries management.
- Analyze potential changes to the habitat space available for overwintering, connectivity during the spawning migration, changes to water quality including temperature, changes to their exposure to anglers, and predators should be considered.
- Analyze modeling of reservoir temperature and oxygen profiles and releases for alternatives.
- Encourage Reclamation to utilize the watershed approach in a basin-wide assessment to identify opportunities for restoration of fish habitat and natural function processes of the river.
- Evaluate the potential to allocate storage for the purpose of maintaining a minimum pool volume to benefit fisheries.
- Analyze the effects of increased storage on high-discharge components of the hydrograph below Anderson Ranch Reservoir.

- Analysis of the effects of this proposed action should consider the Terms and Conditions from Section D of the 2005 U.S. Fish and Wildlife Service Biological Opinion to minimize the effect of the operation of Anderson Ranch Dam on listed bull trout.
- Analyze potential impacts to bull trout habitat.
- How could potential loss of riparian habitat affect fish populations?
- The fisheries that would be affected by the Anderson Ranch Dam raise project, both in the expanded reservoir and downstream, include the 25 identified fish species.
- How will the 30,000 acre-feet, if unused in any given season, affect fish species?
- Impact fish movement and, hence, population connectivity within the larger interconnected watershed.
- What current littoral aquatic species inhabit the existing littoral area?
- Development of a fisheries restoration fund.

Transportation and Infrastructure

Transportation and infrastructure concerns are listed below.

- What steps will be taken for replacement of the Pine Air Strip?
- What roads and bridges are affected, and will they be replaced?
- What are the alternate access routes?
- Will new wells, pipelines, water treatment plants, and water tanks be needed to distribute the increased ground or surface domestic, commercial, municipal, and industrial water supplies?
- Ranchers will not be able to complete required trips across dam during, affectively eliminating operations.
- Will the Cow Creek dirt road be improved and made safer to accommodate increased traffic during construction?
- Current road is near the maximum grade just to access the dam area.
- Are new river diversions, canals, and laterals going to be constructed to deliver new irrigation storage?
- What canals, pipelines, headgates, pits, and injection wells would be needed to deliver new surface water supplies for recharge?
- The Anderson Dam project could compensate the affected ranchers to purchase hay grown in the valley.
- Have any additional expenditures been calculated for regarding transportation infrastructure replacement?

Recreation

Recreation was often linked to socioeconomics, as commenters were concerned with how the increased storage might prohibit access to recreation areas, and negatively impact businesses that cater to recreational activities.

- Restriction of recreational access, even short term, will severely impact Pine economy.
- Will there be additional camping sites to replace those lost along the reservoir when the water level increases?

- What will be the effect on the existing recreational facilities?
- Replace all affected recreational facilities.
- What provisions are there to mitigate the loss of recreational facilities and amenities?
- What are the plans to improve the access to camping and boating around the reservoir?
- Describe the short- and long-term effects of actions and alternatives on public access and opportunity throughout the project area.
- Have any additional expenditures been calculated for regarding recreational facility replacement?
- How will the releases affect recreation floaters on the South Fork and in Boise?
- Doesn't the extra 30,000 acre-feet result in unreplaceable location losses for recreation during those months of new full pool elevation?

Wetlands

- Describe all waters of the U.S., including wetlands that could be affected by the project alternatives.
- Mitigation plans, including compensatory mitigation are required under the Clean Water Act [CWA], to reduce impacts to surface waters of the U.S.
- Will releases affect the riparian areas now accustomed to the operation parameters of Reclamation?
- Loss of riparian habitat.
- What is the littoral area displacement acreage?
- Does any physical removal of man-made or natural elements need to occur within littoral area?
- How long will it take before the littoral area stabilizes in sediment runoff?
- How does the displacement of the littoral area affect additional levels of sedimentation?
- What littoral flora inhabit the existing littoral area?

Water Quality

- Dominant use of agriculture the dominant cause of non-point water pollution in the Boise Watershed.
- What measures will be used to prevent contamination and sedimentation in South Fork of Boise River from happening due to the dam raise?
- How will the 29,000 acre-feet held upstream impact and/or interact with the existing myriad of Idaho Pollutant Discharge Elimination System permits on the same system?
- Include water bodies potentially affected by the project that are on the most recent EPA-approved 303(d) list.
- Address how the proposed project will coordinate with ongoing 303(d) protection efforts, and any mitigation measures implemented to avoid further degradation of impaired waters.
- How will the project would meet the antidegradation provisions of the CWA?
- EIS would need to document the project's consistency with applicable storm water permitting requirements and discuss specific mitigation measures that may be necessary or beneficial in reducing adverse impacts to water quality and aquatic resources due to the discharges.

- Address potential contamination of drinking water sources that may result from the project.
- How does the addition of 30,000 acre-feet affect sediment washing from Anderson Ranch Reservoir downstream?

Alternatives and Construction

- Better water conservation would delay need for a dam raise.
- Duly consider conservation projects.
- What is the construction timeline?
- Will project have its own cement plant & overhead crane?
- What impact will the Forest Service have?
- Include an alternative for domestic, industrial, commercial, ecological, fisheries, flood control, and recreation with no water use for agriculture.
- Project should consider including a pump and pipeline from Anderson Ranch Reservoir into the Elmore County aquifer recharge area.
- Include at least two additional alternatives: 1) one alternative that jointly evaluates a combined raise coupled with increased water use efficiencies, as opposed to only evaluating the raise and efficiencies separately, and 2) an alternative that evaluates managed aquifer recharge or other downstream off-channel storage as a storage option.
- Evaluation of alternatives should include alternatives to structural measures such as water use efficiency

Operations

- How will 30,000 acre-feet of release affect Reclamation's current water management operation releases?
- What is the timing of the new full pool level elevation annually?
- What is the duration of the new full pool elevation annually?
- What weekends and holidays will be affected by the new full pool elevation?
- Focus analysis on flow releases from Anderson Ranch Dam to the South Fork of the Boise River.
- Will releases to keep Anderson Ranch Reservoir from overflowing be more dramatic and intense with the additional 30,000 acre-feet in high water years?

Biological Resources: Wildlife

- Describe the overall flora and fauna in the area and impacts of the project on biota.
- Analyze potential direct and indirect effects on big game winter range and big game movement corridors related to increase/decrease in human activity during feasibility study and project activities.
- Analyze the potential for big game mortality associated with attempted reservoir crossings under actions and alternatives.
- How will the 30,000 acre-feet, if unused in any given season, affect icing and ungulate movement?
- Restore riparian habitat elsewhere commensurate with the amount habitat flooded around the raised reservoir.
- What land animals take advantage of the existing littoral area?

Land Use

- Describe future land use changes in Treasure Valley.
- Will any private property be affected?
- Agriculture dominant use of water but urban growth cited as a project purpose.
- Is the Forest Service involved to address the already limited camping availability and impacts on private property owners?

Biological Resources: Vegetation

- Describe the overall flora and fauna in the area and impacts of the project on biota.
- Provide details on the ecological interactions between species and habitats and the effects of the various alternatives on populations, habitats and ecological interactions.
- Describe downstream flow patterns and bankfull vegetation.
- Black Cottonwood habitat degradation.

Floodplains

- Why is flood risk reduction analyzed as a secondary benefit when it's the primary authorized project purpose?
- Could the constricted downstream canyon cause flood waters to back up and flow through the saddle in the Danskin Mountains at Cow Creek where it would then flow south toward Mountain Home?
- Actions are recommended that restore natural processes, specifically recommend consideration of an EIS alternative which maximizes opportunities to restore natural hydrologic, geomorphic, biological processes including improved floodplain connectivity, surface water and groundwater interactions, and riparian vegetation and wetland development.

Threatened and Endangered Species

- Disclose the impacts of the various alternatives to endangered, threatened or candidate species listed under the Endangered Species Act.
- Analyze potential impacts to bull trout habitat.
- Discuss the terms and conditions of the Biological Opinion for bull trout.
- Sections of the land surrounding Anderson Ranch Reservoir is designated as a General Habitat Management Area and the adjacent southern plateau above the reservoir is designated as an Important Habitat Management Area.

Cumulative Effects

- Identify, analyze, and include in the cumulative affects section potential for Arrowrock and Lucky Peak dams to be raised [reference FAQ No. 11].
- Include cumulative effects from this and other projects on the hydrologic conditions of the analysis area and vicinity, including reasonably foreseeable direct, indirect, and cumulative impacts to groundwater and surface water resources.
- Gather all available information regarding the future impacts of climate change on the Boise River, including impacts on water quantity, quality, and biologic resources. The

cumulative effects of these climate change impacts plus any impacts from the proposed alternatives likely will be significantly greater than the impacts of the alternatives alone.

Safety

- Does the additional water storage cause any increased risks to downstream developments should Anderson Ranch dam fail as result of a catastrophic event?
- With the rise of slack water at the Pine end of the reservoir there will surely be a major increase in the breeding area for mosquitoes potentially carrying dangerous diseases. How will this be addressed and mitigated?

Climate Variability

- Include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed program and the program area.
- Consider the impact of climate change on the utility and viability of the alternatives themselves.

Environmental Justice

- Address negative effects to Elmore County with benefits attributed to Ada and Canyon counties.
- Address the potential for disproportionate adverse impacts to low income or minority populations.

Soils and Geology

- Who is going to remove timber debris that starts to fall in the water due to soil erosion?
- How will the raising of the dam affect private and recreational mine claims?
- The dam raising presents a possibility increased sedimentation below the dam. What measures will be used to prevent this from happening?

Historical Resources

- Identify historic resources and ensure that tribal treaty rights and privileges are addressed appropriately.
- If the proposed project will have impacts on tribes, the development of the EIS should be conducted in consultation with all affected tribal governments, consistent with Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments).

Hazardous and Toxic Materials

- Idaho Department of Environmental Quality regulations should be reviewed to inform the EIS.
- What measures will be put in place to prevent oils, diesel, gas, petroleum products, etc. from getting into the river and reservoir?

Air Quality

- Review IDAPA 58.01.01 for all rules on air quality, especially those regarding fugitive dust (58. 01. 01. 651), trade waste burning (58. 01. 01. 600-617), and odor control plans (58.01.01. 776).

Power

- Project should consider including a pump and pipeline from Reservoir into the Elmore County aquifer recharge area. Pipeline should include electrical generation facilities.

Other

- Has this been approved by Brad Little?

3 References

Bureau of Reclamation, 2006. *Final Boise/Payette Water Storage Assessment Report*. Prepared for U.S. Department of the Interior, Bureau of Reclamation, Pacific Northwest Region. July.

SPF Water Engineering, LLC, 2017. *Elmore County Water Supply Alternatives*. Prepared for Elmore County Board of County Commissioners, Boise, Idaho 83717. February.

Appendix A

This appendix includes the notification materials listed below.

- Notice of Intent published in Federal Register
- Letter sent to mailing list
- Press release
- Flyer

Hamilton County

Mill & Dunn Historic District, 100–139 Williams St., 119 Lock St., 200–328 Dunn St., 100–200 Mill St., and 209–327 Wyoming Ave., Cincinnati, SG100004315

Montgomery County

Downtown Dayton Historic District, Roughly bounded by I 75, St. Clair St., west face of Patterson Blvd., Monument Ave., and Sixth St./Norfolk Southern Railroad line, Dayton, SG100004316

OREGON

Multnomah County

Portland Police Block (Boundary Decrease), 209 SW Oak St., Portland, BC100004313

WASHINGTON

King County

Matzen, George and Irene, House, 320 W. Kinnear Place, Seattle, SG100004329

Baring Bridge, NE Index Creek Rd. off WA 2 over S. Fork of Skykomish River, Baring, SG100004331

Spokane County

McMillen—Dyar House, 526 E. 12th Ave., Spokane, SG100004330

Whitman County

Northern Pacific Railway Depot—Pullman, 330 N. Grand Ave., Pullman, SG100004328

A request for removal has been made for the following resource:

OREGON

Multnomah County

Jefferson Substation, 37 SW Jefferson St., Portland, OT80003368

Nominations submitted by Federal Preservation Officers:

The State Historic Preservation Officer reviewed the following nominations and responded to the Federal Preservation Officer within 45 days of receipt of the nominations and supports listing the properties in the National Register of Historic Places.

ARIZONA

Coconino County

Cliffs Ranger Station, 2 mi. E. of Flagstaff in Walnut Canyon National Monument, Flagstaff vicinity, BC100004317

Cliffs Ranger Station, 2 mi. E. of Flagstaff in Walnut Canyon National Monument, Flagstaff vicinity, AD75000220

OHIO

Medina County

United States Post Office, 143 W. Liberty St., Medina, SG100004307

Authority: Section 60.13 of 36 CFR part 60.

Dated: July 23, 2019.

Lisa Deline,

Acting Chief, National Register of Historic Places/National Historic Landmarks Program.

[FR Doc. 2019–17066 Filed 8–8–19; 8:45 am]

BILLING CODE 4312–52–P

DEPARTMENT OF THE INTERIOR

Bureau of Reclamation

[RR01313000, 18XR0680A1, RX.00036916.5002000]

Notice of Intent To Prepare an Environmental Impact Statement and Public Scoping Open Houses for the Boise River Basin Feasibility Study, Elmore County, Idaho

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice of intent; request for comments.

SUMMARY: The Bureau of Reclamation (Reclamation) intends to prepare an Environmental Impact Statement (EIS) on the Boise River Basin Feasibility Study. Reclamation is requesting public and agency comment to identify significant issues or other alternatives to be addressed in the EIS.

DATES: Submit written comments on the scope of the EIS on or before September 9, 2019.

Three scoping open houses will be held on the following dates and times:

- August 27, 2019, 1:00 p.m. to 3:00 p.m., Pine, ID.
- August 28, 2019, 6:00 p.m. to 8:00 p.m., Boise, ID.
- August 29, 2019, 6:00 p.m. to 8:00 p.m., Mountain Home, ID.

ADDRESSES: Provide written scoping comments, requests to be added to the mailing list, or requests for sign language interpretation for the hearing impaired or other special assistance needs to Ms. Megan Sloan, Project Manager, Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702; or email *BOR-SRA-BoiFeasibility@usbr.gov.*

The scoping meetings and open houses will be located at:

- Pine—Boise River Senior Center, 350 North Pine Featherville Road, Pine, Idaho 83647;
- Boise—Wyndham Garden Boise Airport Hotel, 3300 South Vista Avenue, Boise, Idaho 83705; and
- Mountain Home—American Legion, 515 East 2nd South Street, Mountain Home, Idaho 83647.

FOR FURTHER INFORMATION CONTACT: Ms. Megan Sloan, Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702; telephone (208) 383–2222; facsimile (208) 383–2210; email *BOR-SRA-BoiFeasibility@usbr.gov.* Persons who use a telecommunications device for the deaf may call the Federal Relay Service (FedRelay) at 1–800–877–8339 TTY/ASCII to contact the above individual during normal business hours or to leave a message or question after hours. You will receive a reply during normal business hours. Information on this project may also be found at: *https://www.usbr.gov/pn/studies/boisefeasibility/index.html.*

SUPPLEMENTARY INFORMATION: Reclamation is issuing this notice pursuant to the National Environmental Policy Act of 1969, as amended (NEPA), 42 U.S.C. 4321 *et seq.;* the Council on Environmental Quality's (CEQ) regulations for implementing NEPA, 43 CFR parts 1500 through 1508; and the Department of the Interior's NEPA regulations, 43 CFR part 46.

Background

Under the Omnibus Public Land Management Act of 2009 (Omnibus Act), Public Law (Pub. L.) 111–11, Section 9001, Congress authorized Reclamation to conduct feasibility studies on projects that address water shortages within the Boise River Basin System and that are considered appropriate for study by Reclamation's 2006 Boise/Payette Water Storage Assessment Report (2006 Assessment Report). The action proposed was identified in the 2006 Assessment Report as appropriate for study and is the subject of an ongoing feasibility study pursuant to the Omnibus Act and the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016. The WIIN Act authorizes Reclamation to enter into agreements with requesting states or subdivisions thereof to design, study, construct, or expand federally owned storage projects, and Congress has specified that this project be studied under WIIN Act authority. Public Law 114–322, Section 4007.

The Bureau of Reclamation, in partnership with the Idaho Water Resource Board (IWRB), proposes to raise Anderson Ranch Dam 6 feet, raising the top of the reservoir pool from the present elevation of 4,196 feet to 4,202 feet, allowing the ability to capture and store approximately 29,000 additional acre-feet of water. This new space would allow Reclamation to capture additional water when available during wet years for supplemental supply and to hold over for use during dry years. Potential spaceholders include existing Reclamation contractors and IWRB, which could in turn contract water to existing Water District 63 water users and/or may offer water through the Idaho water supply bank's Water District 63 rental pool.

Proposed dam structure modifications include:

- Raising the earthen embankment dam crest by 6 feet.

• Demolishing the existing spillway crest structure and bridge.

• Removing, rehabilitating, and re-installing the existing radial gates.

• Constructing a new spillway crest structure and bridge.

• Constructing a new two-lane road across the dam.

The existing road across the dam would be closed during construction. An alternative route has been identified that would provide safe public transport. There would likely be a reservoir restriction of 6–10 feet during spillway construction.

In addition to work on the dam, the project would include modification to structures around the reservoir such as culverts, bridges, and recreation sites.

Reclamation is not presently aware of any known or possible Indian Trust Assets or environmental justice issues associated with the proposed action but requests any information relative to this issue be submitted during the scoping period.

Reclamation intends to complete an EIS for this project pursuant to the National Environmental Policy Act to study the potential environmental effects of the proposal and a reasonable range of alternatives designed to respond to the purpose and need for the project, as well as a no-action alternative. The scoping process and public open houses identified in this notice are intended to inform the public about the project and to request public and agency comment to identify significant issues or alternatives to be addressed in the EIS.

Special Assistance for Public Scoping and Open House Meetings

If special assistance is required to participate in the public scoping and open house meetings, please contact Ms. Megan Sloan, Bureau of Reclamation, Snake River Area Office, 230 Collins Road, Boise, ID 83702; telephone (208) 383–2222; facsimile (208) 383–2210; email *BOR-SRA-BoiFeasibility@usbr.gov.* Persons who use a telecommunications device for the deaf may call the Federal Relay Service (FedRelay) at 1–800–877–8339 TTY/ASCII to contact the above individual during normal business hours or to leave a message or question after hours. You will receive a reply during normal business hours. All meeting facilities are physically accessible to people with disabilities.

Public Disclosure

Before including your 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 may 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.

Jennifer Carrington,

Acting Regional Director, Pacific Northwest Region.

[FR Doc. 2019–16744 Filed 8–8–19; 8:45 am]

BILLING CODE 4332–90–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–1156]

Certain LED Packages Containing PFS Phosphor and Products Containing Same; Commission Determination Not To Review an Initial Determination Granting a Motion To Terminate the Investigation Based on a Stipulated Consent Order and Settlement Agreement; Issuance of Consent Order; Termination of the Investigation

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review an initial determination (''ID'') (Order No. 6) issued by the presiding administrative law judge (''ALJ''), granting a joint motion to terminate the investigation based on a stipulated consent order and a settlement agreement. The Commission has also determined to issue a consent order and to terminate the investigation.

FOR FURTHER INFORMATION CONTACT: Robert Needham, Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436, telephone (202) 708–5468. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436, telephone (202) 205–2000. General information concerning the Commission may also be obtained by accessing its internet server *http://www.usitc.gov.* The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov.* Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205–1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on May 16, 2019, based on a complaint filed by Current Lighting Solutions, LLC of East Cleveland, Ohio; General Electric Co. of Boston, Massachusetts; and Consumer Lighting (U.S.), LLC d/b/a GE Lighting of East Cleveland, Ohio (together, ''Complainants''). 84 FR 22164. The complaint, as supplemented, alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain LED packages containing PFS phosphor and products containing same by reason of infringement of certain claims of U.S. Patent Nos. 7,497,973 and 9,680,067. *Id.* The Commission's notice of investigation named as respondents Cree, Inc. of Durham, North Carolina; Cree Hong Kong Ltd. of Hong Kong; and Cree Huizhou Solid State Lighting Co. Ltd. of Huizhou, China (together, ''Cree''). *Id.* at 22165. The Office of Unfair Import Investigations is not participating in this investigation. *Id.*

On June 20, 2019, Complainants and Cree filed a joint motion to terminate the investigation based on a stipulated consent order and a settlement agreement. No responses to the joint motion were received.

On July 10, 2019, pursuant to Commission Rules 210.21(b) and (c) (19 CFR 210.21(b) and (c)), the ALJ issued the subject ID, granting the motion and terminating the investigation. No petitions for review of the ID were received.

The Commission has determined not to review the subject ID, and has determined to issue a consent order. This investigation is hereby terminated.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and in part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.

Issued: August 6, 2019.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2019–17104 Filed 8–8–19; 8:45 am]

BILLING CODE 7020–02–P

United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:

AUG 0 9 2019

SRA-1200
2.1.4.13

Subject: Open House Announcement and Request for Public Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho

Dear Interested Party:

The Bureau of Reclamation is exploring the feasibility of increased water storage opportunities behind Anderson Ranch Dam (See Figure 1.1). Under the Omnibus Public Land Management Act of 2009, Public Law (Pub. L.) 111-11, Section 9001, Congress authorized Reclamation to conduct feasibility studies on projects that address water shortages within the Boise River Basin System that are considered appropriate for study according to Reclamation's 2006 Boise/Payette Water Storage Assessment Report. The proposed action includes a six-foot raise of Anderson Ranch Dam, raising the top of the pool from the present elevation of 4,196 feet to 4,202 feet, and allowing the ability to capture and store approximately 29,000 additional acre-feet of water. This new space would allow Reclamation to capture additional water when available during wet years for supplemental supply and to hold over for use during dry years. Potential space holders include existing Reclamation contractors and the Idaho Water Resource Board, which could in turn contract water to existing Water District 63 water users and/or may offer water through the Idaho water supply bank's Water District 63 rental pool.

The proposed action includes the following dam structure modifications:

- Raising the earthen embankment dam crest by 6 feet
- Demolishing the existing spillway crest structure and bridge
- Removing, rehabilitating, and re-installing the existing radial gates
- Constructing a new spillway crest structure and bridge
- Constructing a new two-lane road across the dam

The existing road across the dam would be closed during construction. An alternative route for safe public passage has been identified.

The purpose of this letter is to inform interested and affected public of the proposal and to solicit comments pursuant to the National Environmental Policy Act of 1969. Scoping is a public involvement process used to identify issues related to a proposed action and to determine the scope of issues to be addressed. Analysis of the proposal is ongoing and will be documented in an Environmental Impact Statement planned for completion in July of 2020.

Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action.

Further information and detail regarding the subject project are available at the project website which can be accessed at www.usbr.gov/pn/studies/boisefeasibility/index.html. Three scoping open houses for the general public will be held on the following dates, times, and locations:

- August 27, 2019, 1:00 p.m. to 3:00 p.m., Boise River Senior Center, 350 North Pine Featherville Road, Pine, Idaho 83647

- August 28, 2019, 6:00 p.m. to 8:00 p.m., Wyndham Garden Boise Airport Hotel, 3300 South Vista Avenue, Boise, Idaho 83705

- August 29, 2019, 6:00 p.m. to 8:00 p.m., American Legion, 515 East 2nd South Street, Mountain Home, Idaho 83647

Please help us identify important issues and concerns related to the proposed action by providing your written comments. Although your comments are always welcome, they can be best used if received by **September 9, 2019**. Written comments may be submitted electronically to bor-sra-boifeasibility@usbr.gov, or mailed or hand-delivered to:

Mr. Jim Taylor
Environmental/Cultural Resource Manager
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, ID 83702

Before including your address, phone number, email address, or other personal identifying information in your comment, be advised 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.

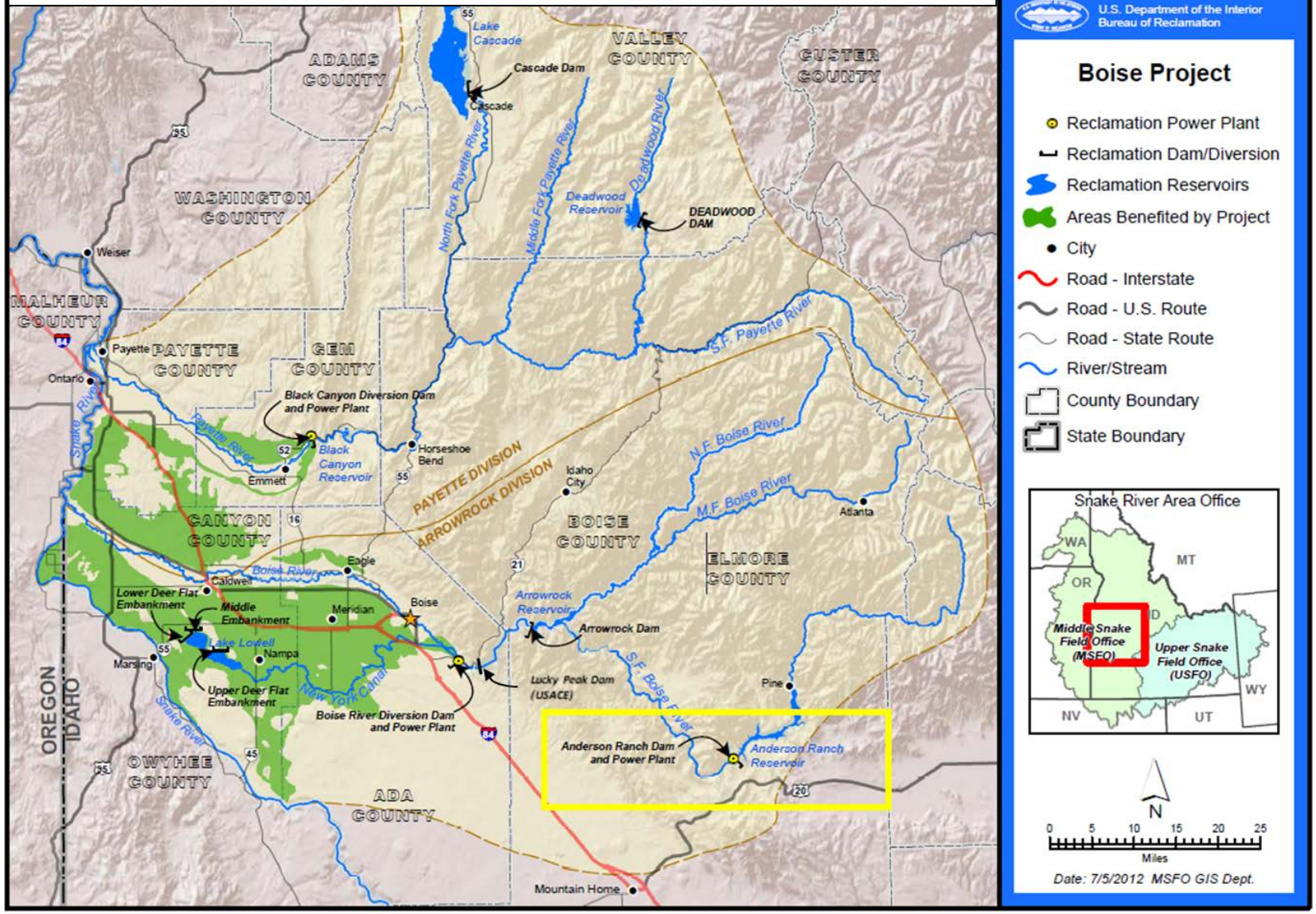
If you have additional questions about this proposal or its analysis, please contact Mr. Jim Taylor, Environmental/Cultural Resource Manager, at 208-383-2260.

Sincerely,

Roland K. Springer
Area Manager

Enclosure

Figure 1.1-Map outlining the proposed project area at Anderson Ranch Dam in yellow and the boundaries of Arrowrock and Payette Divisions of the Boise Project Location



Reclamation seeks public comment on potential changes to water storage in the Boise River system

Bureau of Reclamation

Media Contact: Annette Ross, (208) 378-5322, aross@usbr.gov
Steve Stuebner, sstuebner@cableone.net

For Release: August 09, 2019

BOISE, Idaho – Planning for future water needs in the Boise River basin is essential to ensure a secure water supply for future generations. The Bureau of Reclamation and the Idaho Water Resource Board have been studying options for increasing water storage capacity within the Boise River system via an ongoing feasibility study.

“Reclamation has placed a high priority on enhancing our infrastructure, and we’re delighted to partner with the state to meet critical water supply needs,” said Reclamation’s Snake River Area Manager Roland Springer.

In accordance with the National Environmental Policy Act, Reclamation is preparing an environmental impact statement on the Boise River Basin Feasibility Study. Reclamation will be gathering information from other agencies, interested parties and the public on a range of possible alternatives. Three public scoping open houses are planned for August to solicit input on potential increases to water storage in the Boise River basin. The public scoping open houses on the EIS are as follows:

- August 27, 1:00–3:00 p.m. – Boise River Senior Center, Pine, Idaho
- August 28, 6:00–8:00 p.m. – Wyndham Garden Inn, Boise, Idaho
- August 29, 6:00–8:00 p.m. – American Legion, Mountain Home, Idaho

Additional water storage capacity could help offset changes in precipitation patterns and help enable storage of more runoff in high water years, enhancing long-term water supply for critical irrigation, domestic, industrial and municipal needs while continuing to meet endangered species and power generation needs.

IWRB has committed to fund half the study costs as the non-federal partner. IWRB was created by the Idaho legislature and is responsible for the formulation and implementation of a state water plan, finance of water projects, and the operation of programs that support sustainable management of Idaho’s water resources.

Comments must be submitted by 5 p.m. on September 9, 2019, through the Boise River Basin Feasibility Study official website at https://www.usbr.gov/pn/studies/boisefeasibility/index.html, or by email to BOR-SRA-BoiFeasibility@usbr.gov. Accessibility requests should be made by August 16, 2019, to BOR-SRA-BoiFeasibility@usbr.gov.

# # #

Reclamation is the largest wholesale water supplier in the United States, and the nation's second largest producer of hydroelectric power. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits. Visit our website at https://www.usbr.gov and follow us on Twitter @USBR.

Relevant Link:

https://www.usbr.gov/pn/studies/boisefeasibility/index.html

You are cordially invited to attend the

Boise River Basin Feasibility Study Public Scoping Open Houses

The Bureau of Reclamation is preparing an environmental impact statement on the feasibility of increasing water storage opportunities behind Anderson Ranch Dam. This includes a proposed six-foot raise of Anderson Ranch Dam, allowing the ability to capture and store approximately 29,000 additional acre-feet of water. Information gathered from other agencies, interested parties and the public on a range of possible alternatives will aid in identifying potential environmental issues related to the proposed action and to identify possible alternatives.

Tuesday, August 27, 2019
1:00 – 3:00 p.m.
Boise River Senior Center
350 N. Pine Featherville Road
Pine, Idaho

Wednesday, August 28, 2019
6:00 – 8:00 p.m.
Wyndham Garden Inn
3300 South Vista Avenue
Boise, Idaho

Thursday, August 29, 2019
6:00 – 8:00 p.m.
American Legion
515 E. 2nd S. Street
Mountain Home, Idaho

Staff will be available for conversations throughout the evening. Requests for special assistance should be made by August 19, 2019, to BOR-SRA-BoiFeasibility@usbr.gov.

RECLAMATION
Managing Water in the West

IDAHO WATER RESOURCE BOARD

Appendix B

This appendix includes the comments received during the scoping process.

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Boise River Basin Feasibility Study

Environmental Impact Statement

Scoping Comment Form

Please give us your comments!

Comments must be received by September 9, 2019, to be considered in the Draft Environmental Impact Statement. Comments may be submitted in the following ways:

- Submit a comment form at the public scoping meetings
- Submit verbal comments (with the scribe/recorder) at the public scoping meetings
- Mail comments to ATTN: Jim Taylor, Bureau of Reclamation-Snake River Area Office, 230 Collins Road, Boise, ID 83702
- Submit via email to BOR-SRA-BoiFeasibility@usbr.gov
- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

** Required fields. Please print clearly.*

Name (First and Last)*	Debra Yates				
Organization	Hayhurst Bed + Breakfast, Pine, ID				
Title	Owner				
Address*	810 S Twin Pine Dr				
City*	Pine	***State****	ID	***Zip Code****	83647
E-mail	info@hayhurstbnb.com			***Phone****	208-653-2135

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☒ *If you prefer to be on the mailing list, please check this box* cell 208-731-4043

Comments on the Scope of the Environmental Impact Statement:

~~Please to the next station~~ Please keep in mind the campers, boaters, fishermen above the dam.

- Will there be additional camping sites to replace those lost along the reservoir when the water level increases?
- Businesses like mine depend upon access. What becomes of the roadways + bridges in/out of Pine. If they are to be replaced will there be alternate accesses?
- The airstrip will be impacted. What steps will be taken + where to replace?

Privacy Notice: *Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

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Boise River Basin Feasibility Study

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- Submit via email to BOR-SRA-BoiFeasibility@usbr.gov
- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

** Required fields. Please print clearly.*

Name (First and Last)*	Rick Franklin				
Organization	Rising Springs				
Title	Plant Manager				
Address*	1005 N. Hidden Pine Rd.				
City*	Pine	**State***	ID	**Zip Code***	83647
E-mail	rick@risingssprings.com			**Phone***	208-653-2419

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☒ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

What are your plans to improve the access to camping and boating around the Rez.

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- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

** Required fields. Please print clearly.*

Name (First and Last)*	John Rose Carey				
Organization	Retired				
Title	Property owners Pine				
Address*	5461 Willowcrest Place				
City*	Garden City	**State***	Idaho	**Zip Code***	83714
E-mail	RF-JC@Rocketmail.com			**Phone***	623-680-2338

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☒ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

Will any private property be affected?
When will project start + completed if OK'd?

Will Lime Creek Bridge have to be raised?
or any other bridge be affected?

Will work on this project continue during the harsh winter time frame?

Will project have its own cement plant + overhead crane?
What impact will the Forest Service have?

Privacy Notice: *Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

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- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

* ***Required fields.*** *Please print clearly.*

Name (First and Last)*	Albert Hofer				
Organization	Elmore County				
Title	commissioner				
Address*					
City*	Mtn Home	***State****	ID	***Zip Code****	83647
E-mail	AHofer@Elmorecounty.org			***Phone****	208 599-1620

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☒ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

I Love The project I Just wished the name was different The people of Elmore where All the water comes From. Maybe EL-AOA or something

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- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

** **Required fields.** Please print clearly.*

Name (First and Last)*	RICHARD PRANGE				
Organization	TROUT UNLIMITED				
Title	member				
Address*	2320 E. INDEPENDENCE DR.				
City*	BOISE	***State****	ID	***Zip Code****	83706
E-mail	RPRANGE@CABLEONE.NET			***Phone****	(208) 866-1396

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☑ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

The EIS must have good coverage of how Anderson Dam has been historically operated, depicting the river flows throughout the year. Then there needs to be the with project flow changes that respect, Dam concerned about the reduction in spring time flushing flows (flood control releases to Reclamation).

From a cumulative effects perspective, there is not only the 29,000 AF of new storage for consumptive uses there is also the recently approved 20,000 AF permit to Elmore Co. to pump water from Anderson Ranch Reservoir & the Cat Creek Reservoir pump storage project proposal. These projects combined have the potential to remove about 80,000 AF from spring flows

***Privacy Notice:** Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
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- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

* ***Required fields.*** *Please print clearly.*

Name (First and Last)*	John Hiler				
Organization	Hiler Bros Co.				
Title	Partner				
Address*	520 N. 10 E				
City*	Mtn Home	***State****	ID	***Zip Code****	83647
E-mail	jmhiler@msn.com			***Phone****	208 573-3581

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☐ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

Considering what is available at this meeting I again find it impossible to believe that the BOR will ever allow any of their dedicated water rights to be distributed anywhere but thru their system. They may allow the purchase of "surplus" water to an outside agency - but "water rights" no. The dedicated water right in the Anderson Dam pool for the City of Meridian domestic purposes - passed into other hands - in Boise Valley - when the City did not Act.

Privacy Notice: *Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

over

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study

Environmental Impact Statement

Scoping Comment Form

Please give us your comments!

Additional room on reverse side.

Comments on the Scope of the Environmental Impact Statement (continued):

I guess I just don't see how, considering current Idaho Water Law, how there would or will ever be any water consistently available to any other Agency from the Boise River System.

Historically, the Boise River Water Rights, other than the Garrett Ditch on the East Fork of Lime Creek & the Projected Canal to CAMAS & the Proposed Diversion Dam & Tunnel below the Proposed Anderson Dam Site, as per the Initial Supply Project, & a few instream Dry Diversions then & present, no water will ever go any where except as Allocated By BRBC. Reuse of surplus water - well, maybe - otherwise, the whole system will remain dedicated to the Ada-Canyon Metro & Ag Users

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RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
Scoping Comment Form

Please give us your comments!

Comments must be received by September 9, 2019, to be considered in the Draft Environmental Impact Statement. Comments may be submitted in the following ways:

- Submit a comment form at the public scoping meetings
- Submit verbal comments (with the scribe/recorder) at the public scoping meetings
- Mail comments to ATTN: Jim Taylor, Bureau of Reclamation-Snake River Area Office, 230 Collins Road, Boise, ID 83702
- Submit via email to BOR-SRA-BoiFeasibility@usbr.gov
- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

*** Required fields.** *Please print clearly.*

Name (First and Last)*	Steve Williams				
Organization					
Title					
Address*	1115 N 16th E				
City*	Mountain Home	**State***	ID	**Zip Code***	
E-mail	SJSWilliams@q.com			**Phone***	208-599-2188

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☐ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

Does the additional water storage cause any increase risks to downstream developments should Anderson Ranch dam fail as result of a catastrophic event? The downstream Canyon narrows in a highly constricted canyon (sheer rock walls) between Neil Bridge and the ~~Boise~~ Cow Creek bridge). Could the constricted canyon cause floods waters to backup and flow through the saddle in the Danskin Mountains where it would then flow south towards Mountain Home at Cow Creek

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PO Box 1377
Mountain Home, ID 83647

August 29, 2019

Mr. Jim Taylor
Environmental/Cultural Resource Manager
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, ID 83702

Dear Mr. Taylor:

This letter contains additional comments on the Bureau of Reclamation's proposed Feasibility Study on raising Anderson Ranch Dam (in Elmore County) to increase water storage and flood control during high-runoff years. My previous comments were contained in a letter sent to your office on August 16, 2019. In that letterl, I made the following statement: "Anderson Ranch Dam is located in rural Elmore County, Idaho, and the impacts of any future construction will occur in Elmore County. However, most if not all of the benefits of this project will occur in the Boise/Meridian metropolitan areas in Ada and Canyon Counties. The EIS for this project must address this disparate impacts/benefits issue as part of the Socioeconomic Impacts section of the document."

Elmore County has a significantly lower average income level and higher unemployment compared to the Treasure Valley/Boise metropolitan area. Any Environmental Impact analysis prepared for this proposed project must comply with Executive Order 12898, quoted below:

"Executive Order 12898 of February 11, 1994 -
Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations -
By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:
Section 1–1.Implementation. 1–101. Agency Responsibilities.

To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall 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 a**nd low-income populations** in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands."

All of the adverse effects of the proposed changes to Anderson Ranch Dam will take place in Elmore County, with the benefits occurring in the higher-income Boise Metropolitan area. The EIS for this project should examine the potential mitigation of these disproportionate impacts by using some of the additional Anderson Dam water storage capability to transfer water from Anderson Ranch Reservoir to the aquifer serving the Mountain Home area, and the Anderson Ranch Project mitigation should include construction of a pump and pipeline from Anderson Ranch Reservoir into the Elmore County aquifer recharge area. This will serve as mitigation for the disproportionate level of impacts on the low-income population in Elmore County, as required by EO 12898.

Sincerely,

Peter Humm

Peter Humm

Cy

P.O. Box 1377
Mountain Home
Idaho 83647

August 16, 2019

Megan Sloan, Study Manager
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, Idaho 83702

Dear Ms. Sloan:

This letter contains my comments on the request for scoping issues for the Boise River Basin Feasibility Study for increasing water storage capacity within the Boise River system, particularly at Anderson Ranch Dam.

1) Anderson Ranch Dam is located in rural Elmore County, Idaho, and the impacts of any future construction will occur in Elmore County. However, most if not all of the benefits of this project will occur in the Boise/Meridian metropolitan areas in Ada and Canyon Counties. The EIS for this project must address this disparate impacts/benefits issue as part of the Socioeconomic Impacts section of the document. Impacts in Elmore County will include, but not be limited to, destruction of county roads by construction traffic, delays of people using these roads (due to road closures caused by that construction traffic) to recreation sites ranches, farms, the town of Prairie and the Fall Creek Resort during construction, and the loss of recharge potential for the groundwater reserves in Elmore County.

2) Elmore County is experiencing growth due to the high price of housing in the Boise metropolitan area, with people buying and renting in Mountain Home and commuting to work in Boise. This growth can be confirmed by a survey of the realtors in the Mountain Home area. The Anderson Ranch Dam Project, by enabling additional growth in the Boise Metropolitan Area, will add to this "bedroom community" growth in Elmore County. As a result of this growth, the water table in the Mountain Home aquifer is declining yearly, and the City of Mountain Home has recently had to double their water storage capability by building a new municipal water tank north of town. The EIS for the Anderson Ranch Dam must include an analysis of the impacts of this additional growth on the local aquifer. The EIS should also examine the potential mitigation of this impact by using some of the additional Anderson Dam water storage capability to transfer water from Anderson Ranch Reservoir to the aquifer serving the Mountain Home area, which includes Mountain Home Air Force Base. This water transfer would serve as a partial mitigation to the disparate impacts of the Anderson Ranch Project on rural Elmore County.

3) Elmore County and the City of Mountain Home have filed for water rights on part of any high-water year runoff into the Boise Basin system, and the Anderson Ranch Project

should consider including a pump and pipeline from Anderson Ranch Reservoir into the Elmore County aquifer recharge area (as mitigation for impacts on Elmore County), in coordination with Elmore County and the City of Mountain Home. This pipeline should also include electrical generation facilities as a side benefit, adding the potential for renewable energy generation to the project.

Additional comments on this project will be provided by the residents of the Mountain Home area during the August 29, 2019 scoping session here in Mountain Home.

Sincerely,

Peter Humm

BUREAU OF RECLAMATION

IN RE:)

ANDERSON RANCH STORAGE)

_____)

PUBLIC SCOPING MEETING - PUBLIC COMMENTS PORTION

BOISE RIVER SENIOR CENTER

350 NORTH PINE FEATHERVILLE ROAD

PINE, IDAHO

1:00-3:00 P.M.

AUGUST 27, 2019

REPORTED BY:

JEFF LaMAR, C.S.R. No. 640

Notary Public

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WOODY WINTER: Woody, W-o-o-d-y, Winter, W-i-n-t-e-r. I'm the groundskeeper at Pine, Idaho, Pine Resort.

Okay. My big concern is the affect it's going to have economically on the businesses in this valley when most of that camping around the lake disappears for even a month, if you understand what I'm saying. That could be a real concern. Real concern.

So other than that, I have no other problem with it. It looks like a good idea in a lot of ways. But at the same time it's going to have some negative effects. Everything has its effects, good and bad. Okay.

///

ROSANNA FORD: Rosanna Ford, R-o-s-a-n-n-a, Ford, F-o-r-d. And where am I from? I have a cabin between Pine and Featherville.

I would like to know where the Forest Service involvement is in this, because the impact when they start the work of the people that use the free areas, there are not enough camping areas in our forest to accommodate them. And us as private owners already feel that impact and have to defend our private property. So I want to know where their impact is. And they should be involved, majorly, as a property

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owner.

///

DAVID ODEN: Okay. David, D-a-v-i-d, O-d-e-n.

And I just want to make a statement that I'd sure be in support of the project. There's only one condition that I would recommend they not do is let some outside, private individual come in and file on the water. I think it should be kept to Elmore County, the existing farmers down below, and the City of Boise, water for the population down there. That would be neat.

And I think that get off their butts here get this job done would be my recommendation to you. But it's a good idea. A lot of water that we have to let down the river, that it would sure be nice if we could hold it for a while and utilize it here locally.

The other thing that I recommend, and I can't see that -- and I have no idea. I suppose nobody knows what the charges are going to be for this, this water, excess water that they're able to store. And I can't see any reason for Elmore County to be paying for any of it. All this water accumulates in Elmore County, and I think the County should be able to get it at a minimal cost. You know, maybe the pumping cost or something like that.

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But, you know, if they're going to prorate it out over an acre-foot or gallons or however they come up to do, I don't think the County, the taxpayers here in the county should have to pay for the water. I live a mile and a half up the road here. And, you know, we -- I just -- I just don't believe that the County should have to pay the going rate for water.

So -- and how they appropriate it, I -- you know, I don't know. Is this going to be set up to be a repayment cost to the federal government? Or is this just part of the federal government doing their job? So that's a question I have that I don't know.

But anyway, it's a good idea. Get on it. Get her going. Okay.

///

SUE FISH: I'm Sue Fish, S-u-e, Fish, F-i-s-h. And I do live here in Pine, Idaho, for the last 23 years. And before that I was a recreation user up here.

I have no problems with the dam being raised. I know Elmore County needs some water, and they're hopeful to get some of the water to recharge the aquifer. I am concerned about the economic impact with the construction time zone, especially for Fall Creek, because they have to close the road over the

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dam, and that's the fastest way for people to get to Fall Creek. So I'm concerned about some of the economic impacts there.

We're going to lose some recreation area, at least initially, during high water seasons. The recreation use here in this valley has just exploded the last couple of years. Maybe that goes to the Boise Valley also, population is exploding.

Even the effect of water for recreation on the -- for boating, the boat docks, the boat ramps will have to be extended. There's -- and I'm sure maybe that's part of the process, all the -- what do you call it? All the factors that they've been looking at.

But I just -- that would be my biggest concern was this is a recreation district. It's not a district. This is a recreation area. And we depend upon that for our livelihoods here in this valley and want to see the best outcome for everybody. Okay.

///

WESLEY R. WOOTAN: My name is Wesley R. Wootan. And the Wesley is W-e-s-l-e-y, R is the middle initial. Last name is Wootan, W-o-o-t-a-n. Okay. I'm Elmore County Commissioner. I represent the area District 2.

And this water project has been something we've worked for as a County, and we're glad to see

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this raise happen as a County, because we think it's going to lend more availability of water that Elmore County would be able to use proficiently in our area. We have a declining water area. We need to do something. And I think this offers us the opportunity.

We are -- this water comes out of Elmore County. We feel that Elmore County needs to have some form of right or way of obtaining the right to use water that may become available.

Other issues that have come up today dealt with the airstrip here in Pine, that it would -- the end of it would be under water. I think that's an easy fix. I think we just raise that end and provide -- still provide the same abilities for people to fly in or to have coverage when we have a fire for the helicopters.

The other ones, the new bridge that's just been put in, we need more clarification on that. And all the other areas, the Lime Creek looks like it's going to be all right. I need to find out how high that water gets on the bottom of that bridge. But I think we're going to be all right with that Lime Creek.

Other issues that were covered today is I guess Elmore County feels like they want some of the ability to procure water and water rights, same as

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anyone else and that this is something that comes out of our county, that we have those opportunities.

I think that's all I have at this time. And I thank the people for coming today.

-oOo-

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REPORTER'S CERTIFICATE

I, JEFF LaMAR, CSR No. 640, Certified Shorthand Reporter, certify:

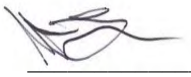
That the foregoing proceedings were taken before me at the time and place therein set forth.

That the testimony made were recorded stenographically by me and transcribed by me or under my direction.

That the foregoing is a true and correct record of all testimony given, to the best of my ability.

I further certify that I am not a relative or employee of any attorney or party, nor am I financially interested in the action.

IN WITNESS WHEREOF, I set my hand and seal this 3rd day of September, 2019.



JEFF LaMAR, CSR NO. 640
Notary Public
Post Office Box 2636
Boise, Idaho 83701
My commission expires December 30, 2023

/

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5:25

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Z

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4:24

2

2 (1)
5:23
23 (1)
4:17

BUREAU OF RECLAMATION

IN RE:)

ANDERSON RANCH STORAGE)

_____)

PUBLIC SCOPING MEETING - PUBLIC COMMENTS PORTION

WYNDHAM GARDEN INN

3300 SOUTH VISTA AVENUE

BOISE, IDAHO

6:00-8:00 P.M.

AUGUST 28, 2019

REPORTED BY:

JEFF LaMAR, C.S.R. No. 640

Notary Public

SCOTT CAMPBELL: Okay. My name is Scott Campbell. I am an attorney here in Boise. I've lived in Boise my entire life. I was born in 1952.

My family goes back to 1865 in the little community of Mayfield, Idaho, in Elmore County. My great-grandfather was the owner of a trading post on the Oregon Trail called Corder Station, C-o-r-d-e-r, Station and was involved in the early development of southern Idaho.

I'm appearing here and providing my comments for Elmore County. I've practiced water law in the state since approximately 1984. And Elmore County hired me in 2014 to assist them in their efforts to solve their water supply deficiencies.

And as part of that, I've pursued a number of water rights, including a water right that was just -- a water permit that was just issued by the Director in his decision of August 13 of this year approving a permit No. 63-34348 to allow Elmore County to develop a diversion system and divert water from the South Fork of the Boise River in the quantity of 200 cubic feet per second, including storage in Little Camas Reservoir, and then conveying the water down through the Mountain Home Irrigation District canal system for beneficial use for aquifer recharge and for

supplemental irrigation in the Mountain Home area.

Through our work, including that of Terry Scanlan, S-c-a-n-l-a-n, a well respected engineer and geologist with SPF Water Engineering, his study that was completed in February of 2017 calculated that the groundwater aquifers in the Mountain Home area are experiencing an annual deficit of in excess of 40,000-acre feet a year. And that condition has existed for many, many years, decades.

In 1982 the Department of Water Resources issued an order establishing the Mountain Home Groundwater Management Area prohibiting any new water rights for development in that area. Prior to that, 1981, the Department created the Cinder Cone Butte Critical Groundwater Management Area.

And so this condition has been in existence for 40 years, yet nothing's been done about it. This opportunity to acquire a portion of the Anderson Ranch Reservoir increased space through this project to raise the dam is critical for Elmore County.

Elmore County supports the proposal, as long as Elmore County will be provided at least 10,000-acre feet of storage space and the accrued water from that space as part of the process. If not, Elmore County vigorously opposes the project.

Anderson Ranch Reservoir and the volumes of water stored there all originate in Elmore County. Elmore County has never gotten any benefit of the reservoir or the river. It's all been the benefit of the Treasure Valley.

And now finally the opportunity arises for the federal government and the Idaho Water Resource Board to correct that deficiency and help Elmore County down the road to have potentially a stable aquifer. Although this water is not going to solve the problem alone, with the new permit, with the diversion system that the County is going to build, with the stored water in Anderson, it would provide in good water years up to 30,000-acre feet for use in the area.

There's still a 10,000-acre feet per year deficit based upon the calculations of Terry Scanlan's company. However, this is a huge step forward for Elmore County and it's something that is desperately needed. And there should be no question that it is in the public interest to provide this quantity of water through this project to Elmore County.

And with that, I'll conclude my comments.

///

ALBERT HOFER: My name is Albert Hofer, A-l-b-e-r-t, H-o-f-e-r, Elmore County Commissioner,

Third District.

I love the project. I wish the project had a different name. It shouldn't have been the Boise project. It should have been the Elmore-Ada project. All that water that comes out of Elmore goes to Ada County. That's all I got.

///

WESLEY R. WOOTAN: Okay. My name is Wes Wootan. And it's actually Wesley R. Wootan, Elmore County Commissioner.

And the comments I'd like to add was that Elmore County should get the water just like a beneficial use. It's just like you prove up on a beneficial use, they put all the infrastructure in, the County does, and puts the water up there, they have that water to use, not pay for it as a rental from the Bureau of Reclamation, because it's water coming off of their water shed and going into this facility.

And I think they need the opportunity to use that water wisely for a drought-stricken area that's short of water.

There was one more comment I had. Let's see. I don't remember what it was now. Okay. That's good. Thanks.

///

CHRISTINE WOOTAN: When -- yes, this is Christine Wootan.

And when I read the sign that was talking about the water flow and everything, I just noticed that Mountain Home was not mentioned at all. And so that's just kind of -- well, I think it would be more appropriate to mention Mountain Home also.

And also that the name of the project, as has been suggested, we really like the idea of El-Ada, which shows that it's both places and not just worried about the people in Boise.

///

REPORTER'S CERTIFICATE

I, JEFF LaMAR, CSR No. 640, Certified Shorthand Reporter, certify:

That the foregoing proceedings were taken before me at the time and place therein set forth.

That the testimony made were recorded stenographically by me and transcribed by me or under my direction.

That the foregoing is a true and correct record of all testimony given, to the best of my ability.

I further certify that I am not a relative or employee of any attorney or party, nor am I financially interested in the action.

IN WITNESS WHEREOF, I set my hand and seal this 3rd day of September, 2019.

JEFF LaMAR, CSR NO. 640
Notary Public
Post Office Box 2636
Boise, Idaho 83701
My commission expires December 30, 2023

/

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3:8

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2:19

BUREAU OF RECLAMATION

IN RE:)

ANDERSON RANCH STORAGE)

_____)

PUBLIC SCOPING MEETING - PUBLIC COMMENTS PORTION

AMERICAN LEGION

515 EAST 2ND SOUTH STREET

MOUNTAIN HOME, IDAHO

6:00-8:00 P.M.

AUGUST 29, 2019

REPORTED BY:

JEFF LaMAR, C.S.R. No. 640

Notary Public

ALBERT HOFER: Albert Hofer, 51 Southwest Sunrise Drive, Mountain Home, Idaho, Commissioner in the Third District for Elmore County.

My comments are any dam raises in Idaho are beneficial. Any water we can hold in this state is beneficial. That's it.

///

JOE BIER: Joe Bier, J-o-e, B-i-e-r.

And I feel that the number one thing that I look at in everything that's happening in our community is number one how much money is this going to cost the taxpayer? I'm a taxpaying person, and I don't like when something that's going to be used and hardly anybody benefits but a lot of money comes out of our taxes.

A lot of us like in this area are retired people. And this town is turning into a military retirement center. The military people that are retired here, they get their paycheck every month, rain or shine. But there's a lot of us older people that are retired here but still living on social security.

So every time when somebody starts talking about, well, the money is going to be out of the federal budget or the money is coming out of a grant, it still comes right back to the number one person, the

taxpayer, the blue collar person.

And I don't -- I don't see -- I'm looking at what they have here to raise the water up, how many years has this been sitting here now? Have we grown that large enough to get this raising the lake? The questions you want to ask. Is this going to raise the lake to benefit the taxpayers that's putting out the money? Because that's the number one person that they should benefit first, the taxpayer.

So well, that's all I got to say. That's all. I don't know anything else.

By the way, one more thing. Has this been approved by Brad Little? That's what I'd like to ask.

///

REPORTER'S CERTIFICATE

I, JEFF LaMAR, CSR No. 640, Certified Shorthand Reporter, certify:

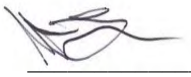
That the foregoing proceedings were taken before me at the time and place therein set forth.

That the testimony made were recorded stenographically by me and transcribed by me or under my direction.

That the foregoing is a true and correct record of all testimony given, to the best of my ability.

I further certify that I am not a relative or employee of any attorney or party, nor am I financially interested in the action.

IN WITNESS WHEREOF, I set my hand and seal this 3rd day of September, 2019.



JEFF LaMAR, CSR NO. 640
Notary Public
Post Office Box 2636
Boise, Idaho 83701
My commission expires December 30, 2023

/

/// (2)
2:7;3:14

A

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2:1,1
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Elmore County
Board of Commissioners

Phone (208) 587-2129 Ext. 270

ELMORE COUNTY COURTHOUSE
150 South 4th East Suite #3
Mountain Home, Idaho 83647

Fax (208) 587-2159

Albert Hofer
(208) 599-1620

Wesley R. Wootan
(208) 599-3131

Franklin L. Corbus
(208) 599-1294

September 6, 2019

Elmore County's Public Comments Re: U.S. Bureau of Reclamation Boise River Basin Storage Feasibility Study Environmental Impact, Boise Project, Elmore County, Idaho

Dated: August 30, 2019

Elmore County ("County") provides these written comments in response to the August 9, 2019 solicitation letter in this matter signed by Mr. Roland Springer, Area Manager for the Snake River Area Office of the U. S. Bureau of Reclamation ("Bureau").

The County supports the efforts of the Bureau and the Idaho Water Resource Board ("Board") to evaluate the environmental effects of a six-foot raise of Anderson Ranch Dam ("Dam") on the South Fork Boise River.

This support is conditional, however, upon allowing the County to contract for at least 10,000 acre feet of new storage space in the expanded capacity of Anderson Ranch Reservoir ("Reservoir"). In contrast, the County opposes, in the strongest and most forceful manner, any efforts to proceed with any project to raise the Dam, unless the County will obtain the use of at least one-third of the new storage water accruing to the Reservoir from the project. The County takes this position, based upon the following considerations.

South Fork Boise River Watershed

Virtually the entire watershed of the South Fork Boise River is located in the County. Despite this fundamental fact, Elmore County citizens have never received any stored water from the vast amounts stored in the Reservoir. Although the Dam and the Reservoir have been operational since 1950, all of the beneficial use of stored water from the Reservoir has been made by the citizens of Ada and Canyon counties. No efforts have been made by the Bureau or any other governmental agency to make any of this stored water available to the citizens of Elmore County.

These circumstances have continued, in spite of the drastic water supply shortages that Elmore County has suffered since 1982. These shortages and the continued ground water deficits in the County are fully documented in the February 2017 report: **Elmore County Water Supply Alternatives** – SPF Water Engineering, LLC. ("Report"- Exhibit A, hereto).

Economic Development Limitations

Economic development in Mountain Home and Elmore County has been severely restricted, because of the severely restricted water supply. No new water rights for ground water development have been issued since the Idaho Department of Water Resources ("IDWR") 1982 order, creating the Mountain Home Ground Water Management Area ("Management Area"), which prohibited new water rights. This limitation and the declining ground water levels in the area preclude development of any new business enterprises that require significant water supplies.

In this regard, Mountain Home has turned away a number of business entities that sought to locate there, simply because the City's existing water rights and supply could not support those businesses.

Moreover, hundreds of acres of previously productive agricultural lands have been idled, due to the continuing ground water declines. The small surface water supplies of the Mountain Home Irrigation District typically do not provide a full season of irrigation water to the farms served by the District. Low water supplies diminish crop yields and prevent cultivation of crops needing late season water.

These limitations reduce economic outputs of existing agricultural operations, thereby adversely impacting economic activity.

Elmore County Water Resource Development Efforts

Since 2014, the Board of Elmore County Commissioners have pursued a concerted effort to improve the water supply deficiencies within the Area. Among others actions, they achieved reinstatement of water permit 61-07731 for aquifer recharge from Canyon Creek. They then achieved licensing of that permit from IDWR.

The County then successfully achieved approval by IDWR of water permit 61-12314 for additional aquifer recharge from Canyon Creek. The infrastructure has been constructed to allow full development of the permit, funded with a grant from the Board. This infrastructure will allow diversion of 200+ cfs from Canyon Creek into existing gravel pits adjacent to Canyon Creek. Prior recharge diversions have demonstrably improved ground water levels in the down-gradient areas. Unfortunately, Canyon Creek does not provide reliable surface water supplies to permit full use of these facilities every year.

Additionally, on August 13, 2019, IDWR issued the Order on Exceptions, Final Order re: Water Permit 63-34348 in the Name of Elmore County, Board of County Commissioners ("Order"). The Order authorizes the County to develop a water diversion for up to 200 cfs from the South Fork Boise River for aquifer recharge and supplemental irrigation uses. The County is actively pursuing the engineering and entitlement authorizations to allow construction of infrastructure to divert this water and deliver it to the Mountain Home plateau for beneficial use. This water will help with the ground water deficiencies in the Area, but it will not solve the problems alone.

Consequently, the 10,000 acre feet sought by the County from the potential new storage space in the Reservoir is essential. As the Report documents, the annual ground water deficit in the Area is approximately 42,000 acre feet. Even with a new storage allocation of 10,000 acre feet from the Reservoir and the intermittent availability of 200 cfs under water permit 63-34348 (maximum yield of 20,000 acre feet), those sources would produce 30,000 acre feet, with a 50 to

60 per cent annual reliability. This leaves more than 10,000 acre feet annual deficits in ground water supply in the best water supply years.

Obviously, the need is real. The problem is substantial, but the County already has expended extensive financial resources and human time investments in its efforts to remedy these dire conditions. It continues to invest financial and human resources in the substantial development efforts that must be completed, before water can be diverted from the South Fork Boise River. And, the County is fully committed to completion of the necessary diversion and conveyance infrastructure that will enable it to provide these new water supplies to beneficial uses for the citizens of the County.

Additionally, Elmore County asserts that all of the balance of storage water that will accrue to Anderson Ranch Reservoir, resulting from the dam raise, should be reserved for Elmore County if any future storage increases occur in Lucky Peak or Arrowrock Reservoirs. Anderson Ranch Reservoir provides the only water storage that can be beneficially used by Elmore County. If future water storage increases occur at Lucky Peak or Arrowrock Reservoirs, Elmore County could not divert and beneficially use that water from the diversion infrastructure that it will construct to develop Water Permit 63-34348.

Consequently, this reality must be carefully evaluated in the environmental analysis for the Feasibility Study. And, any final federal action must include a special reservation for future use by Elmore County of the remainder of the new Anderson Ranch Reservoir storage water, accruing from the dam raise, that has not been allocated to the County if future water storage increases occur at Lucky Peak or Arrowrock Reservoirs.

Conclusion

Elmore County citizens and businesses have struggled with insufficient water supplies for over forty years. IDWR recognized the extent of these deficiencies in 1981, when it created the Cinder Cone Butte Critical Ground Water Area, and when it created the larger Mountain Home Ground Water Management Area in 1982. Only the recent efforts of Elmore County have begun to address this difficult situation, that worsens every year no new water supplies are developed.

The Bureau's environmental review of feasibility of raising Anderson Ranch Dam must carefully consider the adverse effects upon Elmore County, its citizens, its businesses, and its future if 10,000 acre feet of water made available from the Dam raise is not made available for their use. The need is obvious. The reasons are clear. Failure is not an option.

Elmore County Board of Commissioners

Franklin L. Corbus, Chairman

Wesley R. Wootan, Commissioner

Albert Hofer, Commissioner

BOARD OF COUNTY COMMISSIONERS
SEAL
ELMORE COUNTY IDAHO

Label: "Feasibility Study NEPA/NOI Public Comments"

Created by:bor-sra-boifeasibility@usbr.gov

Total Messages in label:51 (24 conversations)
Created: 09-10-2019 at 12:33 PM

Conversation Contents

[EXTERNAL] Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho
Attachments:
/1. [EXTERNAL] Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho/1.1 image001.jpg
/1. [EXTERNAL] Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho/1.2 190909 TU Anderson Ranch Scoping Comments.pdf
/1. [EXTERNAL] Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho/1.3 SFBR 2014 Fall flow shaping recommendations FINAL.docx
/1. [EXTERNAL] Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho/1.4 IDFG_R3_IDWR SFBR 63-34348_20180914.docx.pdf
/1. [EXTERNAL] Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho/2.1 image001.jpg
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Peter Anderson <Peter.Anderson@tu.org>

From:	Peter Anderson <Peter.Anderson@tu.org>
Sent:	Mon Sep 09 2019 10:47:50 GMT-0600 (MDT)
To:	"bor-sra-boifeasibility@usbr.gov" <bor-sra-boifeasibility@usbr.gov>, "'Jim Taylor'" <jbtaylor@usbr.gov>
Subject:	[EXTERNAL] Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho
Attachments:	image001.jpg 190909 TU Anderson Ranch Scoping Comments.pdf SFBR 2014 Fall flow shaping recommendations FINAL.docx IDFG_R3_IDWR SFBR 63-34348_20180914.docx.pdf

Dear Jim,

I am submitting Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho, with the two attached document.

Thank you for opportunity to provide our comments.

Sincerely,

Peter
Peter R. Anderson | Counsel, Idaho Water and Habitat Program
Trout Unlimited
(p) 208.345.9800 | (f) 208.345.6766
910 W. Main St., Suite 342
Boise, ID 83702
www.tu.org

Peter Anderson <Peter.Anderson@tu.org>

From:	Peter Anderson <Peter.Anderson@tu.org>
Sent:	Tue Sep 10 2019 11:08:15 GMT-0600 (MDT)
To:	"bor-sra-boifeasibility@usbr.gov" <bor-sra-boifeasibility@usbr.gov>, "'Jim Taylor'" <jbtaylor@usbr.gov>
Subject:	[EXTERNAL] RE: Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho
Attachments:	image001.jpg 190909 TU Anderson Ranch Scoping Comments.docx

Morning,
For some reason the signature page on our PDF submission yesterday did not reflect Alan Richardson's (of the Hemingway Chapter) signature. I have attached a Word version with his signature.
Thank you,

Peter
Peter R. Anderson | Counsel, Idaho Water and Habitat Program
Trout Unlimited
(p) 208.345.9800 | (f) 208.345.6766
910 W. Main St., Suite 342
Boise, ID 83702
www.tu.org

From: Peter Anderson
Sent: Monday, September 09, 2019 10:48 AM
To: bor-sra-boifeasibility@usbr.gov; 'Jim Taylor' <jbtaylor@usbr.gov>
Cc: Kira Finkler (Kira.Finkler@tu.org) <Kira.Finkler@tu.org>; Ed Northen <aspottedog@cox.net>; Darryl Kuhrt <darryl.kuhrt@gmail.com>; Alan Richardson <richardsonah1@gmail.com>; Daniel Dauwalter <Daniel.Dauwalter@tu.org>
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Boise, ID 83702
www.tu.org

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:54:54 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] RE: Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho
Attachments:	image001.jpg 190909 TU Anderson Ranch Scoping Comments.docx

---------- Forwarded message ---------
From: **Peter Anderson** <Peter.Anderson@tu.org>
Date: Tue, Sep 10, 2019 at 11:10 AM
Subject: [EXTERNAL] RE: Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho
To: bor-sra-boifeasibility@usbr.gov <bor-sra-boifeasibility@usbr.gov>, Jim Taylor <jbtaylor@usbr.gov>
Cc: Alan Richardson <richardsonah1@gmail.com>

Morning,
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910 W. Main St., Suite 342
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Cc: Kira Finkler (Kira.Finkler@tu.org) <Kira.Finkler@tu.org>; Ed Northen <aspottedog@cox.net>; Darryl Kuhrt <darryl.kuhrt@gmail.com>; Alan Richardson <richardsonah1@gmail.com>; Daniel Dauwalter <Daniel.Dauwalter@tu.org>
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910 W. Main St., Suite 342
Boise, ID 83702
www.tu.org

September 9, 2019

Mr. Jim Taylor
Environmental/Cultural Resource Manager
Bureau of Reclamation
Snake River Area Office
bor-sra-boifeasibility@usbr.gov
230 Collins Road
Boise, ID 83702

Sent via email

RE: Trout Unlimited's Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho

Trout Unlimited (TU) appreciates the opportunity to provide comments on the Bureau of Reclamation (BOR) Notice of Intent to Prepare an Environmental Impact Statement (EIS) for their Boise River Basin Storage Feasibility Study that will consider raising Anderson Ranch Dam. TU is a non-profit organization with a mission to conserve, protect and restore North America's coldwater fisheries and their watersheds. With more than 300,000 members and supporters nationwide and more than 2,400 in Idaho, TU works to restore wild trout, salmon, and steelhead and their watersheds throughout the U.S. TU has long considered it a priority to protect and enhance the fisheries in the Boise River Basin, and especially the South Fork Boise River tailwater reach between Anderson Ranch Dam and the Arrowrock Reservoir.

INTRODUCTION

Section 101 of the National Environmental Policy Act (NEPA) declares a broad national commitment to protecting and promoting environmental quality.[1] It implements this commitment by mandating federal agencies adopt the prudent and common-sense decision-making expressed in the old aphorism: "look before you leap." NEPA requires federal agencies to analyze the environmental impact of their proposed actions by preparing environmental impact statements

[1] 42 U.S.C. §4331

for actions "significantly" affecting the environment.[2] The purpose of this requirement is to assure that agencies take a hard look at environmental consequences and provide for broad dissemination of relevant environmental information. NEPA does not mandate particular outcomes, only consideration of every significant aspect of the environmental impact of a proposed action. All impacts must be considered, whether direct, indirect, or cumulative, so long as they are reasonably foreseeable.[3] The BOR has requested assistance gathering information that will help define the issues, concerns and scope of alternatives for the EIS for the Anderson Ranch Dam raise project. TU urges to BOR address the following points in that NEPA analysis.

A. AFFECTED ENVIRONMENT

The Council of Environmental Quality's (CEQ) NEPA rules require a description of the environment affected by the actions being analyzed in an EIS:

> The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.

40 CFR 1502.15. The affected environment includes the entire area of potential effect including potentially affected areas outside the immediate project area. *Reclamation's NEPA Handbook* 8-15 (Feb. 2012).

BOR's purpose and need statement identifies two broad purposes for the Anderson Ranch dam raise: first, supplemental storage to maintain existing uses served by the present Boise River system and, two, storage to meet future projected demands for new uses of water in the Treasure Valley. The EIS will study the alternatives and their impacts for meeting these two purposes. TU suggests that the "affected environment" section of the EIS describe at least three critical elements: (1) the entire contemplated project, stretching from the dam raise to the end use of the stored water; (2) the riverine areas affected by the diversion of 29,000 acre-feet of water in the proposed reservoir enlargement; and (3) the fisheries both in the enlarged reservoir and

[2] 42 U.S.C. § 4332(2)(C).
[3] *See* 42 U.S.C. § 4332(2)(C); 40 C.F.R. §§ 1508.7, 1508.8.

downstream from it affected by the storage of an additional 29,000 acre-feet at the project location. Additionally, climate change impacts will shape the affected environment.

1. All Connected Parts of the Project Define the Affected Environment

The immediate area that would be affected by the actual construction of the proposed Anderson Ranch dam raise is fairly straightforward—the dam, roads and land (and its terrestrial environment) to be inundated by the expanded reservoir. However, for the second purpose of the project -- storage to meet future projected demands for new uses of water in the Treasure Valley -- the elements of the project are not well defined. As it proceeds BOR must precisely define what the water supply needs of the Treasure Valley are, to capture the full impact of each alternative it studies. CEQ's NEPA regulations state that actions which are connected, cumulative or similar should be evaluated in one EIS when it is the best way to assess adequately their combined effects.[4] In the matter at hand, a comprehensive assessment of actions required to provide water supplies to new uses in the Treasure Valley is needed. Consistent with the intent of NEPA the BOR should develop an EIS that analyzes together all of the connected activities needed to address Treasure Valley new water supply needs.

This is because the needs for new water supply determine many of the impacts that water supply measures will have. For instance, the following additional questions regarding water supply needs should be answered when defining the affected environment and the number and range of alternatives to be considered in detail:

1. Is the need for new water supply in the Treasure Valley at the locations identified in Figures 41 - 44 of *Treasure Valley DCMI Water-Demand Projections (2015-2065)*, Petrich, SPF Engineering, pp. 109-112 (August 8, 2016)?
2. Is part of the need for new water supply in the Mountain Home area, and for what purposes and where is water needed there?
3. What role, if any, would the off-channel storage of water by Cat Creek Energy, LLC play in meeting demand for water in the Treasure Valley as proposed in its water right application 63-34652?
4. Will new wells, pipelines, water treatment plants and water tanks be needed to distribute the increased ground or surface DCMI water supplies?
5. Where is new agricultural irrigation water needed in the Treasure Valley?
6. Are new river diversions, canals and laterals going to be constructed to deliver new irrigation storage?
7. Is the water supply needed to recharge the Treasure Valley aquifer?
8. What canals, pipelines, headgates, pits and injection wells would be needed to deliver new surface water supplies for recharge?

[4] 40 CFR 1508.25.

The answer to each of these questions will determine the environment affected by the water supply alternatives to be studied, including determining how and when any new storage water will be released, where and how it will be delivered, impacts on other streams and systems in the Boise River watershed, and the complete description of the necessary construction for its use. BOR cannot segment its consideration of new water supply projects from the final beneficial use of that water supply.[5]

2. The Entire River System Affected by New Water Storage

The water that will be diverted into storage by the proposed Anderson Ranch Dam project is currently being used, from the site of the proposed dam raise to the Snake River.[6] That water provides channel forming flows in the South Fork of the Boise River and the lower Boise River below Lucky Peak Dam. Fish in the South Fork and Lower Boise live in it, with the South Fork's tailwater fishery having particular importance for recreation. It supports complex riparian ecologies in the Boise River. It generates hydropower at at-least 4 dams between Anderson Ranch Dam and the Snake River. It dilutes effluent from water treatment plants in the Treasure Valley. All of these current uses of the 29,000 acre-feet to be stored in Anderson Ranch Dam will be affected by its storage. The BOR should define the affected environment to be studied to include all river environments that will be affected the change in hydrology caused by the dam raise, from the head of Anderson Ranch Dam Reservoir to the Boise River's confluence with the Snake River, with particular focus on the flow releases from Anderson Ranch Dam to the South Fork of the Boise River.

Accompanying the affected physical environment of the River is the legal environment that governs the use and management of water resources in the Boise River Basin. This includes the state granted water rights in the Basin as well as Federal laws and regulations governing activities associated with the reservoir system, the Endangered Species Act being an important example. The EIS will need to describe the legal environment which will constrain an additional 29,000 acre-feet of storage through a system of water rights and compliance with Federal law.

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[5] For that matter, BOR cannot begin construction of new water supply projects without obtaining a water right permit from the State of Idaho for the projects. When applying for such a permit it must identify the elements of the beneficial use to which that water will be put; including purpose of use, place of use, season of use and a description of the conveyance system and system for distributing and using the water . IDAPA 37.03.08.035.

[6] In fact, the new storage would lessen flows in the Snake and Columbia Rivers clear to the Pacific Ocean. However, in years when there is sufficient flow to store additional water in Anderson Ranch Dam the reduction in flows in the Snake River may not be discernible. BOR should confirm this assumption and consult with NOAA NMFS.

3. Fisheries Affected by the New Storage

The fisheries that would be affected by the Anderson Ranch Dam raise project, both in the expanded reservoir and downstream include the following:

a. ESA-listed bull trout
b. Native red band trout
c. Kokanee
d. Yellow Perch
e. Largemouth bass
f. Smallmouth bass
g. Landlocked chinook salmon
h. Wild rainbow trout
i. Mountain Whitefish
j. Wild brown trout
k. White sturgeon
l. ESA-listed fall chinook salmon
m. ESA-listed steelhead
n. ESA-listed Spring/Summer Chinook salmon
o. ESA-listed Sockeye salmon
p. ESA-listed Sockeye salmon
q. Chiselmouth
r. Longnose dace
s. Speckled dace
t. Redside shiner
u. Northern pikeminnow
v. Bridgelip sucker
w. Largescale sucker
x. Mottled sculpin
y. Shorthead sculpin

4. The Affected Environment includes Climactic Changes.

The EIS must gather all available information regarding the future impacts of climate change on the Boise River, including impacts on water quantity, quality and biologic resources. The cumulative effects of these climate change impacts plus any impacts from the proposed alternatives likely will be significantly greater than the impacts of the alternatives alone. Additionally, the Study must consider the impact of climate change on the utility and viability of the alternatives themselves. *Principles and Requirements* at p. 10.

Recent studies show that the Boise River is vulnerable to the specific effects of climate change. Those studies done specifically on the Boise River suggest that bull trout and redband trout thermal habitat will shift to higher elevation habitats (Isaak et al. 2010). Specifically, bull trout spawn in the coldest, highest elevation streams where juveniles rear after emergence, and climate change will shrink the amount of thermally suitable habitat for bull trout spawning and rearing by 11-20% (Isaak et al. 2010). The effects of climate change on Anderson Ranch Reservoir water temperatures have not been studied as far as we are aware. However, the surface temperatures of Anderson Ranch Reservoir are likely already too warm for bull trout during summer, causing them to move out of the reservoir in spring, as has been shown for nearby Arrowrock Reservoir exposed to similar climatic conditions (Maret and Schultz 2013). Climate change can be expected to increase surface temperatures further, including the amount of time that temperatures are unsuitable to bull trout. This would further reduce the suitability of the reservoir for bull trout and potentially impact migration corridors and movement distance and timing between the upper South Fork Boise River and the Reservoir.

Isaak, et al., *Effects of climate change and wildfire on stream temperatures and salmonid thermal habitat in a mountain river network,* Ecological Applications, 20(5), 2010, pp. 1350–1371, https://eprints.qut.edu.au/103728/1/Isaak_et_al-2010-Ecological_Applications.pdf

Maret, T. R., and J. E. Schultz. 2013. *Bull trout (Salvelinus confluentus) movement in relation to water temperature, season, and habitat features in Arrowrock Reservoir, Idaho*, 2012, 2013-5158. U. S. G. Survey, Reston, VA, 10.3133/sir20135158, http://pubs.er.usgs.gov/publication/sir20135158.

Further, the spread in water supply projections using a variety of climate change modeling decisions leads to uncertainty regarding the amount of potentially storable water that must be considered by BOR. (Chegwidden et al. 2019) Some climate records and studies indicate increasingly severe reductions in storable water supply. The re-averaging of the thirty year snowpack medians by NRCS in 2010 revealed an approximately 10% reduction in average snowpacks over the most recent 30-year period. Luce et. al. (2013) found that high mountain snowpack is being reduced by climate change impacts. Because the spring freshet is largely driven by the melting snowpack there is some question whether high flows in excess of current natural flow and storage rights will provide a reliable supply to fill the proposed new storage space. There is already indication that the proposed storage would have filled at most 9 out of the last 20 years.

In the Matter of Application for Permit 63-34348 in the Name of Elmore County, Board of County Commissioners, **Order on Exceptions; Final Order**, p. 11 (IDWR, August 13, 2019). The BOR must incorporate the best available science in assessing the efficacy of the alternatives in light of climate change impacts now and in the foreseeable future.

C. H. Luce, J. T. Abatzoglou, and Z. A. Holden, *The Missing Mountain Water: Slower Westerlies Decrease Orographic Enhancement in the Pacific Northwest USA*, Science 2013

Chegwidden, et al., *How Do Modeling Decisions Affect the Spread Among Hydrologic Climate Change Projections? Exploring a Large Ensemble of Simulations Across a Diversity of Hydroclimates, Earth's Future*, 7 (2019). https://doi.org/10.1029/2018EF001047.

B. ALTERNATIVES

NEPA requires agencies to:

> study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." This requirement … seeks to ensure that each agency decision maker has before him and takes into proper account all possible approaches to a particular project … which would alter the environmental impact and the cost-benefit balance.

42 U.S.C. § 4332(2)(D). A viable but unexamined alternative renders an environmental impact statement inadequate.

TU recommends that the following alternatives be included in the EIS and that the analysis of each alternative clearly articulate whether and to what degree they achieve the goals and objectives outlined in the purpose and need statement. We assume there will be a proposed action to increase the reservoir storage by raising the dam as well as a no action alternative.

1. Water Use Efficiency Alternatives

The *Principles and Requirements* provide that:

> Alternative actions or plans, where applicable, should first consider opportunities to improve water efficiency with respect to existing water infrastructure and supplies. When efficiency alone will not suffice, the reuse and reclamation of water should be promoted.

At 11. The *Principles and Requirements* also provide "[f]ull consideration and reporting on nonstructural alternative actions or plans should be an integral part in the evaluation of Federal investments in water resources." At 11.

Efficiency measures that could extend Treasure Valley water supplies and meet the purposes for the Project include:

- Water diversion automation.
- SCADA water delivery operations. *See Bakersfield's Supervisory Control and Data Acquisition and Automation (SCADA) Project*, WaterSMART Grant: Water and Energy Efficiency, City of Bakersfield, May 10, 2018.
- Domestic appliance and fixture efficiency.
- Canal lining and piping.[7]
- Precision domestic/municipal and agricultural irrigation.
- Wastewater/gray water reuse
- Low water demand cropping and landscaping.
- Conversion of domestic/suburban irrigation to pressurized systems.
- Metering and graduated pricing.

One great advantage of these measures is that they extend available water supplies every year, and are not dependent upon an increasingly fickle snowpack.

2. Water marketing

Water markets provide an opportunity to move water supplies to new water needs:

> In the western United States, the development of new water supplies has become costly in economic and environmental terms. New dams and reservoirs generate strong opposition, while some rivers are already so highly regulated that added storage would decrease yields. Thus it is important that water be transferable from older, lower valued uses to newer, higher valued uses, especially because roughly 85 percent of the consumptive use of water takes place in irrigated agriculture, much of it in the production of low valued crops …. In numerous studies, researchers have argued that water markets are important in increasing this flexibility ….

Howe, Charles W. and Christopher Goemans, *Water Transfers and Their Impacts: Lessons From three Colorado Water Markets,* Journal of the American Water Resources Association (JAWRA) 39(5):1055-1065, at 1055, citations omitted (2003).

3. Managed Aquifer Recharge

Managed aquifer recharge involves a deliberate strategy of recharging water to existing groundwater aquifers. The potential for storing additional Treasure Valley water supply through managed aquifer recharge is being studied by the Idaho Water Resource Board. https://idwr.idaho.gov/IWRB/projects/treasure-valley/

[7] With due consideration for the impact of the loss of incidental recharge.

4. New Flow Augmentation Source

The BOR currently purchases 47,000 acre-feet of water from the Boise Project on an annual basis to provide flow augmentation in the Snake River under the 2004 Snake River Water Rights Agreement. If an alternative source could be found to provide this water to the Snake River at the appropriate time the 47,000 acre-feet that is currently being stored in the Boise Project could be used for the purposes described in the Boise River Basin Storage Feasibility Study. To be used for flow augmentation the water would need to be capable of being released following the spring freshet. Water stored in any reservoir above the confluence of the Clearwater and Snake Rivers could theoretically be used for such purposes. The use of the water use efficiency and market alternatives discussed above could make such stored water available for flow augmentation. Thus, this alternative would expand the consideration of water use efficiency and water marketing to the entire Snake River Basin at and above its confluence with the Clearwater River.

5. **Off-channel Storage**

Given the existing proposals by Elmore County and Cat Creek Energy, LLC to withdraw water from Anderson Ranch Dam for new water storage, and a clear Federal nexus with affected public lands managed by the USDA Forest Service and USDI Bureau of Land Management, as well as the Federal Energy Regulatory Commission involvement in one of the projects, the Bureau should duly consider including an alternative that these projects are constructed in lieu of the proposed action. These projects need to be considered in detail at a minimum for consideration of cumulative effects, see section C. 6. of this letter.

C. ENVIRONMENTAL IMPACTS

The Environmental Impact Statement should examine the following direct and indirect effects of each alternative:

1. Impact of the Loss of High Flows on Stream Channel Function

The additional storage of high flows behind Anderson Ranch Dam will have impacts directly on the South Fork of the Boise River and the lower Boise River below Lucky Peak Dam, and perhaps discernible impacts on Snake River and Columbia River flows. These impacts should be studied by the BOR.

The importance of the spring freshet on the South Fork of the Boise River below Anderson Ranch Dam and above Arrowrock Reservoir has been discussed in numerous studies.

In response to the 2013 wildfires and subsequent debris flows in the South Fork Boise River below Anderson Ranch Dam, the University of Idaho Ecohydraulics lab studied the influence of three flow-release scenarios from Anderson Ranch Dam on sediment transport capacity. Sediment transport is important because of the need to flush fire-related fine sediments from the South Fork Boise River, as these fine sediments smother habitat used by aquatic invertebrates (prey for trout) and trout spawning substrates. The study found that 2400 cfs and higher flow pulses caused a detectable change in sediment transport, and 3000 cfs over 3-months was required to substantially transport sediment from fire-related debris fans; however, even after 3-months sediments were not transported to Arrowrock Reservoir but were rather sorted and deposited within the river channel. The study remains unpublished to our knowledge, but a multi-agency team, including BOR, Trout Unlimited and Idaho Fish and Game Department, used the results to recommend that at a minimum of 2400 cfs be released for at least 8 days to mobilize and resort fire-related sediments within the river channel that are harmful to bull trout and rainbow trout fishery below Anderson Ranch Dam. That recommendation is attached in the email with our comments.

Benjankar et al. (2017, 2018) studied bull trout rearing habitat under different flow releases from Anderson Ranch Dam and found that main channel rearing habitat quality was maximized at 600 cubic feet per second but quality of lateral habitat (side channels and former floodplain) along the river margin increased exponentially as flows were increased (up to 8,000 cfs); flows below 280 cfs reduce bull trout rearing habitat. Periodic high flows (>2,400 cfs) are necessary to maintain connectivity between side channel habitat and the main channel, and these habitats are critical refuge habitats during high flow events. While the study did not address flow-related impacts on stream channel dynamics, the authors asserted that high flows are important in maintaining stream channel morphology, flushing fine sediments, and transporting larger sediments.

Benjankar et al. (2017) also studied cottonwood recruitment in the riparian zone of the South Fork Boise River below Anderson Ranch Dam. They evaluated current locations of cottonwood recruitment and modeled potential areas of favorable recruitment under flow scenarios ranging from 300 to 8,000 cfs. They found that moderate-to-high regulated flows resulted in favorable areas of cottonwood recruitment (moderate and high flows were undefined

in their conclusions) and produced a map of favorable areas that show good potential recruitment in river reaches with braiding and side channels.

Together, these studies illustrate the importance of moderate to high flows in the South Fork Boise River on mobilizing and sorting fine sediments, both annually and after rare events such as wildfires, to maintain habitat for bull trout and rainbow trout. They also illustrate the importance of channel margin and side channel habitats, which require periodic high flows to create and maintain through sediment transport and sorting processes and other river channel forming processes (including interacting with riparian vegetation – see below). The Idaho Department of Fish and Game synthesized well, among other things, the concerns of new, high flow diversions from the South Fork of the Boise River in its September 14, 2018, letter regarding Elmore County's Application for Permit No. 63-34348 to divert water from Anderson Ranch Reservoir, attached in our email with these comments.

Benjankar, R., M. M. Sohrabi, and D. Tonina. 2017. Investigate measures to minimize the effect of operations of Anderson Ranch Dam on the South Fork Boise River between Anderson Ranch and Arrowrock Reservoirs, Final Report to U.S. Bureau of Reclamation. U. o. I. Center for Ecohydraulics Research, Boise, Idaho.

Benjankar, R., D. Tonina, J. A. McKean, M. M. Sohrabi, Q. Chen, and D. Vidergar. 2018. Dam operations may improve aquatic habitat and offset negative effects of climate change. Journal of Environmental Management 213:126-134.

Regarding the loss of high flows in the lower Boise River the Corps of Engineers noted in its *Lower Boise River and Tributaries, Idaho, Reconnaissance Study*, U.S. Army Corps of Engineers, May 1995 (the Rec Study) the loss of stream channel function caused by storage at the three current federal dams on the lower Boise River:

> A significant reduction of the spring freshet flow by the three projects on the Boise River has nearly eliminated the scouring flows that historically took place on an annual basis. This greatly detracts from the natural movement of bedload and sediment, and dewaters side channels that would otherwise fill with water each spring (USFWS, 1995). Such a lack of flushing flows contributes to cobble embeddedness, which decreases invertebrate productivity as well as available spawning habitat for salmonids.
> Regular water releases have affected the riparian plant community in a way that is typical of areas downstream of water storage projects. Previously, cottonwood and other riparian plants existed in a much wider band than exists today. High water flows were allowed to disperse throughout the floodplain, in contrast to the current situation. The riparian community is now concentrated along a very narrow strip adjacent to the river, and this has led to a consequent

> degradation of the habitat (USFWS, 1995). This is caused both by a decrease in the magnitude of flows and encroachment on the floodplain. Chart 5-1 demonstrates the change in flow conditions from pre-project to post-project conditions.

Rec Study at 5-2. The proposed storage increase alternative could exacerbate this problem.

2. Impact on bull trout

Bull trout are listed as a threatened species under the Endangered Species Act, and the South Fork of the Boise River is critical habitat for bull trout. Simply put, section 7(a)(2) of the Endangered Species Act, which obliges the Corps and any other federal agency to "insure that any action authorized, funded, or carried out by such agency … is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species," requires careful consideration of the impact of raising Anderson Ranch Dam and other water supply alternatives on bull trout.

3. Impact on other wild and native fish

The Study must consider the immediate impact of raising Anderson Ranch Dam on fish species other than bull trout (e.g., native redband/wild rainbow trout, mountain whitefish). The broader impacts to other Boise River fisheries – especially on the popular and valuable wild trout fishery and associated habitat in the South Fork and lower Boise River – should also be assessed. The EIS should disclose if the additional storage space in the reservoir will affect the current flow operations that provide a 300 cfs release in the fall and winter months, 600 cfs in the spring during the spawning season, and summer flows in the 1,600 cfs – 1,800 cfs range.

Not all of these impacts are immediately obvious. For instance, the native redband trout fishery is an interconnected meta population that reaches to the North, Middle and lower South Forks of the Boise River. Genetic studies by the Forest Service have established the genetic diversity and relationships of the redband populations in the upper Middle and North Forks of the Boise River. A 2009 study by Trout Unlimited of the South Fork Boise River fishery found genetic links in that blue ribbon fishery with a number of tributary populations in the Middle Fork and North Fork Boise watersheds. *Genetic evaluation of population structure and individual movement of rainbow trout in the lower South Fork Boise River and associated tributaries*[8]. Thus, the storage project alternative should be evaluated in the context of its potential impacts not only

[8] http://www.tu.org/sites/www.tu.org/files/documents/summary%20of%20SFB%20genetic%20results%209-17-09.pdf

to trout populations in the footprint of the project and reservoir but also downstream and how the project might impact fish movement and, hence, population connectivity within the larger interconnected watershed.

4. Loss of riparian habitat

As discussed above, the Anderson Ranch Dam raise would remove high flows that maintain a properly functioning stream channel, and may impact existing low flow operations. It may also affect riparian habitat. Riparian habitat is vitally important to fisheries health. Riparian habitat contributes wood into streams, which in turn creates fish habitat by scouring and sorting streambed substrates and provides overhead cover from avian predators. It also produces terrestrial insects that represent a substantial component of trout diets during certain times of the year. Riparian areas also provide important ecological functions, such as providing stream shading and filtering nutrients and trapping fine sediments during runoff. The EIS should fully reveal the impact of the Anderson Ranch Dam raise alternative on downstream riparian areas and the associated wildlife.

As the Rec Study found for the lower Boise River:

> Riparian lands in the Boise River have historically been in a continuous state of change. The unregulated Boise River frequently flooded large areas adjacent to the river channel A flood event approximately every 2 years promoted the development of the floodplain, scoured upland areas, and exposed river cobbles, gravel, and sand. Areas where soils were either exposed or deposited by the river were colonized by cottonwood and willow, which serve as wildlife habitat and stabilize the floodway banks and flood fringe. The water-saturated dikes also provide appropriate substrate for the germination of cottonwood and willow seed. Historically, the riparian community naturally regenerated itself by this periodic natural disturbance. Seasonal flooding is an important factor in the life cycle of cottonwood trees.

Rec Study at 5-4 – 5-5. IDFG's September 14, 2018, letter further discusses this point.

5. Cottonwood reproduction

BOR should adopt and expand upon the Rec Study's discussion of the impact of proposed alternatives on black cottonwood galleries along the Boise River:

> Since construction and operation of the three upstream projects for flood control and irrigation, the process has been moderated to such a degree that the Boise River no longer creates an environment that allows for the regeneration of the riparian black cottonwood forest. The fluvial processes that

> maintained diverse, self-perpetuating populations of cottonwoods have been disrupted by damming the river. The dams have reduced the intensity of floodflows, and have shifted the time of their occurrence (as documented on chart 5-1). Floodflows now confined to the channel, and a lesser concentration of suspended sediment carried in the channel, have eliminated the process that creates alluvial seedbeds. Water levels no longer recede gradually, and do not provide the moisture to support seed germination of the black cottonwood trees. A narrow band of riparian vegetation has reestablished itself along the steep banks of the river.
>
> Loss of riparian habitat in the Boise River has negatively impacted the wildlife community and, in particular, the bald eagle. The lower Boise River has been identified as a prime wintering area for the bald eagle. Wintering bald eagles have three basic requirements :1) an abundant food supply; 2) suitable foraging habitat with adequate perch trees; and 3) protected areas where they can roost communally at night. Bald eagles are more susceptible to disturbances in roost areas than in perching and foraging areas.
>
> Black cottonwood trees are commonly used by bald eagles for perching and roosting. A prime example of critical bald eagle habitat along the Boise River is in the Barber Pool area, located between Diversion Dam and Barber Dam. Diversion Dam is located approximately 2 miles downstream from the Lucky Peak Project (see plate 2). There is considerable local interest in reestablishing the regeneration of black cottonwood trees for continuation of bald eagles and other wildlife.

Rec Study at 5-5.

6. Cumulative Impacts

As noted above, the current Boise Project facilities and water management have had significant impacts on the South Fork and lower Boise Rivers. Two additional projects that contemplate Anderson Ranch reservoir withdrawals via pumping—the Elmore County water project and the Cat Creek Energy storage project—are also underway. The impact of the Anderson Ranch dam raise and other EIS alternatives would be cumulative to these reasonably foreseeable water supply projects that are being pursued in the Boise River Basin. Constructing all of the projects would have huge impacts on the Boise River, its ecology, its fish and wildlife. These cumulative impacts should be studied in the Environmental Impact Statement.

D. THE STUDY SHOULD FULLY CONSIDER MITIGATION OF ADVERSE EFFECTS.

The *Principles and Requirements* require that "Mitigation of unavoidable adverse effects associated with each plan, strategy, or action is to be an integral part of all alternatives." At 12.

In addition, the Northwest Power Act contains an important legal requirement for Anderson Ranch Dam, because it is part of the Federal Columbia River Power System, to ensure reservoir operations protect, mitigate and enhance the fish and wildlife affected by the project and that fish and wildlife receive equitable treatment with hydropower and other uses, consistent with the Fish and Wildlife Program adopted by the Northwest Power and Conservation Council (USC 839b(h).[9] Mitigation of an Anderson Ranch Dam raise could include:

- A program to restore riparian habitat elsewhere commensurate with the amount habitat flooded around the raised reservoir;
- A program to restore riverine conditions on a currently degraded Boise River reach commensurate with the amount of riverine habitat flooded by the raised reservoir, such as rebuilding the fish ladder at, and remediating the sediment above, Kirby Dam, on the Middle Fork Boise River near Atlanta;
- Development of a fisheries restoration fund;
- Increased winter flows on the Boise River;
- BOR should consider implementation of regular flushing flows from Anderson Ranch Dam. The dam raise alternative, and its location at the head of the Boise Project, provides an opportunity to flexibly provide flushing flows and to back-fill the stream channel maintenance account in Lucky Peak Reservoir, without lessening overall Project storage.

  The Corps previously noted in the Rec Study that such flushing flows are also a flood control measure on the lower Boise River:

  > Vegetation growth continues to encroach upon the Boise River channel. The spring freshet that once took place annually is no longer present. As vegetation continually moves towards the center of the river from both banks, it increases the chance of flooding because of its reduced channel capacity. Consequently, flood control districts in the basin enter the channel with heavy mechanized equipment to remove woody vegetation. This action disturbs the stream bottom and riparian corridor in a more damaging fashion than if a high-water event caused the same amount of tree removal. Such a flushing flow has the effect of removing debris and live growth in the channel without causing any "unnatural" environmental damage. Such a controlled flow release mimics the natural type of high flow event that would take place in an unregulated system. By increasing the flow in this manner, cobble embeddedness in the stream would be reduced. Conditions for spawning salmonids would also be improved, as they would find more gravel that is suitable for digging in their redds. Such

[9] See https://www.nwcouncil.org/reports/poweract/4h_program for more information on the Northwest Power Act.

> flushing flows would also improve cottonwood regeneration, and may help control the spread of noxious plants. Purple loosestrife, a non-native species, has expanded its range tremendously in many reaches of the river. It is speculated that a high flow event, such as that described above, would help to dislodge this otherwise difficult-to-remove plant from the river channel.

Rec Study at 5-6.

- Fish screening of water diversions on the lower Boise River could lessen fish entrainment and mitigate for any fish losses revealed in the EIS.
- Dedication of some portion of new storage under the Anderson Ranch Dam raise alternative to increased winter flows in South Fork and lower Boise River could increase over-wintering fish survival and mitigate for fish losses revealed in the EIS.
- TU is concerned with the Anderson Ranch Dam release downramping that normally occur in August and September. Slower down-ramping rates could benefit the South Fork Boise River fishery and could be implemented without affecting overall Boise Project storage. The rapid flow down-ramping from 1800 cfs -- 1600 cfs to 600 cfs, and then from 600 cfs to 300 cfs occur in just a few hours, resulting in significant stranding of aquatic insects and all life stages of fish, including young of the year, juveniles and adults. A more moderate and slower down-ramping schedule that mimicked the historical hydrograph (see Figure 9.1 in Benjankar 2017 cited above) would likely be much less damaging to the aquatic resources in the South Fork below Anderson Ranch Dam. As a mitigation measure we recommend the following example down-ramping schedule that is slightly slower (more conservative) than the new down-ramping rates adopted by BOR for the last few years:
    - From 1800 – 1000 cfs: No more than 200 cfs flow drop daily
    - From 1000 – 600 cfs: No more than 100 cfs flow drop daily
    - From 600 – 300 cfs: No more than 50 cfs flow drop daily

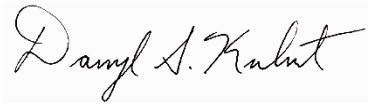
  The scale and impact of fish stranding with any change in ramping rates, including recent changes implemented by BOR, should be studied moving forward.
- BOR should honor the *Principles and Requirements*, at 10, emphasis on adaptive management when implementing mitigation for an Anderson Ranch dam raise. Pre-and post-project monitoring should be conducted to assess any adverse impacts of the dam raise on South Fork Boise River fishery, stream channel and riparian vegetation. Adverse impacts revealed from that monitoring should trigger re-evaluation of, and changes to, stream flow releases patterns from the dam. This includes implementing flushing flows to periodically flush fine sediments from trout spawning areas and to maintain side-channel habitats important to juvenile rearing. It should be made clear upfront in the contracts for the new storage water that adaptive mitigation may affect storage in the new Anderson Ranch reservoir space.

CONCLUSION

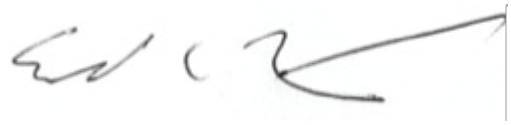
Trout Unlimited appreciates the opportunity to provide comments and stands ready and willing to work with the BOR and other stakeholders to find safe, reliable and environmentally friendly water supplies for the Treasure Valley.

Sincerely,

Peter R. Anderson
Counsel
Idaho Water and Habitat Program



Darryl S. Kuhrt
President
Ted Trueblood Chapter



Ed Northen
Chairman
Idaho Council

Alan Richardson
President
Hemingway Chapter

IDAHO DEPARTMENT OF FISH AND GAME
SOUTHWEST REGION
3101 South Powerline Road
Nampa, Idaho 83686

C.L. "Butch" Otter / Governor
Virgil Moore / Director

September 14, 2018

Phill Hummer
Idaho Dept. of Water Resources
Western Regional Office
2735 Airport Way
Boise ID 83705-5082

RE: Proposed Water Right Development, Application for Permit No. 63-34348—Elmore County, Board of Commissioners

Dear Mr. Hummer,

This letter is in response to a request from SPF Water Engineering, acting on behalf of Elmore County Board of Commissioners, for comment from Idaho Department of Fish and Game (Department) regarding the effects of construction and operation of a proposed water appropriation. The proposed action provided for review was the Application for Permit to Appropriate the Public Waters of the State of Idaho Number 63-34348. The letter requesting comment stated: "Water Appropriation Rules (IDAPA 37.03.08, 40.05.g) require applicants to seek letters of comment on the effects of the construction and operation of projects proposed by certain water right applications."

The Application for Permit to Appropriate the Public Waters of the State of Idaho Number 63-34348 identifies a point of diversion for the project located on Anderson Ranch Reservoir (ARR), which is on the South Fork Boise River (SFBR) in Idaho Department of Water Resources (IDWR) Administrative Basin 63. Diverted water would be transferred to IDWR Basin 61 for the purpose of groundwater recharge and irrigation. The review materials also included a brief narrative with the following description of the proposed project:

> "Water will be pumped from the South Fork Boise River to Little Camas Reservoir for storage, then diverted through the existing Mountain Home Irrigation District canal to the divide between the South Fork Boise drainage and Long Tom Creek drainage (T1S, R8E, S22). The water will flow through an existing tunnel, which may be enlarged for additional flow, to the streambed of East Fork Long Tom Creek, to Canyon Creek. Water will then flow down Canyon Creek to the Mountain Home Irrigation District diversion. At the

diversion, water can be diverted to Mountain Home Reservoir for ground water recharge (through reservoir leakage) and/or irrigation purposes, to the gravel pit area for ground water recharge, or can be allowed to flow downstream in Canyon Creek for ground water recharge via the Creek bed. A beginning point and ending point were used to describe the ground water recharge place of use via the creek beds."

The Application for Permit indicates water could be pumped from ARR up to a rate of 200 cubic feet per second (cfs) at any time year-round for the purpose of Diversion to Storage. The applicant is seeking storage rights for 10,000 acre-feet annually (afa) for the purpose of Ground Water recharge year-round and 10,000 afa for Irrigation Storage from March 1 to November 15 annually. Thus, the applicant may potentially withdraw a total of 20,000 afa from ARR at a maximum rate of 200 cfs.

Fish and Wildlife Management Context

The purpose of these comments is to assist the decision-making authority by providing technical information addressing potential effects on wildlife and wildlife habitat. It is not the purpose of Idaho Department of Fish and Game to support or oppose this proposal. Resident species of fish and wildlife are property of all Idaho citizens, and IDFG and the Idaho Fish and Game Commission are expressly charged with statutory responsibility to preserve, protect, perpetuate and manage all fish and wildlife in Idaho (Idaho Code 36-103(a)). This analysis is conducted pursuant to our statutory charge and direction as provided by Idaho law.

Hunting, fishing, trapping and wildlife viewing are major economic drivers in Idaho, supporting over 14,000 jobs and hundreds of small businesses, many of which are in rural parts of our state and generating over $1.4 billion per year for Idaho's economy. For example, an economic survey of fishing was completed for the entire state in 2011. Spending by anglers on fishing trips to Elmore County ranked 15th out of the 44 Idaho counties. Angler spending on fishing with destinations in Elmore County was about $14 million (IDFG unpublished data).

The Department divides responsibilities for managing the fish and wildlife resources of the Boise River drainage between 2 administrative regions. The Department's Southwest Region manages fisheries and wildlife populations in the Boise River system below Anderson Ranch Dam, as well as in the Canyon Creek drainage. The Department's Magic Valley Region manages resources associated with ARR and SFBR above the reservoir, as well as the Little Camas drainage, including Little Camas Reservoir.

The Fish and Game Commission has approved several wildlife and fisheries management plans relevant to resources within the SFBR basin. Wildlife management plans describing population status, objectives, and priority management actions for species occurring within the SFBR include the Idaho Elk Management Plan 2014-2024, the Idaho Mule Deer Management Plan, 2008-2017, and the State Wildlife Action Plan (SWAP).

Fisheries management priorities and objectives are summarized in the Department's Fisheries Management Plan, 2013-2018 (FMP). Within the FMP, management frameworks are applied to individual waterbodies. For example, a "general" rules framework is applied to provide harvest opportunities; "trophy" and "quality" rules frameworks are applied to increase opportunities to catch and harvest larger fish; and a "wild" rules framework is intended to conserve and increase angling opportunities for native trout.

Management of bull trout (*Salvelinus confluentus*) within SFBR is jurisdiction of the US Fish and Wildlife Service (FWS) because the species is listed Threatened under the federal Endangered Species Act of 1973. For this reason, the species is under "conservation" rules framework in the FMP, which prohibits harvest. Management of bull trout is particularly relevant to the SFBR because ARR operations are subject to terms established in the 2005 FWS Biological Opinion (BIOP; USFWS 2005), which identifies pool volumes and discharge rates to support the bull trout fisheries.

The bald eagle (*Haliaeetus leucocephalus*) was delisted from Endangered Species Act (ESA) in 2007 but is currently protected by the Bald and Golden Eagle Protection Act. This species, along with the majority of native birds in Idaho are also subject to the federal Migratory Bird Treaty Act.

Approach to assessment of potential impacts

In this report the Department summarizes potential impacts related to implementation of this proposed water right. We have organized the report under the following primary topics:

- Description of Geographic Context and Fish and Wildlife Resources
- General Riverine Ecological Concepts
- Fish and Wildlife Resource Considerations
- Analysis of Potential Consequences for Fish And Wildlife Resources.

We anticipate constraints on the amount and timing of water availability necessary for implementation of this project. For example, constraints on reservoir operations during dry years may reduce the amount of water available or the timeframe in which it is available. The difficulty of predicting when withdrawals would occur and the timing and volume of such withdrawals affects the specificity of our analysis.

With specific respect to the limitations of our understanding of the project, we are limiting analysis to the SFBR. Withdrawing water from SFBR has potential downstream impacts below SFBR, including impacts to Arrowrock Reservoir, Lucky Peak Reservoir, and Boise River below Lucky Peak Reservoir. However, these impacts would depend on any changes to the operation of Arrowrock or Lucky Peak dams. These are economically and socially important fisheries, but we

cannot predict how or if dam operations would change, so any analysis of impacts further downstream would be conjectural.

Additionally, effects of construction and implementation of the project on construction and operation of a pumping station and water conveyance pipes between ARR and Little Camas Reservoir cannot be included in this review because specific locations and designs are unknown to us. This infrastructure has the potential to affect upland wildlife habitat, displace wildlife, and affect big-game migration behaviors. Effects of additional storage and drawdown cycles on Little Camas Reservoir would be dependent on the schedule of such activities and whether a conservation pool were established to support fisheries. Increased storage potential may benefit the fishery and anglers. Effects on the Canyon Creek drainage would also depend on the schedule and volume of flows and whether an annual flow cycle would be established. For example, establishing annual flow could benefit fish and wildlife, but erratic flow cycles have the potential to have negative impacts.

Description of Geographic Context and Fish and Wildlife Resources

The SFBR comprises a drainage basin of approximately 1300 square miles located in southwestern Idaho. The SFBR is a major tributary within the Boise River drainage, which is the drainage basin serving the highest density human population in the state. Lucky Peak Reservoir, Arrowrock Reservoir (286,600 af), and ARR (479,000 af) were established 1915-1955 for the purposes of irrigation storage and providing flood protection to downstream urban and agricultural infrastructure. Additional uses include power production, recreation, and fisheries. Management of the 3 dams is coordinated to address flood risks and deliver water to downstream users.

Fisheries

Anderson Ranch Dam was constructed 1941-1950, and the reservoir storage capacity is approximately 479,000 af. The upstream reach of SFBR is the primary tributary to the reservoir, and Lime Creek, Camas Creek, and Fall Creek are smaller tributaries. ARR storage contains a layer of cold, highly-oxygenated water conducive to cold-water fisheries production. ARR's mixed-species fishery includes mountain whitefish (*Prosopium williamsoni*), rainbow trout (introduced populations of *Oncorhynchus mykiss*), bull trout (*Salvelinus confluentus*), kokanee salmon (*Oncorhynchus nerka*), landlocked Chinook salmon (*Oncorhynchus tshawytscha*), yellow perch (*Perca flavescens*), and smallmouth bass (*Micropterus dolomieu*). The majority of ARR anglers target kokanee and smallmouth bass, and the Department's management goal for the ARR fishery is to provide a catch rate of 1 kokanee per hour with a mean size of 12-14 inches. In the most recent IDFG Economic Report (2011 unpublished data) ARR generated 25,840 angler trips annually at an economic value of nearly $4.3 million to the economy.

ARR kokanee salmon and bull trout express an adfluvial life history, seasonally migrating between ARR and the SFBR upstream from the reservoir. The SFBR fishery above ARR consists of a mixture of native and nonnative sportfish, including redband trout (native populations of

Oncorhynchus mykiss), rainbow trout, brook trout (introduced; *Salvelinus fontinalis*), and mountain whitefish. The adfluvial bull trout and kokanee salmon are seasonally available within this fishery. The kokanee spawning run represents a unique experience for campers and day-trip recreationists. Fisheries in upper reaches are regulated mostly under general rules management with emphasis on a put-and-take rainbow trout fishery, but a small section in the upper drainage is managed for quality trout, and bull trout are under conservation rules management. An active stocking program within the SFBR and Big Smoky Creek supplements the popular fishery and includes one put-and-take pond.

Discharge from ARR is managed by the Bureau of Reclamation for uses that include irrigation, flood control, power production, and fisheries management. River flow regimes below ARR have been managed for decades. The manifestation of this regulation is a structured flow regime consisting of minimal flows during the non-irrigation season and managed releases during the irrigation season, which typically spans the period of April through August. Discharge of cold, highly oxygenated water to the SFBR channel contributes to water quality and forage productivity. Seasonal ecological flows have been established with current reservoir management practices to support high sportfish density and growth rate. These conditions have contributed to the establishment of a nationally-renowned trout fishery, and is one of the most popular wild trout fisheries in the state. The upper portion of this reach is accessible by road access. The lower reach is canyon-bound and lacks road and trail access, and it is a popular day- and overnight float trip destination and is a unique angling experience in southwest Idaho. Based on the IDFG 2011 Economic Survey the SFBR generated 28,600 angler trips and $4.6 million in trip-related spending annually.

The recreational fishery occurring in the tailwater reach of the SFBR below ARR primarily comprises populations of wild rainbow trout and mountain whitefish. The Department manages the rainbow trout fishery under trophy trout regulations. Migratory bull trout occur at low density. Native nongame fish populations include largescale sucker (*Catostomus macrocheilus*), northern pikeminnow (*Ptychocheilus oregonensis*), and sculpin (*Cottus* spp.). The fishing season is closed April 1st through Memorial Day to protect spawning rainbow trout.

The SFBR terminates in Arrowrock Reservoir (AR) where it joins the Middle Fork of the Boise River and becomes the mainstem Boise River. Lucky Peak Reservoir is immediately below Arrowrock Reservoir. The two large reservoirs offer popular sport fisheries for kokanee salmon, rainbow trout, and to a lesser extent, smallmouth bass. Both Arrowrock and Lucky Peak reservoirs are managed with a goal of producing larger kokanee salmon (exceeding 14”) with average catch rates exceeding 0.3 kokanee/hour. Additionally, adfluvial bull trout utilize Arrowrock Reservoir as rearing and wintering habitat. Based on the IDFG 2011 Economic Survey, Arrowrock Reservoir generates 20,924 angler trips annually at an economic value of $1.4 million while LPR generates 45,273 annual trips at a value of $3.4 million.

The Little Camas Creek drains into ARR and is dammed to form Little Camas Reservoir, which stores water for irrigators. Little Camas Reservoir is a productive hatchery-trout fishery during good water years, but it lacks a conservation pool and is subject to extreme drawdown during drought years. This fishery is drought sensitive and has had several fish salvages ordered by the Idaho Fish and Game Commission.

The Canyon Creek drainage drains to CJ Strike Reservoir, so Canyon Creek is a tributary of the Snake River. The fishery in this drainage is limited and may contain a remnant population of redband trout, but the current potential of the fishery is likely limited by flow and perhaps water quality, especially temperature. The creek has intermittent flow, and the creek bed passes through Mountain Home to its mouth at CJ Strike Reservoir. Because predicted seasonal flow patterns are not known to us, meaningful analysis of effects on this fishery is not possible at this time.

Wildlife

The Department divides the SFBR among several game management units. The upper portion of the SFBR drainage and ARR comprise Unit 43. This unit is predominately conifer forest administered by the USDA Forest Service Boise and Sawtooth National Forests. Economically important wildlife include big game, such as elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), furbearers, such as beaver (*Castor canadensis*) and American marten (*Martes americana*), and upland birds, such as dusky grouse (*Dendragapus obscurus*). Waterfowl also occur in this unit, but opportunities for hunting are limited when the reservoir freezes.

The lower elevations in the drainage on the south side of ARR and including some tributary basins are located in Unit 44. Economically important wildlife populations also include mule deer, elk, and pronghorn, as well as furbearers, such as beaver and American marten, and upland game, such as grey partridge (*Perdix perdix*) and chukar. Greater Sage-grouse currently occur in the western portion of the unit.

Portions of the SFBR drainage below ARR are primarily in Unit 39. Migratory populations of elk and mule deer populations occupying higher elevations of several game units during late spring through early fall move to winter range at lower-elevation foothills of units 39 and 45. Upland game in Unit 39 includes chukar (*Alectoris chukar*), California quail (*Callipepla californica*), dusky grouse (*Dendragapus obscurus*) and ruffed grouse (*Bonasa umbellus*).

Species of greatest conservation need as identified in SWAP associated with riparian habitat in the SFBR drainage currently or historically include Lewis' woodpecker (*Melenerpes lewis*), mountain quail (*Oreortyx pictus*), western toad (*Anaxyrus boreas*), little brown myotis bat (*Myotis lucifugus*), hoary bat (*Lasiurus cinereus*), and silver-haired bat (*Lasionycteris noctivagans*). In addition, the SFBR includes habitat for nesting bald eagles (*Haliaeetus leucocephalus*), osprey (*Pandion haliaetus*), and a wide variety of waterfowl, shorebirds, and neotropical migrant songbirds.

General Riverine Ecological Concepts

The Department's ability to meet management objectives depends on availability of habitat that provides for adequate survival rates and reproductive productivity of fish and wildlife populations. Habitat is seldom a stable, static entity. Habitat values are maintained by the interaction of disturbance and regeneration processes. In this section we review key ecological concepts that form the framework of our analysis.

Stream dynamics and their alteration

Impacts to river function often involve alteration of the hydrologic regime. Poff et al. (1997) described the hydrologic regime as the magnitude, timing, frequency, duration and rates of change of streamflow. The character of the drainage and native landscape interact with the flow regime to drive ecological processes and establish habitats within which native and resident species have adapted. These complex, dynamic ecosystems are made up of a network of channels and floodplains that are intermittently connected via changes in flow (Humphries et al. 2014), and the ecological processes that support these ecosystems are generally predictable with respect to the longitudinal and lateral changes in production, discharge, and function (Vannote et al. 1980).

Substantial alteration to the aforementioned characteristics of the natural hydrologic regime will alter habitat, ultimately affecting the dependent fish and wildlife species (Vannote et al. 1980, Junk et al. 1989, Thorp and Delong 2002, Thorp et al. 2008). Throughout the nation standards have been developed to protect stream processes, defining bounds for consumptive and non-consumptive use in order to preserve necessary hydrologic regimes and subsequent river function (e.g., environmental flows, ecological flows, ecosystem flows, biological flows, etc.; Baron et al. 2002, Hauer et al. 2004, MacDonnell 2009, Petts 2009, Smith 2009, DePhilip and Moberg 2010).

Hydrograph stratification

Hauer et al. (2004) highlight five primary time intervals during the water year, with each interval having specific and largely distinct ecological conditions.

- Interval 1 is the winter period, which generally extends from early November to late February or early March. In the SFBR, the primary winter ecological constraint is adequate fish habitat in the form of sufficient stream flows for rainbow trout, bull trout, and mountain whitefish.
- Interval 2 is the initiation of spring snowmelt, usually in March or April. This is the period where flows gradually begin increasing from the low flows experienced during the winter. This is the period when spring-spawning rainbow trout begin migrating.
- Interval 3 is the spring high-flow period, usually from April through June, when under natural conditions, snowmelt generates the flows necessary to accomplish channel maintenance work in the river channel and maintain a functioning river-floodplain interface. The high-flow period is essential for maintaining riparian habitats and for those wildlife species that are dependent on healthy riparian habitat.

- Interval 4 is the period after high flow, usually in late June and July, and is important because the rate of the decline in the falling limb of the hydrograph can affect the regeneration and sustainability of the riparian cottonwood forest.
- Interval 5 is the summer and fall hydrograph recession period (generally from July through October), up to the onset of winter. In SFBR below ARR, this period is somewhat modified by water management for irrigation. River flow is typically maintained through August and reduced in September following the irrigation season.

Winter fish ecology

In northern latitude rivers, winter can be a very stressful period for stream-dwelling fish. In fact, overwinter survival may be the most prominent limiting factor for stream-dwelling salmonids (Cunjak 1996) when they face a variety of stressful conditions. First and foremost, water temperatures can be extremely cold. Because salmonids are poikilotherms that do not hibernate, cold water temperatures limit their swimming and acceleration abilities, which make them more susceptible to displacement and predation (Huusko et al. 2007). Moreover, metabolic processes are slowed at such temperatures, and stream-dwelling trout often suffer a metabolic deficit during acclimation to rapidly declining water temperatures at the onset of winter (Cunjak and Power 1987, Cunjak et al. 1987). Consequently, energy reserves may not be sufficient to survive the winter, and added stress, such as flow reductions, may exacerbate their metabolic deficit.

A second difficulty for salmonids in winter is that streamflow is usually reduced to the lowest levels of the year. The availability of suitable physical habitat is already considered the primary factor regulating stream trout populations in winter (Chapman 1966), and additional streamflow reductions from water withdrawal may magnify this shortfall, further limiting habitat availability and reducing food supplies for stream-dwelling fish.

A third winter stressor on stream-dwelling salmonids in northern latitudes is ice formation. Three types of ice—frazil ice, anchor ice, and surface ice (such as ice shelves)—are common in streams, and all can be harmful to salmonids (Brown et al. 2011). In some situations, anchor ice may fill pools where trout would normally aggregate during winter (Brown and Mackay 1995, Jakober et al. 1998), the result being increasing stream velocities in whatever habitat remains. The shallower the river, the more detrimental ice will likely be to stream-dwelling fish.

Aquatic habitat, riparian habitat, and channel maintenance

High streamflows are a necessary component of the annual hydrograph (Leopold et al. 1964). As reviewed in the seminal paper by Poff et al. (1997), high flow events are crucial to the long-term health of river and floodplain ecosystems because they put in motion a number of important stream ecosystem processes. Bankfull streamflow initiates bedload transport and scouring of vegetation, which helps maintain channel morphology. High flows inundate the floodplain, which sustains and regenerates important streambank and floodplain vegetation such as cottonwoods and willows. High flows also recruit new woody material to the channel and rearrange existing woody debris, creating

a mosaic of complex habitat that is important for fish, invertebrates, and other animals. Finally, high flows help flush spawning habitat for salmonids, cleaning fine sediment from the gravel beds where salmonids build redds to incubate their eggs.

Fundamentally, the shape and function of the river channel, and therefore the habitat for fish and other aquatic organisms, is determined by the physical processes of moving water and sediment in the channel and between the channel and the floodplain (Poff et al. 1997). Rivers migrate across their floodplain by eroding material from the outside bank of meander bends and depositing material on the inside of meander bends, and this occurs primarily at or above bankfull discharge (Leopold et al. 1964).

The ability of a river to scour its channels and maintain functioning floodplains is dependent not only on regular attainment and exceedance of bankfull flows, but is also dependent on the duration of bankfull flow events. While it is true that bankfull flows are not needed every year and naturally do not occur every year, it is also true that attainment of bankfull discharge for only a few days each year may not be adequate for maintaining channel capacity and floodplain function (Schmidt and Potyondy 2004). Indeed, the highest-magnitude streamflows, those with a recurrence interval of 50 or more years, may be necessary for creating important pool habitats and rearranging the largest bedload particles in rivers (Whiting 2002).

Schmidt and Potyondy (2004) describe and highlight the following ecological benefits of channel maintenance flows:

- Conveyance of water and erosion products from tributary areas through the stream system without aggradation or degradation;
- Maintenance of the relationship between the channel and floodplain by temporarily storing flood flows on the floodplain;
- Maintenance of pools, riffles, meanders, and other physical habitats necessary to sustain aquatic ecosystems;
- Providing navigation conduits on larger streams and rivers for recreational floating and power boating;
- Stabilization of streambanks by riparian vegetation and rootwads which protects banks from erosion and collapse;
- A vegetation filter that removes and stabilizes sediments and nutrients moving toward the stream from adjacent slopes;
- Surface roughness on the floodplain favorable for recharging groundwater systems;
- Effective floodplain soil conditions to detain flood water for later release to sustain low flows;
- Moist corridors that act as fuel-breaks, fire line anchor points, and safety zones;
- Large woody debris which helps create structural features that form pools and bars;

- Shade to the stream that maintains cooler water temperatures necessary to sustain cold-water aquatic life.

Floodplain vegetation in the SFBR includes black cottonwood as a dominant component. Seed germination and seedling survival of cottonwoods is dependent on the combination of flood events, which provide necessary moisture at the right time, and flood scouring and deposition, which provides the ideal barren soil seed bed (Rood et al. 1995, Braatne et al. 1996, Mahoney and Rood 1998, Rood et al. 2003). Critical to cottonwood seedling success is the timing and rate of decline of the falling limb of the hydrograph (Mahoney and Rood 1998). Cottonwoods typically release their short-lived seeds after the peak flood flow has dramatically declined. Seeds land on moist, barren sand and cobble bars left after the flood. They rapidly germinate but rely on a slow decline of water levels to maintain soil moisture needed for seedlings to survive the summer drought. Numerous studies have shown that when this process is disrupted by flow alteration and/or diversion during or after spring flood flows, cottonwood recruitment declines (Rood et al. 1995, Braatne et al. 1996, Merigliano 1996, Rood et al. 2003, Braatne et al. 2007).

Flow diversions that reduce base flows have also been shown to negatively affect cottonwoods. Persistence of cottonwoods is dependent on sufficient streamflow, which maintains the local alluvial groundwater table during drought periods (Braatne et al. 1996, Mahoney and Rood 1998, Rood et al. 2003). For example, cottonwoods along sections of the Big Lost River completely died in 5 years when channels were dewatered for irrigation (Rood et al. 2003). When the extent of wetted area within river channels is reduced due to diversion, seedlings may opportunistically find suitable sites for growth below the baseflow level, but they are scoured the following spring during even small floods (Braatne et al. 2007).

The flows necessary to mobilize channel sediments and create barren alluvial bars necessary for cottonwood seed germination (Hauer and Lorang 2004) will become less frequent if flows during late spring or early summer are appreciably reduced. Since cottonwoods are a relatively short-lived tree (100-200 years), alteration causing a decline in seedling recruitment could lead to an age structure of the cottonwood community dominated by older individuals. Without sufficient recruitment of new seedlings, the long-term health of the riparian cottonwood ecosystem along the floodplain of the SFBR is in jeopardy. Additional diversions would further truncate flood flows necessary for creating sand and cobble bars for cottonwood seed germination and would further alter the rate of decline of the falling limb of the hydrograph—both causing worse conditions for cottonwood persistence.

Steenhof et al. (1980) found that bald eagles preferred tree perches compared to cliffs, ice, logs, or the ground, and preferred stout, horizontal branches. In this study, nearly all perches were within 30 m of the river, 58% of the perches were within 5 m of the river bank, and eagles preferred mature cottonwood trees. If high flows were inadequate to promote cottonwood regeneration, the Department would anticipate the eventual decline and potential loss of bald eagle habitat.

Fish and Wildlife Resource Considerations

Fisheries in ARR and SFBR are affected by the volume of water and the temporal pattern of changes in volume. The proposed water right and withdrawal from ARR has the potential to alter reservoir filling. Removing water from ARR would also change reservoir discharge. The timing of removal of water from the reservoir and the timing of changes to downstream flow are not necessarily coupled, so changes in flow downstream would depend on reservoir management decisions.

Water withdrawal could affect fish populations in either the reservoir or the downstream river by directly increasing mortality or decreasing productivity (e.g. stranding mortality or reproductive failure), or changes could reduce habitat quality by compromising habitat function or complexity. The rate, amount, and timing of changes to the volume of water (e.g., the release schedule from ARR) may also affect food web interactions, reproductive behaviors, and basic ecological processes. As reviewed previously, riparian vegetation is reliant on disturbance regimes, particularly flooding. Besides providing valuable high-productivity habitat for terrestrial wildlife, riparian vegetation also affects instream conditions and water quality. For example, riparian habitat provides shading and mitigates the stream temperature warming rate.

Thus, from a perspective of the Department's mission to preserve, protect, perpetuate, and manage the State's fish and wildlife resources, primary concerns regarding withdrawal of water from ARR include the following primary considerations.

Reduction of reservoir pool height during migration of bull trout and kokanee.

The ARR fishery includes adfluvial populations of bull trout and kokanee salmon. Thus, fish populations seasonally occupying the upper basin could be affected when reservoir draw-downs coincide with spawning runs and increase travel distance for migrating fish. Channels through the upper portion of the ARR basin lack structural cover during low pool height, which exposes migrating fish to increased predation risk.

Entrainment of sportfish resulting from the diversion of water.

The proposed project would involve pumping water at rates up to 200 cfs from ARR. At this velocity, the potential to remove fish from the reservoir through the diversion works is substantial. The Little Camas sport fishery is made up of illegally introduced smallmouth bass and rainbow trout, but is dominated by the hatchery rainbow trout. It is possible that fish from the Anderson Ranch Reservoir fish community (e.g. yellow perch) may be transported with the pumped water, thus introducing new fish species into Little Camas and any downstream fishery. Repeated introductions, as would be expected with a water right, increase the likelihood of successful colonization. Under this theoretical scenario, a sustained yellow perch population would likely compete with other resident sportfish and conflict with current management goals.

Reduced flow during periods of low flow, particularly during winter.
As discussed previously, winter conditions are particularly challenging for fish, and winter conditions are often considered limiting for fish populations. In the SFBR, lowest flows occur following the irrigation season, generally from mid-September through March. Additional flow reductions could increase winter mortality or reduce the condition of fish prior to spawning.

Flow reduction or reservoir pool reduction that results in stranding mortality.
Withdrawing water from ARR would reduce the reservoir pool and potentially affect reservoir discharge. During periods of decreasing flow, fish can become stranded as habitat is dewatered. The risk of stranding is particularly high when fish are trapped in off-channel pools or when the flows are reduced suddenly. Because juvenile salmonids conceal almost exclusively along shore, fluctuations in discharge, especially during the day, can result in fish stranding, and may lead directly to fish mortality (Bradford et al. 1995, Bradford 1997).

Loss of high flows that maintain channel and floodplain dynamics.
The SFBR is in a disturbance-prone ecosystem, and the fish and wildlife adapted to this ecosystem depend on disturbance cycles that form and maintain habitat. Key requirements for fisheries production include cold, highly oxygenated water, access to spawning gravel, concealment cover and channel complexity to reduce predation vulnerability, and abundant aquatic invertebrate productivity. Mesic riparian habitat represents a high-productivity source of forage for herbivores, including elk and mule deer. Reduction of mesic riparian vegetation may displace big game to nearby irrigated fields and contribute to wildlife conflicts on private land. Maintaining key ecological attributes depends on periodic high-flow events.

Analysis of Potential Consequence for Fish And Wildlife Resources.
In this section, we review each of the above fish and wildlife considerations in the context of proposed water diversions. This section is intended to present to the applicant possible outcomes of the project and indicate uncertainties about the outcome dependent on unknown fish and wildlife responses or unknown details of the proposed plan.

Reduction of reservoir pool height during migration of bull trout and kokanee.
Adfluvial fish populations migrating between ARR and the upper basin could be affected when reservoir draw-downs coincide with spawning runs and increase travel distance for out-migrating fish. Implementation of the water right has the potential to lower the pool height during the out-migration of adfluvial populations.

Bull trout out-migrations from ARR occur in March through early May, and kokanee out-migrations occur in July and August. Bull trout return to the reservoir during the late fall. During the bull trout out-migration, the reservoir is generally at its highest level and SFBR flow rate above the reservoir is high. During this period, withdrawal from ARR at 200 cfs would have minimal

implications for bull trout out-migration except in situations when the reservoir is at a low level at the beginning of the irrigation season.

For kokanee, this period is generally in the latter half of the irrigation season and during the descending portion of the hydrograph. Pool volume would be decreasing but not typically at minimal pool volume, but pool volume would be variable from year to year at the time of spawning out-migration. We anticipate unappropriated water would be unavailable during this period.

Water uses that would lead to a reduction of the pool level during out-migration periods would increase vulnerability of migrating fish to predation. Lower pool levels would also increase the length of migration corridors associated with the delta of sediments that accumulate at the upper end of ARR. Channel formation and dynamics can reduce outmigration success by creating unstable channel banks. Additional data would be needed to more specifically analyze effects of reduced pool flow on adfluvial populations of bull trout and kokanee.

Entrainment of sportfish resulting from the diversion of water.
Pumping water from a fish-bearing waterbody has the potential to entrain (remove) fish. As the velocity of the intake increases, fish are progressively less able to escape the intake current. Fish entering the pump may be killed or removed with the diverted water. If the pump is protected with a screen, the velocity of water passing through the screen (i.e., the approach velocity) has the potential to impinge fish on the screen if the velocity is too high. Implementation of the water right has the potential to entrain fish at the point of diversion.

The application does not include description of the diversion works. A high-capacity pump would be expected to create water currents in proximity to the intake that could not be overcome by fish. If mortality on fish populations is to be minimized or avoided, design of the diversion structure and pump would need to include measures to exclude fish from the intake and avoid approach velocities that could immobilize fish on any screening. Numerous studies have evaluated screening methods for diversions, but most applications are for canal diversions or similar structures rather than pumps (e.g. Zydlewski and Johnson 2002). Current research suggests the need for individualized evaluation of pump works relative to the fish assemblage at the point of diversion and design constraints or opportunities associated with each project (Baumgartner et al. 2009).

Reduced flow during periods of low flow, particularly during winter.
Winter flows are believed to be one of the most important drivers of rainbow trout density. In a 2015 study of rainbow trout status in SFBR (Butts et al., 2017), the carrying capacity of winter habitat was considered to be more important for population growth than was overall reproductive output. As described previously, winter habitat quality—and, thus, the carrying capacity of winter habitat—is related to the magnitude of winter flows. Implementation of the water right has the potential to reduce discharge from ARR during the winter period and negatively affect the fishery.

Discharge from ARR is lowest following the irrigation season, dropping to low flow rates during the period of mid-September through late February or March during most years. Current discharge rates target minimally 300 cfs during winter and often exceed this flow (USGS 13190500 gage data) to address fisheries needs. As summarized in the 2005 FWS Bull Trout BIOP:

> "Reclamation has flow targets in the South Fork Boise River to support fish habitat and to benefit rainbow trout spawning. The minimum flow target from September 16 to March 31 is 300 cfs. Reclamation will meet this target in 95 percent of years. In the remaining 5 percent of years, flows may drop to as low as 122 cfs. The minimum flow target from April 1 to September 15 is 600 cfs. In years of low carryover, Reclamation will provide at least 300 cfs through April. April to September flows will be at least 600 cfs in 90 percent of years, at least 300 cfs in 98 percent of years, and at 114 cfs during its lowest flow. April flows will be at least 600 cfs in 74 percent of years and as low as 300 cfs in 15 percent of years."

According to USGS data for the river gage at Anderson Ranch Dam (USGS 13190500), SFBR discharge is typically lowest during the month of December, averaging 473 cfs since 1943. During the most recent reporting period, 2016-17, December flow averaged 315 cfs. Small changes in reservoir management could have amplified effects during winter low-flow periods for reasons outlined in previous sections.

If water withdrawal were to reduce winter flow rates, the Department would expect reduced population density and reduced population growth rate for salmonids. Conversely, evidence suggests that increased winter flows would increase the carrying capacity of the river and increase juvenile winter survival.

Flow reduction or reservoir pool reduction that results in stranding mortality.
Reservoir pool reduction occurs annually as water is discharged from ARR during the irrigation season. Fish stranding as a result of normal reservoir operations have not been reported. During extreme reservoir draw-downs, the reservoir is not dewatered but has rarely gone below a target 50,000 af minimum pool (USBR 2016). Implementation of the water right has the potential to alter the existing discharge below Anderson Dam in such manner as to increase salmonid stranding.

In a study of stranding mortality on SFBR below ARR, Dauwalter et al. (2013) summarized typical flow management related to the rate of flow reductions:

> "Flows released from Anderson Ranch Dam are managed by the U.S. Bureau of Reclamation (Reclamation) to fulfill irrigation, flood control, and fish and wildlife needs (USFWS 2005). To support fish habitat and spawning, minimum flows from April 1 to September 15 are 600 cubic feet per second (cfs). From September 16 to March 31, minimum flows are 300 cfs. Ramping rates to decrease flows from 1,000 to 600 cfs from

> April 1 to September 15 are a maximum of 35 cfs per 10 minutes for 1 hour, and ramping rates to decrease flows from 600 to 300 cfs from September 16 to March 31 are a maximum of 35 cfs per 10 minutes (USFWS 2005). In practice, these guidelines typically result in two periods of rapid downrampings on the South Fork Boise River. For example, in 2011 flows were decreased from 1,600 to 600 cfs over 1.5 days in mid-August, and flows were again reduced from 600 to 300 cfs overnight on September 15."

Dauwalter et al. (2013) documented fish stranding at all down-ramping periods, and the majority of stranded fish were age-0 rainbow trout (i.e., young-of-year). However, the majority of stranded fish observed were associated with off-channel pools. Active research topics include characterization of stranding patterns and population-level effects of stranding, as well as methods to manage the rate of flow down-ramping to minimize stranding mortality.

Considering that strandings were documented at all standard down-ramping periods and did not appear to vary linearly with flow levels, the proposal to withdraw water from ARR may not affect the rate of stranding within normal operation parameters. However, if the project were to result in increased rate of down-ramping, higher rates of stranding would be expected. Down-ramping effects at flow rates other than those observed by Dauwalter et al. (2013) have not been studied. If the project were to result in down-ramping at atypical flow rates, additional study would be required to evaluate stranding rates.

Loss of high flows that maintain channel and floodplain dynamics.
High flows serve a vital function in maintaining channel characteristics, including spawning substrate, required by fish and other aquatic organisms. Disturbance regimes from flows that inundate the floodplain are also required to maintain riparian habitat, which in SFBR includes cottonwood. Implementation of the water right may reduce the frequency and duration of maintenance flows under some circumstances.

All intervals could potentially experience altered flow because the proposed water withdrawals have a year-round season of use. However, as acknowledged previously, withdrawals are likely to be constrained by other users, such as those with senior water rights. The most likely period when withdrawals would occur in the proposed project would be during high flow periods of the spring and early summer freshet when unappropriated water would be available for discharge.

Predicting the effects of withdrawing water from ARR on SFBR flow during high water is complicated by BOR dam operations. Withdrawal from the reservoir pool does not necessarily result in a decrease in flow through the dam. As a basis for discussion, we will assume that reduction in discharge during flood releases would be reduced at a rate equal to the maximum rate of diversion proposed for this project, 200 cfs.

Historically, discharge from ARR during flood events has approached 10,000 cfs, but the USGS gage at ARR dam have recorded flows exceeding 7000 cfs just 6 times since ARR was completed in 1950, which is just under 10% of years during that period. During such high flows, reduction of flow by 200 cfs associated with this project would be negligible from the standpoint of ecological effects. The challenge, however, is determining the flow at which channel and floodplain dynamics would be impacted. At annual high flows below some unknown threshold, a reduction of 200 cfs would be expected to reduce in-stream habitat quality, limit reproduction by reducing spawning substrate maintenance, and reduce riparian regeneration, as summarized previously.

Bankfull discharge appropriate for floodplain maintenance flows can be determined empirically by measuring the discharge at which flooding begins to flow out of the stream channel and across the floodplain. However, such data is not known to us. Bankfull discharge can be estimated based on the knowledge that, in most gravel-bed river drainages, bankfull discharge occurs at roughly a 1.5 year recurrence interval (Leopold et al. 1964, Schmidt and Potyondy 2004). This translates to roughly the 33rd percentile of the annual maximum daily flow over the period of record. For the SFBR, stream flow has been modified by dam management for decades, which limits the utility of this metric in this setting because the periodicity and magnitude of flooding events is moderated by dam operations. Based on streamflow during water years 1975-2016, we calculated a flow of 1745 cfs to represent bankfull discharge using this analytical method. However, considering the managed nature of SFBR flows over this period, this metric is expected to be an artifact of the manipulated flow regime.

In contrast, flows necessary to mobilize fine sediments to maintain salmonid spawning gravels have been modeled for SFBR. Following wildfires that affected the SFBR in 2013, large volumes of sediment discharged to the river after rainstorms eroded unstable hillsides and tributaries. Recognizing the resulting conditions could jeopardize sportfish populations, agencies recognized the need to promote higher flow events to restore spawning beds by flushing fine sediments. Researchers from University of Idaho modeled sediment transport under various flushing flows to determine the amount and duration of flow required to mobilize sediment and improve habitat. Models suggested that a flushing flow of 2400 cfs or greater for at least 8 days was needed to mobilize fine sediments (Benjankar and Tonina 2014). A flow rate of 2000 cfs was not effective for mobilizing fine sediment for the purpose of maintaining spawning gravels. A flow rate of 3000 cfs for a prolonged period of 3 months was predicted to erode debris fans extensively. These models evaluated the potential to mobilize bed substrates but did not address bankfull flow required as floodplain maintenance flows. Additional modeling would be needed to empirically establish a bankfull flow volume sufficient for floodplain maintenance.

Thus, the high flow events required to maintain instream habitat and riparian dynamics are likely in excess of 2400 cfs. Based on the analyses presented here, we regard 2400 cfs for >8 days to be a minimal flow required to maintain stream channel substrates required by trout. If current flows were reduced by 200 cfs, a recorded flow of 2600 cfs would need to be achieved to meet conditions for

withdrawal if this standard were applied. Based on data from USGS Stream Gage at Anderson Ranch, daily average flows have exceeded 2600 cfs on 945 days since October 1, 1977, representing 6% of days during this period. Daily average flows in excess of 3200 cfs were achieved on 462 days during this 40-year period.

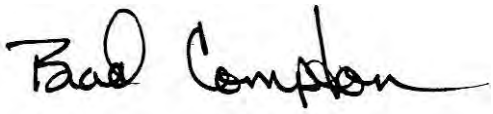
Inability to create maintenance flows would jeopardize regeneration of riparian vegetation, particularly cottonwood. Along the SFBR, this dynamic riparian habitat mosaic and associated functions (e.g., hyporheic exchange, base flow support, thermoregulation, etc.) and outcomes (e.g., cottonwood forest) are present, but may be negatively influenced by decades of flow alterations (Hauer and Lorang 2004). Channel maintenance flows in the SFBR are vital to maintaining fish habitat, riparian vegetation, and a functioning floodplain.

Concluding Remarks

The Department appreciates the opportunity to provide our assessment of the proposed project to divert water from Anderson Ranch Reservoir for the purpose of groundwater recharge and irrigation. The review resulted in a general assessment of the proposed activities apparent from the water appropriation application, and some assumptions were necessary to conduct the review. As more details concerning the project are made available or emerge from ongoing negotiations, the Department would welcome opportunities to provide additional technical assistance to IDWR and the project proponent and may be able to assist efforts to avoid, minimize, or offset effects on fish and wildlife resources.

Please contact in the Southwest Region office at (208)465-8465 if you have any additional questions concerning this letter.

Sincerely,



Bradley B. Compton
Southwest Regional Supervisor

ecc: Terry Scanlan, SPF Engineering, Inc.
IDFG Southwest Regional Staff
Gary Vecellio (IDFG-HQ)
cc: Gold file

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From: South Fork Boise Recovery Team; including US Forest Service, Trout Unlimited, University of Idaho, Idaho Department of Fish and Game, and U.S. Bureau of Reclamation

To: Jerry Gregg, Regional Director, US Bureau of Reclamation
Brian Sauer, Hydraulic Engineer, US Bureau of Reclamation
Mary Mellema, Hydrologist, US Bureau of Reclamation

Re: A recommendation for 2014 fall operational adjustments in the South Fork Boise River downstream of Anderson Ranch Reservoir

Date: August 1, 2014

The South Fork Boise River (SFBR) downstream of Anderson Ranch Reservoir is classified as critical habitat for bull trout. The critical habitat supports Foraging, Migration and Overwintering (FMO) habitat for a portion of the Arrowrock Reservoir migratory bull trout population. The SFBR also supports a regionally, if not nationally, renowned tailwater trout fishery. Rainbow trout contribute to the prey base for bull trout and rely on the same habitat for survival. A recent use and economic survey indicated that anglers took 28,602 trips to the SFBR and spent $4,620,918 in fishing-trip related expenses during 2011.

A large wildfire burned the lower portion of the SFBR drainage during August 2013. Most of the upland slopes of the SFRB downstream of Anderson Ranch Reservoir were burned as was a high proportion of the riparian vegetation in the mainstem and tributaries. During mid-September, relatively heavy rainstorms fell on exposed hill-slopes and caused extensive sediment and debris slides. Initially, five tributaries and un-named drainages contributed the most sediment to the 10 miles of the SFBR downstream of Anderson Ranch Dam. During the winter of 2013-2014, additional rains and snowmelt resulted in additional debris flows from tributaries lower in the SFBR.

Fire and the resulting sediment and debris slides are a natural and regular occurrence in southern Idaho and the Idaho Batholith. In natural systems, fires impact fish populations positively and negatively. In managed systems, impacts may be more or less severe depending on circumstances. Changes in sediment regimes may be one of the largest changes to stream networks post fire. A tremendous amount of fine sediment was added to the SFBR during these events. Fine sediments affected the quality and quantity of overwintering habitat by filling in side channels and interstitial spaces along the shoreline, these habitat features are critical for the survival of bull trout, rainbow trout, and their prey bases. Reduced quality and quantity of overwintering habitat and spawning habitat for prey fishes affect bull trout. Fisheries surveys in the fall of 2013 and spring of 2014 show reduced numbers of age-0 rainbow trout that will support the future rainbow trout fishery and serve as prey fish for bull trout. In a natural system, these sediment inputs are sorted and transported under naturally occurring high flows during spring snowmelt. In regulated systems, such as the SFBR, high flow events are attenuated to mitigate flood risk and to store water for irrigation (and other uses). The regulated flows result in lower peak flows especially in poor water years or years with low carryover storage like the

winter of 2013/2014. During these conditions, less fine sediment is transported leading to longer-term detrimental impacts to bull trout, their habitats, and other aquatic biota.

In response to substantial public concern, a multi-agency team was formed to develop recommendations to minimize the impact to trout populations and hasten recovery. This team includes staff from US Forest Service, US Bureau of Reclamation (Reclamation), University of Idaho (U of I), Trout Unlimited, and Idaho Department of Fish and Game. Meetings were held on November14, 2014, March 5, 2014, May 29, 2014, and July 18, 2014. Initially, the group developed a list of data needs in order to assess potential responses to mitigate or reduce the effects of the fires and resulting debris flows. Recent fisheries and habitat data were assembled, a sediment transport model developed, and water forecasting was reviewed. After discussing preliminary results from sediment model and recent fish surveys, the team recommended (on April 24, 2014) that the SFBR be held at 300 cfs until after Memorial Day weekend and a flushing pulse be provided in late May/early June. Maintaining lower flows served three purposes:

1) Provide as much stability as possible during the rainbow trout spawning period;
2) Provide stability for incubating rainbow trout eggs; and
3) Increase reservoir storage, in anticipation that increased storage would enable a flushing pulse that could be used to mobilize fine sediment during the 2014 spring runoff period.

The team believed this strategy would have provided benefits to the fish and macro-invertebrate communities as well as aquatic habitats while still meeting other water management obligations. The SFBR flows were maintained at 300 cfs until after Memorial Day weekend, however, storage in the Boise River system precluded a flushing event as there was little room to store the flushed water in the lower system (Arrowrock and Luck Peak reservoirs). The team believes that a pulsing flow is an important step to hasten recovery of important fish populations and habitats found within the SFBR. As such, the team reconvened after learning that a spring flush was not possible to update the sediment model and discuss options for a flushing pulse later during the 2014 water year.

Modelers from U of I's Ecohydraulics group developed a 1 dimensional (1D) coupled hydraulic and sediment transport model of SFBR (between Anderson Ranch Dam Gage and Neal Bridge) to simulate sediment transport through the system. The sediment transport model assumes all the sediments within the channel are available for transport and there is no additional sediment inputs from tributaries or hill slopes. The volume of recently deposited sediment (debris fan) was estimated by field measurements at four separate locations. A total of five debris fans were identified within 10 miles downstream of Anderson Ranch Dam. The 1D sediment model predicts that size of sediment that will move under certain flow volumes given the channel cross-sectional shape and slope. Sediment particles less than the size used by spawning fishes were considered in the model. Existing LiDAR DEM data was used to extract cross-sectional depth data to more accurately identify depth of recently deposited sediment and identify where redistribution of sediment would occur under each flow scenario. Three different discharge magnitude and duration scenarios (based on recommendations of the team) were used to investigate total volume of sediment transport from debris fans, upper canyon and canyon

sections. Discharge scenarios included a pulse of 2000 cfs for 8 days; 2400 cfs for 8 days; and 3000 cfs for three months.

Sediment transport simulations based on the 1D model showed that the 2014 irrigation flows of 1600 cfs move some sediment but do not erode the debris fans completely. Part of the mobilized sediment is deposited in lower velocity reaches like pools and the remaining sediment remains in transport. A 2000 cfs pulse (Scenario 1) does not visibly change the sediment transport in comparison to 1600cfs. A 2400 cfs or higher flow pulse (Scenario 2) causes a detectable change in slope of the cumulative sediment volume at the control cross-section. A constant 3000 cfs (Scenario 3) discharge for three months would erode the debris fans more extensively than the previous two scenarios (1 and 2), but the majority of sediments are not transported into Arrowrock Reservoir only redistributed to low velocity areas along the SFBR. Analysis of potential depositional areas shows that overwintering habitat and spawning reaches should not experience large deposits of fine sediments, improving the quality of both habitat types.

Key findings from latest modeling:

- A flow pulse of 2000 cfs for 8 days does not visibly change the sediment transport.
- A flow pulse of 2400 cfs or greater for 8 days causes a detectable change in the deposition of sediment while improving the quality of both overwintering and spawning habitat.
- Flows in excess of 3000 cfs, sustained for as long as three months will mobilize fine sediments but will not flush them out of the river corridor into Arrowrock Reservoir.

We recommend a flow pulse of at least 2400 cfs for a minimum of eight days based on the new results from U of I's sediment transport model. The recommended pulsing flows depicted in Table 1 are based on this recommendation, as well as discussions with Reclamation water managers regarding water balances/deliveries within the Boise River system, and other bull trout ESA requirements. Reclamation has requirements for maintaining critical bull trout habitat threshold storage levels in both Anderson Ranch and Arrowrock reservoirs during the same time period as the recommended pulsing flows. Neither requirement will be jeopardized as a result of the recommended flow pulse. Furthermore, water used for the flushing pulse (approximately 16,000 acre feet), if stored in Arrowrock Reservoir through November 2014, would provide an additional benefit to migratory bull trout returning to Arrowrock Reservoir. Benefits to the migration zone would be provided by minimizing the length of the MF Boise River that flows through the Arrowrock Reservoir drawdown zone during the migration period (Reclamation 2006 – Monitoring and Implementation Plan for the USFWS 2005 Biological Opinion).

We offer these recommendations as a framework for discussion with the Boise River water users.

Table 1. Estimated discharge of the South Fork Boise River downstream of Anderson Ranch Reservoir for the recommended 2014 flushing pulse to benefit bull trout and bull trout critical habitat. (Estimated summer operations may vary from 1600 to 1800 cfs.)

Date	2014 "normal" operations (cfs)	2014 conceptual pulse (cfs)	Difference (cfs)
August 1	1600	1600	0
August 2	1600	1600	0
August 3	1600	1600	0
August 4	1600	1600	0
August 5	1600	1600	0
August 6	1600	1600	0
August 7	1600	1600	0
August 8	1600	1600	0
August 9	1600	1600	0
August 10	1600	1600	0
August 11	1600	1600	0
August 12	1600	1600	0
August 13	1600	1600	0
August 14	1600	1600	0
August 15	1600	1600	0
August 16	1600	1600	0
August 17	1600	1600	0
August 18	1600	2100	500
August 19	1600	2400	800
August 20	1600	2400	800
August 21	1600	2400	800
August 22	1600	2400	800
August 23	1600	2400	800
August 24	1600	2400	800
August 25	1600	2400	800
August 26	1600	2400	800
August 27	1600	2100	500
August 28	1600	1600	0
August 29	1600	1600	0
August 30	1600	1600	0
August 31	1600	1600	0
September 1	1600	1600	0
September 2	1600	1600	0
September 3	600	600	0
September 4	600	600	0
September 5	600	600	0
September 6	600	600	0
September 15	300	300	0

Conversation Contents

[EXTERNAL] OSC Scoping Comments for Anderson Ranch Dam Proposed Project
Attachments:
/2. [EXTERNAL] OSC Scoping Comments for Anderson Ranch Dam Proposed Project/1.1 FINAL_OSCScopingCommentsAndersonRanchDam9Sept2019.pdf
/2. [EXTERNAL] OSC Scoping Comments for Anderson Ranch Dam Proposed Project/2.1 FINAL_OSCScopingCommentsAndersonRanchDam9Sept2019.pdf

Pete Katsilometes <Pete.Katsilometes@osc.idaho.gov>

From:	Pete Katsilometes <Pete.Katsilometes@osc.idaho.gov>
Sent:	Mon Sep 09 2019 16:18:30 GMT-0600 (MDT)
To:	"BOR-SRA-BoiFeasibility@usbr.gov" <BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] OSC Scoping Comments for Anderson Ranch Dam Proposed Project
Attachments:	FINAL_OSCScopingCommentsAndersonRanchDam9Sept2019.pdf

Good Afternoon,

Attached is the Idaho Governor's Office of Species Conservation scoping comments regarding the Bureau of Reclamation's Notice of Intent to prepare an Environmental Impact Statement for the Boise River Basin Feasibility Study, raising Anderson Ranch Dam by six (6) feet. Thank you for the opportunity to comment. A hard copy of the letter is being sent via snail mail. Please verify this letter was received.

Thank you!

Pete Katsilometes | Project Manager
Governor's Office of Species Conservation
208-332-1553
species.idaho.gov

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:54:49 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] OSC Scoping Comments for Anderson Ranch Dam Proposed Project
Attachments:	FINAL_OSCScopingCommentsAndersonRanchDam9Sept2019.pdf

---------- Forwarded message ---------
From: **Pete Katsilometes** <Pete.Katsilometes@osc.idaho.gov>
Date: Mon, Sep 9, 2019 at 4:20 PM

Subject: [EXTERNAL] OSC Scoping Comments for Anderson Ranch Dam Proposed Project
To: BOR-SRA-BoiFeasibility@usbr.gov <BOR-SRA-BoiFeasibility@usbr.gov>
Cc: Joshua Uriarte <Joshua.Uriarte@osc.idaho.gov>, Mike Edmondson <Mike.Edmondson@osc.idaho.gov>, Scott Pugrud <Scott.Pugrud@osc.idaho.gov>

Good Afternoon,

Attached is the Idaho Governor's Office of Species Conservation scoping comments regarding the Bureau of Reclamation's Notice of Intent to prepare an Environmental Impact Statement for the Boise River Basin Feasibility Study, raising Anderson Ranch Dam by six (6) feet. Thank you for the opportunity to comment. A hard copy of the letter is being sent via snail mail. Please verify this letter was received.

Thank you!

Pete Katsilometes | Project Manager
Governor's Office of Species Conservation
208-332-1553
species.idaho.gov

OFFICE OF SPECIES CONSERVATION

BRAD LITTLE
Governor

SCOTT N. PUGRUD
Administrator

P.O. Box 83720
Boise, Idaho 83720-0195

304 North Eighth Street, Suite 149
Boise, Idaho 83702

September 9, 2019

Ms. Megan Sloan, Project Manager
Bureau of Reclamation
Snake River Area office
230 Collins Road
Boise, ID 83702

RE: Scoping Comments for the Notice of Intent to Prepare an Environmental Impact Statement for the Boise River Basin Feasibility Study, Elmore County, Idaho.

Dear Project Manager Sloan,

The Idaho Governor's Office of Species Conservation (OSC) appreciates the opportunity to provide comments on the Bureau of Reclamation's Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Boise River Basin Feasibility Study; proposing to raise the Anderson Ranch Dam reservoir pool six (6) feet, Elmore County, Idaho. OSC provides the following comments for the proposed project:

Comments Related to Bull Trout:

Anderson Ranch Reservoir hosts a fluvial population of bull trout that exhibit adfluvial characteristics and seasonally migrate between the reservoir and the South Fork Boise River above the reservoir. This population is listed under the Endangered Species Act as threatened and is contained in the Upper Snake Recovery Unit in the Upper Snake Recovery Unit Implementation Plan for Bull Trout (RUIP). The Anderson Ranch Core Area contains 11 local populations of bull trout. In 2014, the Idaho Department of Fish and Game determined that the Anderson Ranch Core area had an increasing population trend (page E-98 Upper Snake RUIP). No threats to this Core Area were identified in the Upper Snake RUIP.

OSC requests that the analysis of increasing the height of the earthen dam six feet consider effects to listed bull trout in the Anderson Ranch Core Area. Specifically, potential changes to the habitat space available for overwintering, connectivity during the spawning migration, changes to water quality including temperature, changes to their exposure to anglers, and predators should be considered. Additionally, an analysis of the effects of this proposed action should consider the Terms and Conditions from Section D of the 2005 US Fish and Wildlife Service Biological Opinion to minimize the effect of the operation of Anderson Ranch

Dam on listed bull trout. Effects identified in the Biological Opinion were related to ramping rates and management of flows (USFWS 2005, pg. 259).

Comments related to Sage-Grouse:

Based on Idaho's sage-grouse strategy and Executive Order 2015-04 (Idaho Plan), sections of the land surrounding Anderson Ranch Reservoir is designated as a General Habitat Management Area and the adjacent southern plateau above the reservoir is designated as an Important Habitat Management Area. Although the reservoir contains Habitat Management Areas the proposed project is not considered to be within *key habitat* based on the Key Habitat Planning map used by the Bureau of Land Management and the U.S. Forest Service for planning purposes (Appendix F, BLM 2019 ARMPA). The area contained between the proposed elevation of 4,196 and 4,202 is not assigned a habitat class. Even though habitat upslope of the reservoir is classified as *key habitat* and contains several sage-grouse telemetry and GPS locations, none of the point locations are within the area of inundation. Much of the area directly affected by raising the water level contains conifers which would typically not be utilized by sage-grouse. Based on the intent of the project and its location, this project should not influence sage-grouse in the area.

OSC is dedicated to planning, coordinating, and implementing actions within the State of Idaho that will preserve, protect, and restore species listed as threatened, endangered, or candidate while taking into consideration the economic vitality of the state. If you have any questions about these comments, please feel free to contact me at (208) 334-2189 or at scott.pugrud@osc.idaho.gov.

Sincerely,

Scott Pugrud
Administrator

Conversation Contents

Boise Feasibility Inquiry

<Anonymous@anonymous.com>

From:	<Anonymous@anonymous.com>
Sent:	Mon Sep 09 2019 15:13:48 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	Boise Feasibility Inquiry

From Anonymous (Anonymous@Anonymous.com) on 09/09/2019 at 03:09:38MSGBODY: 1. How will 30 KAF of release affect Reclamation water management operations when the calls for this new storage water is simultaneous with the current operational releases governing the Boise operations? 2. How will the releases affect: a. Recreation floaters on the South Fork and in Boise? b. How will the extra release affect fisheries and fishing in the S. Fork? c. Will these releases affect the riparian areas now accustomed to the operation parameters of Reclamation? 3. What is the timing of the new full pool level elevation annually? 4. What is the duration of the new full pool elevation annually? 5. What weekends and holidays will be affected by the new full pool elevation? 6. How will the new high pool level in Anderson Ranch Reservoir affect: a. Any roads? b. Each of the 10 designated campgrounds? c. Any undesignated campground? d. The 4 boat ramps? e. Pine? f. Pine airstrip? g. Littoral area displacement: i. Amount of acreage? ii. Does any physical removal of man-made or natural elements need to occur? iii. How long will it take before the littoral area stabilizes in sediment runoff? iv. How does the displacement of the literal area affect additional levels of sedimentation? v. What current littoral aquatic species inhabit the existing littoral area? vi. What littoral flora inhabit the existing littoral area? vii. What land animals take advantage of the existing littoral area? 7. Doesn't the extra 30 KAF result in unreplaceable location losses for recreation during those months of new full pool elevation? 8. How does the addition of 30 KAF affect sediment washing from ARR downstream? 9. How will the additional water affect water temperature in: a. Anderson Ranch Reservoir over the year? b. South Fork of the Boise River? 10. Have any monetary losses been calculated for restricted recreation opportunities: a. On Anderson Ranch Reservoir? b. Downstream on the South Fork? c. The communities of Mountain Home, Fairfield, Pine and Featherville? 11. Have any additional expenditures been calculated for: a. Road re-building or bulwarks necessary for new full pool elevation? b. New campgrounds? c. Modification of existing campgrounds? d. New boat docks? e. Modifications to existing boat docks? f. Pine airstrip? 12. How will the 30 KAF, if unused in any given season, affect: a. Icing? b. Ungulate movement? c. Fish species? 13. In any given excess-water year, will releases to keep Anderson Ranch Reservoir from overflowing be more dramatic and intense with the additional 30 KAF volume to be dispersed? Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:54:44 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: Boise Feasibility Inquiry

---------- Forwarded message ---------
From: <Anonymous@anonymous.com>
Date: Mon, Sep 9, 2019 at 3:13 PM
Subject: Boise Feasibility Inquiry
To: <BOR-SRA-BoiFeasibility@usbr.gov>

From Anonymous (Anonymous@Anonymous.com) on 09/09/2019 at 03:09:38MSGBODY:

1. How will 30 KAF of release affect Reclamation water management operations when the calls for this new storage water is simultaneous with the current operational releases governing the Boise operations?
2. How will the releases affect:
    a. Recreation floaters on the South Fork and in Boise?
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3. What is the timing of the new full pool level elevation annually?
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    a. Any roads?
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    d. The 4 boat ramps?
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    f. Pine airstrip?
    g. Littoral area displacement:
        i. Amount of acreage?
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        iii. How long will it take before the littoral area stabilizes in sediment runoff?
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        vi. What littoral flora inhabit the existing littoral area?
        vii. What land animals take advantage of the existing littoral area?
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11. Have any additional expenditures been calculated for:
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    b. New campgrounds?
    c. Modification of existing campgrounds?
    d. New boat docks?
    e. Modifications to existing boat docks?
    f. Pine airstrip?
12. How will the 30 KAF, if unused in any given season, affect:
    a. Icing?

b. Ungulate movement?
c. Fish species?

13. In any given excess-water year, will releases to keep Anderson Ranch Reservoir from overflowing be more dramatic and intense with the additional 30 KAF volume to be dispersed?

Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

Conversation Contents

[EXTERNAL] Request for Comments regarding Boise River Basin Storage
Attachments:
/4. [EXTERNAL] Request for Comments regarding Boise River Basin Storage/1.1 image001.gif
/4. [EXTERNAL] Request for Comments regarding Boise River Basin Storage/1.2 IDFG_R4_AndersonRaise_20190909_final.docx
/4. [EXTERNAL] Request for Comments regarding Boise River Basin Storage/2.1 image001.gif
/4. [EXTERNAL] Request for Comments regarding Boise River Basin Storage/2.2 IDFG_R4_AndersonRaise_20190909_final.docx

"White,Craig" <craig.white@idfg.idaho.gov>

From:	"White,Craig" <craig.white@idfg.idaho.gov>
Sent:	Mon Sep 09 2019 14:41:33 GMT-0600 (MDT)
To:	"bor-sra-boifeasibility@usbr.gov" <bor-sra-boifeasibility@usbr.gov>
Subject:	[EXTERNAL] Request for Comments regarding Boise River Basin Storage
Attachments:	image001.gif IDFG_R4_AndersonRaise_20190909_final.docx

Mr. Taylor,
Thank you for the opportunity to provide information pertinent to the Bureau of Reclamation's feasibility study regarding raising the storage capacity in Anderson Ranch Reservoir. Idaho Department of Fish and Game provides the attached written comments for your consideration. Please don't hesitate to contact myself or Bill Bosworth (bill.bosworth@idfg.idaho.gov) with any questions.
Thanks,
Craig

Craig White
Magic Valley Regional Supervisor
Idaho Department of Fish and Game
324 South 417 East, Suite 1
Jerome, Idaho 83338
(208) 644-6303

EmailLogo

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:54:40 GMT-0600 (MDT)

To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Request for Comments regarding Boise River Basin Storage
Attachments:	image001.gif IDFG_R4_AndersonRaise_20190909_final.docx

---------- Forwarded message ---------
From: **White,Craig** <craig.white@idfg.idaho.gov>
Date: Mon, Sep 9, 2019 at 2:43 PM
Subject: [EXTERNAL] Request for Comments regarding Boise River Basin Storage
To: bor-sra-boifeasibility@usbr.gov <bor-sra-boifeasibility@usbr.gov>
Cc: Bosworth,Bill <bill.bosworth@idfg.idaho.gov>

Mr. Taylor,
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Thanks,
Craig

Craig White
Magic Valley Regional Supervisor
Idaho Department of Fish and Game
324 South 417 East, Suite 1
Jerome, Idaho 83338
(208) 644-6303

EmailLogo

IDAHO DEPARTMENT OF FISH AND GAME
MAGIC VALLEY REGION
324 South 417 East, Suite 1
Jerome, Idaho 83338

Brad Little / Governor
Ed Schriever / Director

September 9, 2019

Jim Taylor
Environmental/Cultural Resource Manager Bureau of Reclamation
Snake River Area Office 230 Collins Road
Boise, ID 83702

RE: EIS Scoping for Boise River Basin Feasibility Study

Dear Mr. Taylor:

The Idaho Department of Fish and Game (IDFG) received the Bureau of Reclamation (BOR) request for input regarding the feasibility study for increased water storage opportunities behind Anderson Ranch Dam located on the South Fork Boise River (SFBR). BOR wishes to evaluate raising the earthen embankment dam crest by 6 feet, which would increase storage capacity in Anderson Ranch Reservoir (ARR) by approximately 29,000 acre-feet. This new space would allow BOR to capture additional water during wet years.

The purpose of these comments is to assist BOR in scoping for its environmental impact statement and complying with the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c), which applies to the project. The Act requires BOR to "first coordinate with state fish and wildlife management agencies to assess potential impacts to fish and wildlife resources and to avoid, minimize, and mitigate for those impacts" related to a water resource development. IDFG provides the following technical information in this regard. It is not the purpose of the Idaho Department of Fish and Game to support or oppose this proposal.

IDFG staff attended public meetings regarding this project, including a scoping open house in Boise on August 28, 2019. BOR staff specifically solicited IDFG feedback on how this project could be structured to benefit fish and wildlife resources.

IDFG management goals and objectives
The *Idaho Fish and Game 2015 Strategic Plan,* developed through public input and approved by the Idaho Fish and Game Commission, describes IDFG's primary goals for sustaining Idaho's wildlife and the habitats on which they depend and to meet the demand for fish and wildlife recreation.

Specific management objectives are outlined in IDFG management plans; which are reviewed and approved by the Idaho Fish and Game Commission. Relevant and important management plans include the Fisheries Management Plan 2019-2024, Elk Management Plan 2014-2024, and the Mule Deer Management Plan 2020-2025, and the State Wildlife Action Plan (2016). These

documents are available on the Department's website (http://fishandgame.idaho.gov/). As more specific proposed actions are identified, IDFG staff will be available to highlight specific management objectives outlined in these plans that should serve as the metric against which assessments are made.

Fish and Wildlife resource considerations
The SFBR and ARR support popular and economically important wildlife and fishery resources. IDFG suggests the following general categories for describing and considering potential effects: (1) reservoir fisheries, (2) downstream fisheries, (3) upland habitat and wildlife populations, and (4) fish- and wildlife-based recreation. Each is generally described below.

Reservoir Fisheries
ARR storage currently contains a layer of cold, highly-oxygenated water conducive to cold-water fisheries production. ARR's mixed-species fishery includes mountain whitefish (*Prosopium williamsoni*), rainbow trout (introduced populations of *Oncorhynchus mykiss*), bull trout (*Salvelinus confluentus*), kokanee salmon (*Oncorhynchus nerka*), landlocked Chinook salmon (*Oncorhynchus tshawytscha*), yellow perch (*Perca flavescens*), and smallmouth bass (*Micropterus dolomieu*).

ARR kokanee salmon and bull trout seasonally migrate between ARR and the SFBR upstream from the reservoir (showing an adfluvial life history). The SFBR fishery above ARR consists of a mixture of native and nonnative sportfish, including redband trout (native populations of *Oncorhynchus mykiss*), rainbow trout, brook trout (introduced; *Salvelinus fontinalis*), and mountain whitefish. The adfluvial bull trout and kokanee salmon are seasonally present within this fishery. The kokanee spawning run represents a unique viewing experience for campers and day-trip recreationists. IDFG primarily manages and regulates fisheries in upper reaches of the reservoir under "general fishing rules," with emphasis on a put-and-take rainbow trout fishery (see https://idfg.idaho.gov/sites/default/files/seasons-rules-fish-2019-2021-magic-valley.pdf). A small section in the upper drainage is managed for quality trout, and bull trout are under conservation rules management.

Potential effects on fish habitat and fisheries from alternatives may vary based on volumes of cold, well-oxygenated water; the potential for fish entrainment in the dam; and the extent and duration of inundations.

If raising ARR or other actions increase the volume of cold, well-oxygenated water, it would potentially benefit recreational fisheries by supporting abundant fish populations and high-use fisheries. However, some operational components associated with a reservoir raise might have offsetting negative impacts to fisheries resources. For example, some potential change in dam operation might increase the rate of fish entrainment through the dam.

Several project components have the potential to affect water quality within and downstream of the project. The EIS should include and analyze modeling of reservoir temperature and oxygen profiles and releases for alternatives. Some actions may increase length of the varial zone (i.e., the zone periodically inundated), resulting in localized inundations in lower tributary reaches, including the SFBR; this could affect fish movement and residency time and potentially increase

vulnerability of certain species (e.g., bull trout, rainbow trout and kokanee) to predation. Reservoir draw-downs exposing reservoir and tributary bed materials may affect bank and channel stability.

Under current management and environmental conditions, ARR fills infrequently. IDFG recommends the feasibility study evaluate anticipated temporal patterns of reservoir volume and, specifically, the relationship to fisheries management. ARR is currently managed within operational constraints established in the 2005 US Fish and Wildlife Service Bull Trout Biological Opinion (2005 Bull Trout BIOP), which include maintaining a minimum pool. Maintaining a minimum pool volume supports the bull trout population and benefits other fish populations. IDFG recommends BOR evaluate the potential to allocate storage for the purpose of maintaining a minimum pool volume to benefit fisheries. Analysis should include an assessment of whether available storage volumes would be sufficient to benefit fisheries.

Downstream Fisheries

The South Fork Boise River (SFBR) between Arrowrock Reservoir and Anderson Ranch Dam was the first designated quality trout stream segment in southwestern Idaho, and is a nationally renowned section of river. This section remains the premier wild trout fishery in the IDFG's Southwest Region and one of the most popular wild trout fisheries in the state. The upper portion of this reach is accessible by road. The lower reach is canyon-bound and lacks road and trail access. The lower reach is a popular day- and overnight float trip destination and is a unique angling experience in southwest Idaho.

The recreational fishery primarily includes populations of wild rainbow trout and mountain whitefish. IDFG manages the rainbow trout fishery under trophy trout regulations. Migratory bull trout occur at low density. Native nongame fish populations include largescale sucker (*Catostomus macrocheilus*), northern pikeminnow (*Ptychocheilus oregonensis*), and sculpin (*Cottus* spp.). Rainbow trout and mountain whitefish make up the majority of the fish caught in the SFBR. The fishing season closes April 1st through Memorial Day to protect spawning rainbow trout. Between 1988 and 2002, angler effort increased 66%, and IDFG believes this trend of increasing use has continued since 2002. Within the SFBR, IDFG seeks to maintain, improve, or increase effort, catch rates, and average fish size, as well as to maintain or improve aquatic habitat quality through improved land and water management practices.

Discharge from ARR is managed by BOR for uses that include irrigation, flood control, power production, and fisheries management. River flow regimes below ARR have been managed for decades. The operations plan provides a structured flow regime consisting of minimal flows during the non-irrigation season and managed releases during the irrigation season, which typically spans the period of April through August. Discharge of cold, highly oxygenated water to the SFBR channel benefits the water quality regime as well as the forage productivity for fish species. Seasonal ecological flows have been established with current reservoir management practices to support high sportfish density and growth rate.

Winter flows are believed to be one of the most important drivers of rainbow trout density. A 2015 study of rainbow trout status in SFBR (Butts et al., 2017) indicated the carrying capacity of winter habitat to be more important for population growth than overall reproductive output.

Winter habitat quality—and, thus, the carrying capacity of winter habitat—is related to the magnitude of winter flows. Discharge from ARR is lowest following the irrigation season, dropping to low flow rates during the period of mid-September through late February or March during most years. Current discharge rates target minimally 300 cfs during winter and often exceed this flow (USGS 13190500 gage data) to address fisheries needs. As summarized in the 2005 Bull Trout BIOP:

> Reclamation has flow targets in the [SFBR] to support fish habitat and to benefit rainbow trout spawning. The minimum flow target from September 16 to March 31 is 300 cfs. Reclamation will meet this target in 95 percent of years. In the remaining 5 percent of years, flows may drop to as low as 122 cfs. The minimum flow target from April 1 to September 15 is 600 cfs. In years of low carryover, Reclamation will provide at least 300 cfs through April. April to September flows will be at least 600 cfs in 90 percent of years, at least 300 cfs in 98 percent of years, and at 114 cfs during its lowest flow. April flows will be at least 600 cfs in 74 percent of years and as low as 300 cfs in 15 percent of years.

The non-irrigation low-flow period for SFBR typically runs from September 16 through March 31 of the following year (197 days). A flow volume of approximately 117,000 AF is required to maintain 300 cfs for this period. Increasing base flow to 350 cfs would require an additional 20,000 AF (total 137,000 AF) of storage. IDFG anticipates maintaining current base flows would support the existing fishery and increasing base flows to benefit the fishery. IDFG recommends BOR evaluate the potential to allocate storage for the purpose of maintaining base flows during winter to benefit fisheries. Analysis should include an assessment of whether available storage volumes would be sufficient to benefit fisheries.

Loss of high flows that maintain channel and floodplain dynamics.
High flows serve a vital function in maintaining channel characteristics, including spawning substrate, required by fish and other aquatic organisms. Disturbance regimes from flows that exceed bankfull capacity and inundate the floodplain are also required to maintain riparian habitat, which in SFBR includes cottonwood. Riparian habitat provides important habitat for wildlife and also contributes to instream habitat and water quality, especially by moderating water temperature with shading. Conversely, extremely high flows can adversely affect instream habitat and fisheries.

Historically, discharge from ARR during flood events has approached 10,000 cfs, but the USGS gauge at Anderson Ranch dam has recorded flows exceeding 7000 cfs just 6 times since ARR was completed in 1950, which is just under 10% of years during that period. In most gravel-bed river drainages, bankfull discharge occurs at roughly a 1.5 year recurrence interval (Leopold et al. 1964, Schmidt and Potyondy 2004). Flows 2,400 cfs or greater for at least 8 days may be necessary to mobilize fine sediments to maintain salmonid spawning gravels in SFBR (Benjankar and Tonina 2014).

Increased storage at ARR would potentially affect the frequency, duration, and volume of high flow events. IDFG recommends BOR analyze the effects of increased storage on high-discharge components of the hydrograph below ARR. IDFG also recommends BOR evaluate the potential to allocate storage for the purpose of maintaining periodic high-flow events to sustain spawning

and riparian habitat and moderating extreme high-flow events. Analysis should include an assessment of whether available storage volumes would be sufficient to benefit fisheries and riparian habitat.

Upland habitat and wildlife populations
The land surrounding ARR is documented mule deer and elk migration habitat (transition) and winter range. Raising the reservoir may result in some loss of winter range. BOR should analyze potential direct and indirect effects on big game winter range and big game movement corridors related to increase/decrease in human activity during feasibility study and project activities. As observed elsewhere, migrating deer and elk may attempt to traverse ice forming on the reservoir, breaking through or becoming stranded. Expanding ARR has the potential to inundate migration corridors and exacerbate this problem for both deer and elk. The EIS should analyze the potential for big game mortality associated with attempted reservoir crossings under actions and alternatives.

Fish- and wildlife-based recreation
The EIS should describe the short-term and long-term effects of actions and alternatives on public access and opportunity throughout the project area, and identify potential differences resulting from roadway and access-point realignments, including boat launches.

Concluding remarks
IDFG appreciates the opportunity to provide information pertinent to BOR's proposed projects. IDFG staff are available to assist BOR in evaluating potential information gaps, effects, and priorities as this project progresses. Please contact Bill Bosworth in the Southwest Region office at (208)465-8465 if you have any additional questions concerning this letter.

Sincerely,

Craig A. White

Craig White
Magic Valley Regional Supervisor

CW/WRB

ecc: John Cassinelli, Southwest IDFG
Brad Compton, Southwest IDFG
Bill Bosworth, Southwest IDFG
Mike McDonald, Magic Valley IDFG
Mike Peterson, Magic Valley IDFG
Rick Ward, Southwest IDFG
Gary Vecellio, HQ IDFG
Paul Kline, Director's Office
Scott Reinecker, Director's Office

e-file: M:/Region 3/

Literature Cited

Benjankar, R., and D. Tonina. 2014. Sediment transport analysis in South Fork Boise River based on model simulation. Final Report to Bureau of Reclamation. Center for Ecohydraulics Research, University Of Idaho, Boise, ID. 25 pp.

Butts, A. E., M. P. Peterson, J. R. Kozfkay, N. Porter, and L. Work. 2017. Status of Rainbow Trout in the South Fork Boise River. In Idaho Department of Fish and Game Fisheries Management Annual Report, Southwest Region 2015. Idaho Department of Fish and Game, Boise, ID.

Leopold L. B., M. G. Wolman, and J. P. Miller. 1964. Fluvial processes in geomorphology. San Francisco: W. H. Freeman and Sons.

Schmidt, L. J., and J. P. Potyondy. 2004. Quantifying channel maintenance instream flows: an approach for gravel-bed streams in the Western United States. RMRS-GTR-128. Fort Collins, CO: USDA, Forest Service, Rocky Mountain Research Station. 33 pp.

Conversation Contents

[EXTERNAL] Idaho Farm Bureau Comments
Attachments:
/5. [EXTERNAL] Idaho Farm Bureau Comments/1.1 image001.jpg
/5. [EXTERNAL] Idaho Farm Bureau Comments/1.2 IFBF - Anderson Ranch Comments to BOR, Sept. 2019.pdf
/5. [EXTERNAL] Idaho Farm Bureau Comments/2.1 image001.jpg
/5. [EXTERNAL] Idaho Farm Bureau Comments/2.2 IFBF - Anderson Ranch Comments to BOR, Sept. 2019.pdf

Braden Jensen <bjensen@idahofb.org>

From:	Braden Jensen <bjensen@idahofb.org>
Sent:	Mon Sep 09 2019 13:53:47 GMT-0600 (MDT)
To:	"bor-sra-boifeasibility@usbr.gov" <bor-sra-boifeasibility@usbr.gov>
Subject:	[EXTERNAL] Idaho Farm Bureau Comments
Attachments:	image001.jpg IFBF - Anderson Ranch Comments to BOR, Sept. 2019.pdf

Mr. Jim Taylor:

Please find the attached comments submitted by the Idaho Farm Bureau Federation regarding the proposed Anderson Ranch Dam Project.

Thank you for your consideration.

Best regards,
Braden Jensen

Deputy Director of Governmental Affairs
office 208-342-2688 | cell 435-230-3992
fax 208-342-8585 | bjensen@idahofb.org

cid:image001.jpg@01D33719.AF7C8600

Idaho Farm Bureau Federation® *— The Voice of Idaho Agriculture*™
500 W. Washington Street, Boise, ID 83701
www.idahofb.org

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"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

Sent:	Tue Sep 10 2019 11:54:35 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Idaho Farm Bureau Comments
Attachments:	image001.jpg IFBF - Anderson Ranch Comments to BOR, Sept. 2019.pdf

---------- Forwarded message ---------
From: **Braden Jensen** <bjensen@idahofb.org>
Date: Mon, Sep 9, 2019 at 1:54 PM
Subject: [EXTERNAL] Idaho Farm Bureau Comments
To: bor-sra-boifeasibility@usbr.gov <bor-sra-boifeasibility@usbr.gov>

Mr. Jim Taylor:

Please find the attached comments submitted by the Idaho Farm Bureau Federation regarding the proposed Anderson Ranch Dam Project.

Thank you for your consideration.

Best regards,
Braden Jensen

Deputy Director of Governmental Affairs
office 208-342-2688 | cell 435-230-3992
fax 208-342-8585 | bjensen@idahofb.org

Idaho Farm Bureau Federation® *— The Voice of Idaho Agriculture*™
500 W. Washington Street, Boise, ID 83701
www.idahofb.org

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Idaho Farm Bureau® Federation
500 West Washington Street
Boise, Idaho 83702
(208) 342-2688 Fax (208) 342-8585

September 6, 2019

SUBMITTED VIA EMAIL: bor-sra-boifeasibility@usbr.gov

Mr. Jim Taylor
Environmental/Cultural Resource Manager
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, ID 83702

RE: Bureau of Reclamation – Anderson Ranch Increased Water Storage Project

Dear Mr. Jim Taylor:

On behalf of the more than 80,000 member-families of the Idaho Farm Bureau Federation, I write to provide comments in support of the Bureau of Reclamation ("BOR or Agency") moving forward with the study and analysis of increased water storage behind Anderson Ranch Dam. This topic is important to our members and we are grateful for the opportunity to provide our insight.

The Idaho Farm Bureau Federation ("IFBF" or "Farm Bureau") has been recognized as the state's leading advocate for private property rights and sustained prosperity, for more than 75 years. Our members represent water-users from across the state – farmers, ranchers, families, and property owners. Responsible stewardship of our water resources is appreciated, honored, and practiced by our members.

Additional water storage facilities are a top priority for Farm Bureau. As the fastest growing state in the nation, the demand on our water resources will only increase in the future. IFBF policy supports the construction, improvement and increased size of storage facilities that provide multiple beneficial uses of Idaho's water. Farm Bureau asks the BOR to fully consider the existing and future demand for water in Water District 63, and how the approximate 29,000 additional acre-feet of water storage will benefit water-user needs.

IFBF was a strong supporter of HJM4 that was passed in the 2019 Idaho Legislative Session. This joint memorial expressed the Idaho Legislature's support to designate the raising of Anderson Ranch Dam as one of the State's priorities. We believe that this memorial sends an important message to BOR that the state legislature, and the constituents that they represent, are supportive of these water infrastructure projects. We encourage the Agency to move forward with this project as quickly and responsibly as possible.

Farm Bureau recognizes the potential impact that such a project may have on private property. IFBF policy supports the protection of property rights and the just compensation for any takings of any

private property. Farm Bureau asks the BOR to fully consider any loss of, or impact to, the full enjoyment of private property with this proposed project.

On behalf of the entire membership of the Idaho Farm Bureau, I thank you for your consideration of these comments. We look forward to being involved in this process as the Agency's analysis continues. Please contact Braden Jensen at 208-342-2688, if you have any questions regarding this topic.

Sincerely,

Bryan Searle, President
Idaho Farm Bureau Federation

Conversation Contents

[EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study
Attachments:
/6. [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study/1.1 Idaho Conservation League EIS & Scoping Comments Boise Feasibility 09092019 .pdf
/6. [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study/1.2 IDFG Letter 63-34348 09092018.pdf
/6. [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study/1.3 Treasure Valley DCMI Future Demand Study, cited at p. 7 of SPF 2016 DCMI Study.pdf
/6. [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study/2.1 Idaho Conservation League EIS & Scoping Comments Boise Feasibility 09092019 .pdf
/6. [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study/2.2 IDFG Letter 63-34348 09092018.pdf
/6. [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study/2.3 Treasure Valley DCMI Future Demand Study, cited at p. 7 of SPF 2016 DCMI Study.pdf

Marie Kellner <mkellner@idahoconservation.org>

From:	Marie Kellner <mkellner@idahoconservation.org>
Sent:	Mon Sep 09 2019 13:47:45 GMT-0600 (MDT)
To:	<BOR-SRA-Boifeasibility@usbr.gov>
Subject:	[EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study
Attachments:	Idaho Conservation League EIS & Scoping Comments Boise Feasibility 09092019 .pdf IDFG Letter 63-34348 09092018.pdf Treasure Valley DCMI Future Demand Study, cited at p. 7 of SPF 2016 DCMI Study.pdf

Greetings,

Attached, please find the Idaho Conservation League's comment letter re: the BOR's Boise River Feasibility Study. Please also find attached two documents referenced in ICL's letter: 1) an Idaho Dep't of Fish & Game letter dated Sept. 14, 2018, and 2) an excerpt from a 2016 SPF Water Engineering study commissioned by the Idaho Water Resource Board.

ICL thanks the BOR for its serious and thoughtful consideration of our comments, and we look forward to discussing any ideas or questions raised by our comments.

Best,
Marie Kellner

--
Marie Callaway Kellner
Conservation Programs Director

Idaho Conservation League
PO Box 844, Boise, ID 83701
208.345.6933 x 32 • fax 208.344.0344
http://www.idahoconservation.org• http://www.idahoconservation.org/blog
Twitter: iclnaturerocks
Facebook: /idahoconservationleague

Idaho's leading voice for conservation

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:54:24 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study
Attachments:	Idaho Conservation League EIS & Scoping Comments Boise Feasibility 09092019 .pdf IDFG Letter 63-34348 09092018.pdf Treasure Valley DCMI Future Demand Study, cited at p. 7 of SPF 2016 DCMI Study.pdf

---------- Forwarded message ---------
From: **Marie Kellner** <mkellner@idahoconservation.org>
Date: Mon, Sep 9, 2019 at 1:49 PM
Subject: [EXTERNAL] Idaho Conservation League's Comments re: Boise River Feasibility Study
To: <BOR-SRA-Boifeasibility@usbr.gov>
Cc: John Robison <jrobison@idahoconservation.org>

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ICL thanks the BOR for its serious and thoughtful consideration of our comments, and we look forward to discussing any ideas or questions raised by our comments.

Best,
Marie Kellner

--
Marie Callaway Kellner
Conservation Programs Director
Idaho Conservation League
PO Box 844, Boise, ID 83701
208.345.6933 x 32 • fax 208.344.0344
http://www.idahoconservation.org• http://www.idahoconservation.org/blog
Twitter: iclnaturerocks
Facebook: /idahoconservationleague

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208.345.6933 • PO Box 844, Boise, ID 83702 • www.idahoconservation.org

Bureau of Reclamation
Snake River Area Office
bor-sra-boifeasibility@usbr.gov
230 Collins Road
Boise, ID 83702

Submitted via Email

September 9, 2019

Dear Bureau of Reclamation:

The Idaho Conservation League ("ICL") submits these comments in response to the BOR's *Notice of Intent to Prepare an Environmental Impact Statement for the Boise River Basin Feasibility Study, Elmore County, Idaho*.

Since 1973, ICL has been Idaho's voice for clean water, clean air and public lands—values that are the foundation of Idaho's extraordinary quality of life. ICL works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest statewide non-profit conservation organization, we represent members who want to ensure that public resource developments are as respectful and protective of Idaho's natural resources as possible.

ICL actively engages in opportunities related to improving Boise River health including, though not limited to: reviewing and commenting on Clean Water Act permits; participating in the creation of water quality rules; partnering with local governments, NGOs and other stakeholders on river floats, clean-up efforts, and riparian restoration projects; and reviewing, and engaging when appropriate, in water right applications and other permitting and project opportunities.

ICL staff and members care deeply about the health of the Boise River. Staff has closely followed the BOR's Boise River Feasibility project, including meeting with BOR staff, Idaho Water Resource Board ("IWRB") members and their staff, attending relevant Open Houses, and meeting with various stakeholders in the impacted area. ICL asks the BOR to consider the following factors as it moves forward with its analysis and compiles its Environmental Impact Statement ("EIS"):

Need for Anticipated Future Demand Updates for Both DCMI and Irrigation, and Acknowledgment of Their Relationship to Each Other

The BOR's *Boise River Basin Feasibility Study, Frequently Asked Questions, August 2019,* cites the 2016 SPF Water Engineering study's finding that, by 2065, the Boise River Basin will need between 109,000 and 188,000 additional acre-feet for DCMI uses. ICL directs the BOR's attention to a 2010 report commissioned by the IWRB and cited by SPF at page 7 in its 2016 study,[1] which indicates both anticipated increased DCMI demand and anticipated lesser irrigation demand. In the 2010 study, when the increasing need for DCMI is coupled with the decreasing need for irrigation, the need for additional DCMI dropped to ~83,000 acre-feet.

No matter the appropriate number, the discrepancy between the 2010 and 2016 studies demonstrates that: 1) there are differences in professional opinion as to the accurate anticipated future need, and 2) it is misleading and inaccurate to evaluate anticipated future DCMI demand without also calculating and incorporating anticipated lessened irrigation demand at that time.

As this study continues, ICL urges the BOR to evaluate *ALL* anticipated future needs and to recognize the declining need for irrigation water in the Treasure Valley as its population becomes increasingly urban. In suggesting this, ICL underscores and seeks to refute a commonly held belief that Treasure Valley water needs will only increase with a growing population. While Idaho Code codifies that Treasure Valley water will be delivered at the same rate it has always been delivered no matter the beneficial use to which it is put, the gravity of expense and impact proposed by a dam raise warrants a hard look at this increasingly outdated practice.

Instead of accepting that current water delivery needs remain the same no matter the *actual* beneficial use to which water is being put, the BOR should analyze storage opportunities created by a more robust Boise Basin water market; canal and diversion infrastructure efficiencies, with the caveat that there is a fine line between establishing efficiency but not having a negative impact on helpful amounts of incidental recharge; and possibly other efficiency opportunities to "store" water via more efficient use of existing water rights.

Alternatives

ICL understands that there are currently three proposed alternatives: a 6' raise of Anderson Ranch Dam, increased irrigation efficiencies through automation in Water District 63, and no-action.

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[1] Summary of WRIME's 2010 Projections, found at p. 7 in the SPF 2016 future demand study referenced in the BOR's FAQ's in Question 2. Attached via email to ICL's comment letter in this matter. *See also*, 2010 TREASURE VALLEY WATER DEMAND PROJECTIONS by WRIME, commissioned by the IWRB, found at: https://idwr.idaho.gov/files/iwrb/2010/20101116-Treasure-Valley-Future-Water-Demand.pdf.

ICL advocates that "irrigation efficiencies" should be broadened to all water use efficiencies. Additionally, ICL urges the BOR to include at least two additional alternatives: one alternative that jointly evaluates a combined raise coupled with increased water use efficiencies, as opposed to only evaluating the raise and efficiencies separately, and 2) an alternative that evaluates managed aquifer recharge or other downstream off-channel storage as a storage option.

Ecological Concerns & Cumulative Impacts

NEPA requires the BOR to consider the cumulative impacts of this project with other known situations. As the 6' Anderson Ranch Dam raise is studied, ICL urges the BOR to consider the following in the spirit of both environmental concerns and cumulative impacts:

Fishery and River Health Impacts and Opportunities

Anderson Ranch Dam is on the South Fork of the Boise River ("SFBR"). Both the reservoir and the SFBR below the dam are habitat for bull trout, a species designated as threatened by the Endangered Species Act. Additionally, the SFBR hosts a native trout fishery that, in addition to its inherent value, provides a popular recreational fishery and injects millions of dollars into the regional economy. Impacts to and protection of all of these fish must be a study priority.

The Boise River system is heavily manipulated and managed, and agreements between the BOR, Water District 63, Idaho Dep't of Fish & Game ("IDFG"), and other water users and stakeholders allow for minimum amounts of flow in all reaches of the river throughout the year for fish and other ecological and recreational reasons.

For bull trout, at least 600 cfs flows through the SFBR in the irrigation season and at least 300 cfs flows through the SFBR in the non-irrigation season. In addition to these base flows, an IDFG study conducted last year[2] estimated that periodic high flows of at least 2400 cfs for 8+ days are the bare minimum necessary to maintain the ecological health of the SFBR. Further down river, at least 240 cfs is released between Lucky Peak and the Glenwood Gage in the non-irrigation season to maintain the most basic river health.

Also relevant, approximately 50,000 acre-feet of Boise River water is used for salmon flow augmentation in the Columbia-Snake River System, of which the Boise River Basin is part. This underscores the Boise's relationship to the northwest US's critically endangered salmon and steelhead populations.

BOR's analysis should investigate how holding back the additional 29,000 acre-feet will impact these agreed upon flows and practices? And what mitigation could adequately address any negative impacts not just to these amounts of available water but also to river and fishery health?

[2] IDFG Letter of Sept. 14, 2018, *Re: Proposed Water Right Development, Application for Permit No. 63-34348—Elmore County, Board of Commissioners.* Attached via email to ICL's Comment Letter in this matter.

Could other water sources be found to meet any of these obligations so that the need for additional Boise Basin storage would be obviated?

Water Rights

In this instance, at least three (and possibly more) large water rights have priority to the water right the BOR will need to seek for this proposed dam raise. Elmore County's water right no. 63-34348, and Cat Creek Energy LLC's nos. 63-34403 and 63-34652. If granted, ICL understands that any and all three of these rights will have priority over the 29,000 sought here. If ICL's understanding is incorrect, and the BOR has already applied for the water right necessary to store 29,000 acre-feet, the questions remain: how will these water rights interact with each other? And how can they be managed so as to protect the fishery and other relevant ecological needs?

Water Quality

All of the Boise River Basin municipalities, and numerous commercial and industrial dischargers, have Clean Water Act discharge permits via the Idaho Pollution Discharge Elimination System ("IPDES"). The pollution discharge limits established by these permits rely on certain flows in the river. How will the 29,000 acre-feet held upstream impact and/or interact with the existing myriad IPDES permit son the same system?

ICL has also reviewed and joins in Trout Unlimited's comments in this matter.

ICL thanks the BOR for its thoughtful consideration of our ideas and concerns, and we stand ready to actively participate in any work groups or other opportunities that may be created in furtherance of the BOR's Boise River Feasibility Study. Please keep ICL on the notice list for all communications related to this project.

Sincerely,

Marie Callaway Kellner
Conservation Programs Director
Idaho Conservation League
mkellner@idahoconservation.org
208.345.6933 ext. 32

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SEP 14 2018
DEPT OF WATER RESOURCES

IDAHO DEPARTMENT OF FISH AND GAME
SOUTHWEST REGION
3101 South Powerline Road
Nampa, Idaho 83686

C.L. "Butch" Otter / Governor
Virgil Moore / Director

September 14, 2018

Phill Hummer
Idaho Dept. of Water Resources
Western Regional Office
2735 Airport Way
Boise ID 83705-5082

RE: Proposed Water Right Development, Application for Permit No. 63-34348—Elmore County, Board of Commissioners

Dear Mr. Hummer,

This letter is in response to a request from SPF Water Engineering, acting on behalf of Elmore County Board of Commissioners, for comment from Idaho Department of Fish and Game (Department) regarding the effects of construction and operation of a proposed water appropriation. The proposed action provided for review was the Application for Permit to Appropriate the Public Waters of the State of Idaho Number 63-34348. The letter requesting comment stated: "Water Appropriation Rules (IDAPA 37.03.08, 40.05.g) require applicants to seek letters of comment on the effects of the construction and operation of projects proposed by certain water right applications."

The Application for Permit to Appropriate the Public Waters of the State of Idaho Number 63-34348 identifies a point of diversion for the project located on Anderson Ranch Reservoir (ARR), which is on the South Fork Boise River (SFBR) in Idaho Department of Water Resources (IDWR) Administrative Basin 63. Diverted water would be transferred to IDWR Basin 61 for the purpose of groundwater recharge and irrigation. The review materials also included a brief narrative with the following description of the proposed project:

> "Water will be pumped from the South Fork Boise River to Little Camas Reservoir for storage, then diverted through the existing Mountain Home Irrigation District canal to the divide between the South Fork Boise drainage and Long Tom Creek drainage (T1S, R8E, S22). The water will flow through an existing tunnel, which may be enlarged for additional flow, to the streambed of East Fork Long Tom Creek, to Canyon Creek. Water will then flow down Canyon Creek to the Mountain Home Irrigation District diversion. At the

diversion, water can be diverted to Mountain Home Reservoir for ground water recharge (through reservoir leakage) and/or irrigation purposes, to the gravel pit area for ground water recharge, or can be allowed to flow downstream in Canyon Creek for ground water recharge via the Creek bed. A beginning point and ending point were used to describe the ground water recharge place of use via the creek beds."

The Application for Permit indicates water could be pumped from ARR up to a rate of 200 cubic feet per second (cfs) at any time year-round for the purpose of Diversion to Storage. The applicant is seeking storage rights for 10,000 acre-feet annually (afa) for the purpose of Ground Water recharge year-round and 10,000 afa for Irrigation Storage from March 1 to November 15 annually. Thus, the applicant may potentially withdraw a total of 20,000 afa from ARR at a maximum rate of 200 cfs.

Fish and Wildlife Management Context

The purpose of these comments is to assist the decision-making authority by providing technical information addressing potential effects on wildlife and wildlife habitat. It is not the purpose of Idaho Department of Fish and Game to support or oppose this proposal. Resident species of fish and wildlife are property of all Idaho citizens, and IDFG and the Idaho Fish and Game Commission are expressly charged with statutory responsibility to preserve, protect, perpetuate and manage all fish and wildlife in Idaho (Idaho Code 36-103(a)). This analysis is conducted pursuant to our statutory charge and direction as provided by Idaho law.

Hunting, fishing, trapping and wildlife viewing are major economic drivers in Idaho, supporting over 14,000 jobs and hundreds of small businesses, many of which are in rural parts of our state and generating over $1.4 billion per year for Idaho's economy. For example, an economic survey of fishing was completed for the entire state in 2011. Spending by anglers on fishing trips to Elmore County ranked 15th out of the 44 Idaho counties. Angler spending on fishing with destinations in Elmore County was about $14 million (IDFG unpublished data).

The Department divides responsibilities for managing the fish and wildlife resources of the Boise River drainage between 2 administrative regions. The Department's Southwest Region manages fisheries and wildlife populations in the Boise River system below Anderson Ranch Dam, as well as in the Canyon Creek drainage. The Department's Magic Valley Region manages resources associated with ARR and SFBR above the reservoir, as well as the Little Camas drainage, including Little Camas Reservoir.

The Fish and Game Commission has approved several wildlife and fisheries management plans relevant to resources within the SFBR basin. Wildlife management plans describing population status, objectives, and priority management actions for species occurring within the SFBR include the Idaho Elk Management Plan 2014-2024, the Idaho Mule Deer Management Plan, 2008-2017, and the State Wildlife Action Plan (SWAP).

Fisheries management priorities and objectives are summarized in the Department's Fisheries Management Plan, 2013-2018 (FMP). Within the FMP, management frameworks are applied to individual waterbodies. For example, a "general" rules framework is applied to provide harvest opportunities; "trophy" and "quality" rules frameworks are applied to increase opportunities to catch and harvest larger fish; and a "wild" rules framework is intended to conserve and increase angling opportunities for native trout.

Management of bull trout (*Salvelinus confluentus*) within SFBR is jurisdiction of the US Fish and Wildlife Service (FWS) because the species is listed Threatened under the federal Endangered Species Act of 1973. For this reason, the species is under "conservation" rules framework in the FMP, which prohibits harvest. Management of bull trout is particularly relevant to the SFBR because ARR operations are subject to terms established in the 2005 FWS Biological Opinion (BIOP; USFWS 2005), which identifies pool volumes and discharge rates to support the bull trout fisheries.

The bald eagle (*Haliaeetus leucocephalus*) was delisted from Endangered Species Act (ESA) in 2007 but is currently protected by the Bald and Golden Eagle Protection Act. This species, along with the majority of native birds in Idaho are also subject to the federal Migratory Bird Treaty Act.

Approach to assessment of potential impacts

In this report the Department summarizes potential impacts related to implementation of this proposed water right. We have organized the report under the following primary topics:

- Description of Geographic Context and Fish and Wildlife Resources
- General Riverine Ecological Concepts
- Fish and Wildlife Resource Considerations
- Analysis of Potential Consequences for Fish And Wildlife Resources.

We anticipate constraints on the amount and timing of water availability necessary for implementation of this project. For example, constraints on reservoir operations during dry years may reduce the amount of water available or the timeframe in which it is available. The difficulty of predicting when withdrawals would occur and the timing and volume of such withdrawals affects the specificity of our analysis.

With specific respect to the limitations of our understanding of the project, we are limiting analysis to the SFBR. Withdrawing water from SFBR has potential downstream impacts below SFBR, including impacts to Arrowrock Reservoir, Lucky Peak Reservoir, and Boise River below Lucky Peak Reservoir. However, these impacts would depend on any changes to the operation of Arrowrock or Lucky Peak dams. These are economically and socially important fisheries, but we

cannot predict how or if dam operations would change, so any analysis of impacts further downstream would be conjectural.

Additionally, effects of construction and implementation of the project on construction and operation of a pumping station and water conveyance pipes between ARR and Little Camas Reservoir cannot be included in this review because specific locations and designs are unknown to us. This infrastructure has the potential to affect upland wildlife habitat, displace wildlife, and affect big-game migration behaviors. Effects of additional storage and drawdown cycles on Little Camas Reservoir would be dependent on the schedule of such activities and whether a conservation pool were established to support fisheries. Increased storage potential may benefit the fishery and anglers. Effects on the Canyon Creek drainage would also depend on the schedule and volume of flows and whether an annual flow cycle would be established. For example, establishing annual flow could benefit fish and wildlife, but erratic flow cycles have the potential to have negative impacts.

Description of Geographic Context and Fish and Wildlife Resources

The SFBR comprises a drainage basin of approximately 1300 square miles located in southwestern Idaho. The SFBR is a major tributary within the Boise River drainage, which is the drainage basin serving the highest density human population in the state. Lucky Peak Reservoir, Arrowrock Reservoir (286,600 af), and ARR (479,000 af) were established 1915-1955 for the purposes of irrigation storage and providing flood protection to downstream urban and agricultural infrastructure. Additional uses include power production, recreation, and fisheries. Management of the 3 dams is coordinated to address flood risks and deliver water to downstream users.

Fisheries

Anderson Ranch Dam was constructed 1941-1950, and the reservoir storage capacity is approximately 479,000 af. The upstream reach of SFBR is the primary tributary to the reservoir, and Lime Creek, Camas Creek, and Fall Creek are smaller tributaries. ARR storage contains a layer of cold, highly-oxygenated water conducive to cold-water fisheries production. ARR's mixed-species fishery includes mountain whitefish (*Prosopium williamsoni*), rainbow trout (introduced populations of *Oncorhynchus mykiss*), bull trout (*Salvelinus confluentus*), kokanee salmon (*Oncorhynchus nerka*), landlocked Chinook salmon (*Oncorhynchus tshawytscha*), yellow perch (*Perca flavescens*), and smallmouth bass (*Micropterus dolomieu*). The majority of ARR anglers target kokanee and smallmouth bass, and the Department's management goal for the ARR fishery is to provide a catch rate of 1 kokanee per hour with a mean size of 12-14 inches. In the most recent IDFG Economic Report (2011 unpublished data) ARR generated 25,840 angler trips annually at an economic value of nearly $4.3 million to the economy.

ARR kokanee salmon and bull trout express an adfluvial life history, seasonally migrating between ARR and the SFBR upstream from the reservoir. The SFBR fishery above ARR consists of a mixture of native and nonnative sportfish, including redband trout (native populations of

Oncorhynchus mykiss), rainbow trout, brook trout (introduced; *Salvelinus fontinalis*), and mountain whitefish. The adfluvial bull trout and kokanee salmon are seasonally available within this fishery. The kokanee spawning run represents a unique experience for campers and day-trip recreationists. Fisheries in upper reaches are regulated mostly under general rules management with emphasis on a put-and-take rainbow trout fishery, but a small section in the upper drainage is managed for quality trout, and bull trout are under conservation rules management. An active stocking program within the SFBR and Big Smoky Creek supplements the popular fishery and includes one put-and-take pond.

Discharge from ARR is managed by the Bureau of Reclamation for uses that include irrigation, flood control, power production, and fisheries management. River flow regimes below ARR have been managed for decades. The manifestation of this regulation is a structured flow regime consisting of minimal flows during the non-irrigation season and managed releases during the irrigation season, which typically spans the period of April through August. Discharge of cold, highly oxygenated water to the SFBR channel contributes to water quality and forage productivity. Seasonal ecological flows have been established with current reservoir management practices to support high sportfish density and growth rate. These conditions have contributed to the establishment of a nationally-renowned trout fishery, and is one of the most popular wild trout fisheries in the state. The upper portion of this reach is accessible by road access. The lower reach is canyon-bound and lacks road and trail access, and it is a popular day- and overnight float trip destination and is a unique angling experience in southwest Idaho. Based on the IDFG 2011 Economic Survey the SFBR generated 28,600 angler trips and $4.6 million in trip-related spending annually.

The recreational fishery occurring in the tailwater reach of the SFBR below ARR primarily comprises populations of wild rainbow trout and mountain whitefish. The Department manages the rainbow trout fishery under trophy trout regulations. Migratory bull trout occur at low density. Native nongame fish populations include largescale sucker (*Catostomus macrocheilus*), northern pikeminnow (*Ptychocheilus oregonensis*), and sculpin (*Cottus* spp.). The fishing season is closed April 1st through Memorial Day to protect spawning rainbow trout.

The SFBR terminates in Arrowrock Reservoir (AR) where it joins the Middle Fork of the Boise River and becomes the mainstem Boise River. Lucky Peak Reservoir is immediately below Arrowrock Reservoir. The two large reservoirs offer popular sport fisheries for kokanee salmon, rainbow trout, and to a lesser extent, smallmouth bass. Both Arrowrock and Lucky Peak reservoirs are managed with a goal of producing larger kokanee salmon (exceeding 14") with average catch rates exceeding 0.3 kokanee/hour. Additionally, adfluvial bull trout utilize Arrowrock Reservoir as rearing and wintering habitat. Based on the IDFG 2011 Economic Survey, Arrowrock Reservoir generates 20,924 angler trips annually at an economic value of $1.4 million while LPR generates 45,273 annual trips at a value of $3.4 million.

The Little Camas Creek drains into ARR and is dammed to form Little Camas Reservoir, which stores water for irrigators. Little Camas Reservoir is a productive hatchery-trout fishery during good water years, but it lacks a conservation pool and is subject to extreme drawdown during drought years. This fishery is drought sensitive and has had several fish salvages ordered by the Idaho Fish and Game Commission.

The Canyon Creek drainage drains to CJ Strike Reservoir, so Canyon Creek is a tributary of the Snake River. The fishery in this drainage is limited and may contain a remnant population of redband trout, but the current potential of the fishery is likely limited by flow and perhaps water quality, especially temperature. The creek has intermittent flow, and the creek bed passes through Mountain Home to its mouth at CJ Strike Reservoir. Because predicted seasonal flow patterns are not known to us, meaningful analysis of effects on this fishery is not possible at this time.

Wildlife

The Department divides the SFBR among several game management units. The upper portion of the SFBR drainage and ARR comprise Unit 43. This unit is predominately conifer forest administered by the USDA Forest Service Boise and Sawtooth National Forests. Economically important wildlife include big game, such as elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), furbearers, such as beaver (*Castor canadensis*) and American marten (*Martes americana*), and upland birds, such as dusky grouse (*Dendragapus obscurus*). Waterfowl also occur in this unit, but opportunities for hunting are limited when the reservoir freezes.

The lower elevations in the drainage on the south side of ARR and including some tributary basins are located in Unit 44. Economically important wildlife populations also include mule deer, elk, and pronghorn, as well as furbearers, such as beaver and American marten, and upland game, such as grey partridge (*Perdix perdix*) and chukar. Greater Sage-grouse currently occur in the western portion of the unit.

Portions of the SFBR drainage below ARR are primarily in Unit 39. Migratory populations of elk and mule deer populations occupying higher elevations of several game units during late spring through early fall move to winter range at lower-elevation foothills of units 39 and 45. Upland game in Unit 39 includes chukar (*Alectoris chukar*), California quail (*Callipepla californica*), dusky grouse (*Dendragapus obscurus*) and ruffed grouse (*Bonasa umbellus*).

Species of greatest conservation need as identified in SWAP associated with riparian habitat in the SFBR drainage currently or historically include Lewis' woodpecker (*Melenerpes lewis*), mountain quail (*Oreortyx pictus*), western toad (*Anaxyrus boreas*), little brown myotis bat (*Myotis lucifugus*), hoary bat (*Lasiurus cinereus*), and silver-haired bat (*Lasionycteris noctivagans*). In addition, the SFBR includes habitat for nesting bald eagles (*Haliaeetus leucocephalus*), osprey (*Pandion haliaetus*), and a wide variety of waterfowl, shorebirds, and neotropical migrant songbirds.

General Riverine Ecological Concepts

The Department's ability to meet management objectives depends on availability of habitat that provides for adequate survival rates and reproductive productivity of fish and wildlife populations. Habitat is seldom a stable, static entity. Habitat values are maintained by the interaction of disturbance and regeneration processes. In this section we review key ecological concepts that form the framework of our analysis.

Stream dynamics and their alteration

Impacts to river function often involve alteration of the hydrologic regime. Poff et al. (1997) described the hydrologic regime as the magnitude, timing, frequency, duration and rates of change of streamflow. The character of the drainage and native landscape interact with the flow regime to drive ecological processes and establish habitats within which native and resident species have adapted. These complex, dynamic ecosystems are made up of a network of channels and floodplains that are intermittently connected via changes in flow (Humphries et al. 2014), and the ecological processes that support these ecosystems are generally predictable with respect to the longitudinal and lateral changes in production, discharge, and function (Vannote et al. 1980).

Substantial alteration to the aforementioned characteristics of the natural hydrologic regime will alter habitat, ultimately affecting the dependent fish and wildlife species (Vannote et al. 1980, Junk et al. 1989, Thorp and Delong 2002, Thorp et al. 2008). Throughout the nation standards have been developed to protect stream processes, defining bounds for consumptive and non-consumptive use in order to preserve necessary hydrologic regimes and subsequent river function (e.g., environmental flows, ecological flows, ecosystem flows, biological flows, etc.; Baron et al. 2002, Hauer et al. 2004, MacDonnell 2009, Petts 2009, Smith 2009, DePhilip and Moberg 2010).

Hydrograph stratification

Hauer et al. (2004) highlight five primary time intervals during the water year, with each interval having specific and largely distinct ecological conditions.

- Interval 1 is the winter period, which generally extends from early November to late February or early March. In the SFBR, the primary winter ecological constraint is adequate fish habitat in the form of sufficient stream flows for rainbow trout, bull trout, and mountain whitefish.
- Interval 2 is the initiation of spring snowmelt, usually in March or April. This is the period where flows gradually begin increasing from the low flows experienced during the winter. This is the period when spring-spawning rainbow trout begin migrating.
- Interval 3 is the spring high-flow period, usually from April through June, when under natural conditions, snowmelt generates the flows necessary to accomplish channel maintenance work in the river channel and maintain a functioning river-floodplain interface. The high-flow period is essential for maintaining riparian habitats and for those wildlife species that are dependent on healthy riparian habitat.

- Interval 4 is the period after high flow, usually in late June and July, and is important because the rate of the decline in the falling limb of the hydrograph can affect the regeneration and sustainability of the riparian cottonwood forest.
- Interval 5 is the summer and fall hydrograph recession period (generally from July through October), up to the onset of winter. In SFBR below ARR, this period is somewhat modified by water management for irrigation. River flow is typically maintained through August and reduced in September following the irrigation season.

Winter fish ecology

In northern latitude rivers, winter can be a very stressful period for stream-dwelling fish. In fact, overwinter survival may be the most prominent limiting factor for stream-dwelling salmonids (Cunjak 1996) when they face a variety of stressful conditions. First and foremost, water temperatures can be extremely cold. Because salmonids are poikilotherms that do not hibernate, cold water temperatures limit their swimming and acceleration abilities, which make them more susceptible to displacement and predation (Huusko et al. 2007). Moreover, metabolic processes are slowed at such temperatures, and stream-dwelling trout often suffer a metabolic deficit during acclimation to rapidly declining water temperatures at the onset of winter (Cunjak and Power 1987, Cunjak et al. 1987). Consequently, energy reserves may not be sufficient to survive the winter, and added stress, such as flow reductions, may exacerbate their metabolic deficit.

A second difficulty for salmonids in winter is that streamflow is usually reduced to the lowest levels of the year. The availability of suitable physical habitat is already considered the primary factor regulating stream trout populations in winter (Chapman 1966), and additional streamflow reductions from water withdrawal may magnify this shortfall, further limiting habitat availability and reducing food supplies for stream-dwelling fish.

A third winter stressor on stream-dwelling salmonids in northern latitudes is ice formation. Three types of ice—frazil ice, anchor ice, and surface ice (such as ice shelves)—are common in streams, and all can be harmful to salmonids (Brown et al. 2011). In some situations, anchor ice may fill pools where trout would normally aggregate during winter (Brown and Mackay 1995, Jakober et al. 1998), the result being increasing stream velocities in whatever habitat remains. The shallower the river, the more detrimental ice will likely be to stream-dwelling fish.

Aquatic habitat, riparian habitat, and channel maintenance

High streamflows are a necessary component of the annual hydrograph (Leopold et al. 1964). As reviewed in the seminal paper by Poff et al. (1997), high flow events are crucial to the long-term health of river and floodplain ecosystems because they put in motion a number of important stream ecosystem processes. Bankfull streamflow initiates bedload transport and scouring of vegetation, which helps maintain channel morphology. High flows inundate the floodplain, which sustains and regenerates important streambank and floodplain vegetation such as cottonwoods and willows. High flows also recruit new woody material to the channel and rearrange existing woody debris, creating

a mosaic of complex habitat that is important for fish, invertebrates, and other animals. Finally, high flows help flush spawning habitat for salmonids, cleaning fine sediment from the gravel beds where salmonids build redds to incubate their eggs.

Fundamentally, the shape and function of the river channel, and therefore the habitat for fish and other aquatic organisms, is determined by the physical processes of moving water and sediment in the channel and between the channel and the floodplain (Poff et al. 1997). Rivers migrate across their floodplain by eroding material from the outside bank of meander bends and depositing material on the inside of meander bends, and this occurs primarily at or above bankfull discharge (Leopold et al. 1964).

The ability of a river to scour its channels and maintain functioning floodplains is dependent not only on regular attainment and exceedance of bankfull flows, but is also dependent on the duration of bankfull flow events. While it is true that bankfull flows are not needed every year and naturally do not occur every year, it is also true that attainment of bankfull discharge for only a few days each year may not be adequate for maintaining channel capacity and floodplain function (Schmidt and Potyondy 2004). Indeed, the highest-magnitude streamflows, those with a recurrence interval of 50 or more years, may be necessary for creating important pool habitats and rearranging the largest bedload particles in rivers (Whiting 2002).

Schmidt and Potyondy (2004) describe and highlight the following ecological benefits of channel maintenance flows:

- Conveyance of water and erosion products from tributary areas through the stream system without aggradation or degradation;
- Maintenance of the relationship between the channel and floodplain by temporarily storing flood flows on the floodplain;
- Maintenance of pools, riffles, meanders, and other physical habitats necessary to sustain aquatic ecosystems;
- Providing navigation conduits on larger streams and rivers for recreational floating and power boating;
- Stabilization of streambanks by riparian vegetation and rootwads which protects banks from erosion and collapse;
- A vegetation filter that removes and stabilizes sediments and nutrients moving toward the stream from adjacent slopes;
- Surface roughness on the floodplain favorable for recharging groundwater systems;
- Effective floodplain soil conditions to detain flood water for later release to sustain low flows;
- Moist corridors that act as fuel-breaks, fire line anchor points, and safety zones;
- Large woody debris which helps create structural features that form pools and bars;

- Shade to the stream that maintains cooler water temperatures necessary to sustain cold-water aquatic life.

Floodplain vegetation in the SFBR includes black cottonwood as a dominant component. Seed germination and seedling survival of cottonwoods is dependent on the combination of flood events, which provide necessary moisture at the right time, and flood scouring and deposition, which provides the ideal barren soil seed bed (Rood et al. 1995, Braatne et al. 1996, Mahoney and Rood 1998, Rood et al. 2003). Critical to cottonwood seedling success is the timing and rate of decline of the falling limb of the hydrograph (Mahoney and Rood 1998). Cottonwoods typically release their short-lived seeds after the peak flood flow has dramatically declined. Seeds land on moist, barren sand and cobble bars left after the flood. They rapidly germinate but rely on a slow decline of water levels to maintain soil moisture needed for seedlings to survive the summer drought. Numerous studies have shown that when this process is disrupted by flow alteration and/or diversion during or after spring flood flows, cottonwood recruitment declines (Rood et al. 1995, Braatne et al. 1996, Merigliano 1996, Rood et al. 2003, Braatne et al. 2007).

Flow diversions that reduce base flows have also been shown to negatively affect cottonwoods. Persistence of cottonwoods is dependent on sufficient streamflow, which maintains the local alluvial groundwater table during drought periods (Braatne et al. 1996, Mahoney and Rood 1998, Rood et al. 2003). For example, cottonwoods along sections of the Big Lost River completely died in 5 years when channels were dewatered for irrigation (Rood et al. 2003). When the extent of wetted area within river channels is reduced due to diversion, seedlings may opportunistically find suitable sites for growth below the baseflow level, but they are scoured the following spring during even small floods (Braatne et al. 2007).

The flows necessary to mobilize channel sediments and create barren alluvial bars necessary for cottonwood seed germination (Hauer and Lorang 2004) will become less frequent if flows during late spring or early summer are appreciably reduced. Since cottonwoods are a relatively short-lived tree (100-200 years), alteration causing a decline in seedling recruitment could lead to an age structure of the cottonwood community dominated by older individuals. Without sufficient recruitment of new seedlings, the long-term health of the riparian cottonwood ecosystem along the floodplain of the SFBR is in jeopardy. Additional diversions would further truncate flood flows necessary for creating sand and cobble bars for cottonwood seed germination and would further alter the rate of decline of the falling limb of the hydrograph—both causing worse conditions for cottonwood persistence.

Steenhof et al. (1980) found that bald eagles preferred tree perches compared to cliffs, ice, logs, or the ground, and preferred stout, horizontal branches. In this study, nearly all perches were within 30 m of the river, 58% of the perches were within 5 m of the river bank, and eagles preferred mature cottonwood trees. If high flows were inadequate to promote cottonwood regeneration, the Department would anticipate the eventual decline and potential loss of bald eagle habitat.

Fish and Wildlife Resource Considerations

Fisheries in ARR and SFBR are affected by the volume of water and the temporal pattern of changes in volume. The proposed water right and withdrawal from ARR has the potential to alter reservoir filling. Removing water from ARR would also change reservoir discharge. The timing of removal of water from the reservoir and the timing of changes to downstream flow are not necessarily coupled, so changes in flow downstream would depend on reservoir management decisions.

Water withdrawal could affect fish populations in either the reservoir or the downstream river by directly increasing mortality or decreasing productivity (e.g. stranding mortality or reproductive failure), or changes could reduce habitat quality by compromising habitat function or complexity. The rate, amount, and timing of changes to the volume of water (e.g., the release schedule from ARR) may also affect food web interactions, reproductive behaviors, and basic ecological processes. As reviewed previously, riparian vegetation is reliant on disturbance regimes, particularly flooding. Besides providing valuable high-productivity habitat for terrestrial wildlife, riparian vegetation also affects instream conditions and water quality. For example, riparian habitat provides shading and mitigates the stream temperature warming rate.

Thus, from a perspective of the Department's mission to preserve, protect, perpetuate, and manage the State's fish and wildlife resources, primary concerns regarding withdrawal of water from ARR include the following primary considerations.

Reduction of reservoir pool height during migration of bull trout and kokanee.

The ARR fishery includes adfluvial populations of bull trout and kokanee salmon. Thus, fish populations seasonally occupying the upper basin could be affected when reservoir draw-downs coincide with spawning runs and increase travel distance for migrating fish. Channels through the upper portion of the ARR basin lack structural cover during low pool height, which exposes migrating fish to increased predation risk.

Entrainment of sportfish resulting from the diversion of water.

The proposed project would involve pumping water at rates up to 200 cfs from ARR. At this velocity, the potential to remove fish from the reservoir through the diversion works is substantial. The Little Camas sport fishery is made up of illegally introduced smallmouth bass and rainbow trout, but is dominated by the hatchery rainbow trout. It is possible that fish from the Anderson Ranch Reservoir fish community (e.g. yellow perch) may be transported with the pumped water, thus introducing new fish species into Little Camas and any downstream fishery. Repeated introductions, as would be expected with a water right, increase the likelihood of successful colonization. Under this theoretical scenario, a sustained yellow perch population would likely compete with other resident sportfish and conflict with current management goals.

Reduced flow during periods of low flow, particularly during winter.
As discussed previously, winter conditions are particularly challenging for fish, and winter conditions are often considered limiting for fish populations. In the SFBR, lowest flows occur following the irrigation season, generally from mid-September through March. Additional flow reductions could increase winter mortality or reduce the condition of fish prior to spawning.

Flow reduction or reservoir pool reduction that results in stranding mortality.
Withdrawing water from ARR would reduce the reservoir pool and potentially affect reservoir discharge. During periods of decreasing flow, fish can become stranded as habitat is dewatered. The risk of stranding is particularly high when fish are trapped in off-channel pools or when the flows are reduced suddenly. Because juvenile salmonids conceal almost exclusively along shore, fluctuations in discharge, especially during the day, can result in fish stranding, and may lead directly to fish mortality (Bradford et al. 1995, Bradford 1997).

Loss of high flows that maintain channel and floodplain dynamics.
The SFBR is in a disturbance-prone ecosystem, and the fish and wildlife adapted to this ecosystem depend on disturbance cycles that form and maintain habitat. Key requirements for fisheries production include cold, highly oxygenated water, access to spawning gravel, concealment cover and channel complexity to reduce predation vulnerability, and abundant aquatic invertebrate productivity. Mesic riparian habitat represents a high-productivity source of forage for herbivores, including elk and mule deer. Reduction of mesic riparian vegetation may displace big game to nearby irrigated fields and contribute to wildlife conflicts on private land. Maintaining key ecological attributes depends on periodic high-flow events.

Analysis of Potential Consequence for Fish And Wildlife Resources.
In this section, we review each of the above fish and wildlife considerations in the context of proposed water diversions. This section is intended to present to the applicant possible outcomes of the project and indicate uncertainties about the outcome dependent on unknown fish and wildlife responses or unknown details of the proposed plan.

Reduction of reservoir pool height during migration of bull trout and kokanee.
Adfluvial fish populations migrating between ARR and the upper basin could be affected when reservoir draw-downs coincide with spawning runs and increase travel distance for out-migrating fish. Implementation of the water right has the potential to lower the pool height during the out-migration of adfluvial populations.

Bull trout out-migrations from ARR occur in March through early May, and kokanee out-migrations occur in July and August. Bull trout return to the reservoir during the late fall. During the bull trout out-migration, the reservoir is generally at its highest level and SFBR flow rate above the reservoir is high. During this period, withdrawal from ARR at 200 cfs would have minimal

implications for bull trout out-migration except in situations when the reservoir is at a low level at the beginning of the irrigation season.

For kokanee, this period is generally in the latter half of the irrigation season and during the descending portion of the hydrograph. Pool volume would be decreasing but not typically at minimal pool volume, but pool volume would be variable from year to year at the time of spawning out-migration. We anticipate unappropriated water would be unavailable during this period.

Water uses that would lead to a reduction of the pool level during out-migration periods would increase vulnerability of migrating fish to predation. Lower pool levels would also increase the length of migration corridors associated with the delta of sediments that accumulate at the upper end of ARR. Channel formation and dynamics can reduce outmigration success by creating unstable channel banks. Additional data would be needed to more specifically analyze effects of reduced pool flow on adfluvial populations of bull trout and kokanee.

Entrainment of sportfish resulting from the diversion of water.
Pumping water from a fish-bearing waterbody has the potential to entrain (remove) fish. As the velocity of the intake increases, fish are progressively less able to escape the intake current. Fish entering the pump may be killed or removed with the diverted water. If the pump is protected with a screen, the velocity of water passing through the screen (i.e., the approach velocity) has the potential to impinge fish on the screen if the velocity is too high. Implementation of the water right has the potential to entrain fish at the point of diversion.

The application does not include description of the diversion works. A high-capacity pump would be expected to create water currents in proximity to the intake that could not be overcome by fish. If mortality on fish populations is to be minimized or avoided, design of the diversion structure and pump would need to include measures to exclude fish from the intake and avoid approach velocities that could immobilize fish on any screening. Numerous studies have evaluated screening methods for diversions, but most applications are for canal diversions or similar structures rather than pumps (e.g. Zydlewski and Johnson 2002). Current research suggests the need for individualized evaluation of pump works relative to the fish assemblage at the point of diversion and design constraints or opportunities associated with each project (Baumgartner et al. 2009).

Reduced flow during periods of low flow, particularly during winter.
Winter flows are believed to be one of the most important drivers of rainbow trout density. In a 2015 study of rainbow trout status in SFBR (Butts et al., 2017), the carrying capacity of winter habitat was considered to be more important for population growth than was overall reproductive output. As described previously, winter habitat quality—and, thus, the carrying capacity of winter habitat—is related to the magnitude of winter flows. Implementation of the water right has the potential to reduce discharge from ARR during the winter period and negatively affect the fishery.

Discharge from ARR is lowest following the irrigation season, dropping to low flow rates during the period of mid-September through late February or March during most years. Current discharge rates target minimally 300 cfs during winter and often exceed this flow (USGS 13190500 gage data) to address fisheries needs. As summarized in the 2005 FWS Bull Trout BIOP:

> "Reclamation has flow targets in the South Fork Boise River to support fish habitat and to benefit rainbow trout spawning. The minimum flow target from September 16 to March 31 is 300 cfs. Reclamation will meet this target in 95 percent of years. In the remaining 5 percent of years, flows may drop to as low as 122 cfs. The minimum flow target from April 1 to September 15 is 600 cfs. In years of low carryover, Reclamation will provide at least 300 cfs through April. April to September flows will be at least 600 cfs in 90 percent of years, at least 300 cfs in 98 percent of years, and at 114 cfs during its lowest flow. April flows will be at least 600 cfs in 74 percent of years and as low as 300 cfs in 15 percent of years."

According to USGS data for the river gage at Anderson Ranch Dam (USGS 13190500), SFBR discharge is typically lowest during the month of December, averaging 473 cfs since 1943. During the most recent reporting period, 2016-17, December flow averaged 315 cfs. Small changes in reservoir management could have amplified effects during winter low-flow periods for reasons outlined in previous sections.

If water withdrawal were to reduce winter flow rates, the Department would expect reduced population density and reduced population growth rate for salmonids. Conversely, evidence suggests that increased winter flows would increase the carrying capacity of the river and increase juvenile winter survival.

Flow reduction or reservoir pool reduction that results in stranding mortality.
Reservoir pool reduction occurs annually as water is discharged from ARR during the irrigation season. Fish stranding as a result of normal reservoir operations have not been reported. During extreme reservoir draw-downs, the reservoir is not dewatered but has rarely gone below a target 50,000 af minimum pool (USBR 2016). Implementation of the water right has the potential to alter the existing discharge below Anderson Dam in such manner as to increase salmonid stranding.

In a study of stranding mortality on SFBR below ARR, Dauwalter et al. (2013) summarized typical flow management related to the rate of flow reductions:

> "Flows released from Anderson Ranch Dam are managed by the U.S. Bureau of Reclamation (Reclamation) to fulfill irrigation, flood control, and fish and wildlife needs (USFWS 2005). To support fish habitat and spawning, minimum flows from April 1 to September 15 are 600 cubic feet per second (cfs). From September 16 to March 31, minimum flows are 300 cfs. Ramping rates to decrease flows from 1,000 to 600 cfs from

April 1 to September 15 are a maximum of 35 cfs per 10 minutes for 1 hour, and ramping rates to decrease flows from 600 to 300 cfs from September 16 to March 31 are a maximum of 35 cfs per 10 minutes (USFWS 2005). In practice, these guidelines typically result in two periods of rapid downrampings on the South Fork Boise River. For example, in 2011 flows were decreased from 1,600 to 600 cfs over 1.5 days in mid-August, and flows were again reduced from 600 to 300 cfs overnight on September 15."

Dauwalter et al. (2013) documented fish stranding at all down-ramping periods, and the majority of stranded fish were age-0 rainbow trout (i.e., young-of-year). However, the majority of stranded fish observed were associated with off-channel pools. Active research topics include characterization of stranding patterns and population-level effects of stranding, as well as methods to manage the rate of flow down-ramping to minimize stranding mortality.

Considering that strandings were documented at all standard down-ramping periods and did not appear to vary linearly with flow levels, the proposal to withdraw water from ARR may not affect the rate of stranding within normal operation parameters. However, if the project were to result in increased rate of down-ramping, higher rates of stranding would be expected. Down-ramping effects at flow rates other than those observed by Dauwalter et al. (2013) have not been studied. If the project were to result in down-ramping at atypical flow rates, additional study would be required to evaluate stranding rates.

Loss of high flows that maintain channel and floodplain dynamics.
High flows serve a vital function in maintaining channel characteristics, including spawning substrate, required by fish and other aquatic organisms. Disturbance regimes from flows that inundate the floodplain are also required to maintain riparian habitat, which in SFBR includes cottonwood. Implementation of the water right may reduce the frequency and duration of maintenance flows under some circumstances.

All intervals could potentially experience altered flow because the proposed water withdrawals have a year-round season of use. However, as acknowledged previously, withdrawals are likely to be constrained by other users, such as those with senior water rights. The most likely period when withdrawals would occur in the proposed project would be during high flow periods of the spring and early summer freshet when unappropriated water would be available for discharge.

Predicting the effects of withdrawing water from ARR on SFBR flow during high water is complicated by BOR dam operations. Withdrawal from the reservoir pool does not necessarily result in a decrease in flow through the dam. As a basis for discussion, we will assume that reduction in discharge during flood releases would be reduced at a rate equal to the maximum rate of diversion proposed for this project, 200 cfs.

Historically, discharge from ARR during flood events has approached 10,000 cfs, but the USGS gage at ARR dam have recorded flows exceeding 7000 cfs just 6 times since ARR was completed in 1950, which is just under 10% of years during that period. During such high flows, reduction of flow by 200 cfs associated with this project would be negligible from the standpoint of ecological effects. The challenge, however, is determining the flow at which channel and floodplain dynamics would be impacted. At annual high flows below some unknown threshold, a reduction of 200 cfs would be expected to reduce in-stream habitat quality, limit reproduction by reducing spawning substrate maintenance, and reduce riparian regeneration, as summarized previously.

Bankfull discharge appropriate for floodplain maintenance flows can be determined empirically by measuring the discharge at which flooding begins to flow out of the stream channel and across the floodplain. However, such data is not known to us. Bankfull discharge can be estimated based on the knowledge that, in most gravel-bed river drainages, bankfull discharge occurs at roughly a 1.5 year recurrence interval (Leopold et al. 1964, Schmidt and Potyondy 2004). This translates to roughly the 33rd percentile of the annual maximum daily flow over the period of record. For the SFBR, stream flow has been modified by dam management for decades, which limits the utility of this metric in this setting because the periodicity and magnitude of flooding events is moderated by dam operations. Based on streamflow during water years 1975-2016, we calculated a flow of 1745 cfs to represent bankfull discharge using this analytical method. However, considering the managed nature of SFBR flows over this period, this metric is expected to be an artifact of the manipulated flow regime.

In contrast, flows necessary to mobilize fine sediments to maintain salmonid spawning gravels have been modeled for SFBR. Following wildfires that affected the SFBR in 2013, large volumes of sediment discharged to the river after rainstorms eroded unstable hillsides and tributaries. Recognizing the resulting conditions could jeopardize sportfish populations, agencies recognized the need to promote higher flow events to restore spawning beds by flushing fine sediments. Researchers from University of Idaho modeled sediment transport under various flushing flows to determine the amount and duration of flow required to mobilize sediment and improve habitat. Models suggested that a flushing flow of 2400 cfs or greater for at least 8 days was needed to mobilize fine sediments (Benjankar and Tonina 2014). A flow rate of 2000 cfs was not effective for mobilizing fine sediment for the purpose of maintaining spawning gravels. A flow rate of 3000 cfs for a prolonged period of 3 months was predicted to erode debris fans extensively. These models evaluated the potential to mobilize bed substrates but did not address bankfull flow required as floodplain maintenance flows. Additional modeling would be needed to empirically establish a bankfull flow volume sufficient for floodplain maintenance.

Thus, the high flow events required to maintain instream habitat and riparian dynamics are likely in excess of 2400 cfs. Based on the analyses presented here, we regard 2400 cfs for >8 days to be a minimal flow required to maintain stream channel substrates required by trout. If current flows were reduced by 200 cfs, a recorded flow of 2600 cfs would need to be achieved to meet conditions for

withdrawal if this standard were applied. Based on data from USGS Stream Gage at Anderson Ranch, daily average flows have exceeded 2600 cfs on 945 days since October 1, 1977, representing 6% of days during this period. Daily average flows in excess of 3200 cfs were achieved on 462 days during this 40-year period.

Inability to create maintenance flows would jeopardize regeneration of riparian vegetation, particularly cottonwood. Along the SFBR, this dynamic riparian habitat mosaic and associated functions (e.g., hyporheic exchange, base flow support, thermoregulation, etc.) and outcomes (e.g., cottonwood forest) are present, but may be negatively influenced by decades of flow alterations (Hauer and Lorang 2004). Channel maintenance flows in the SFBR are vital to maintaining fish habitat, riparian vegetation, and a functioning floodplain.

Concluding Remarks

The Department appreciates the opportunity to provide our assessment of the proposed project to divert water from Anderson Ranch Reservoir for the purpose of groundwater recharge and irrigation. The review resulted in a general assessment of the proposed activities apparent from the water appropriation application, and some assumptions were necessary to conduct the review. As more details concerning the project are made available or emerge from ongoing negotiations, the Department would welcome opportunities to provide additional technical assistance to IDWR and the project proponent and may be able to assist efforts to avoid, minimize, or offset effects on fish and wildlife resources.

Please contact in the Southwest Region office at (208)465-8465 if you have any additional questions concerning this letter.

Sincerely,

Brad Compton

Bradley B. Compton
Southwest Regional Supervisor

ecc: Terry Scanlan, SPF Engineering, Inc.
IDFG Southwest Regional Staff
Gary Vecellio (IDFG-HQ)
cc: Gold file

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Hersley, Jean

From: Weaver, Mathew
Sent: Tuesday, September 18, 2018 11:21 AM
To: Hersley, Jean
Cc: English, Kimberle; Blades, Emmi
Subject: FW: application 63-34348
Attachments: IDFG_R3_IDWR SFBR 63-34348_20180914.docx.pdf

Jean,

Here's the email from the applicant with F&G analysis of public interest issues from their perspective concerning the application.

Mathew Weaver, PE | deputy director
Idaho Department of Water Resources
www.idwr.idaho.gov | 208.287.4800

From: Hummer, Phill
Sent: Friday, September 14, 2018 3:23 PM
To: Weaver, Mathew <Mathew.Weaver@idwr.idaho.gov>
Subject: FW: application 63-34348

Hi Matt,

Here is a forward from Bill Bosworth, IDFG. I believe SPF/Elmore County has been soliciting comments from parties maybe in advance of rule 40 information, not sure. But since you have the file figured this should go to you.

-Phill

From: Bosworth,Bill [mailto:bill.bosworth@idfg.idaho.gov]
Sent: Friday, September 14, 2018 1:23 PM
To: Hummer, Phill <Phill.Hummer@idwr.idaho.gov>
Cc: tscanlan@spfwater.com
Subject: RE: application 63-34348

Phill,

Please find IDFG's analysis of the Elmore County Board of Commissioners Application 63-34348.

Please feel free to contact me with any questions.

Bill

Bill Bosworth
Environmental Staff Biologist
Southwest Region
3101 S. Powerline Dr.
Nampa ID 83686
208-465-8465

https://idfg.idaho.gov

From: Bosworth,Bill
Sent: Friday, August 10, 2018 3:24 PM
To: Hummer, Phill <Phill.Hummer@idwr.idaho.gov>
Cc: tscanlan@spfwater.com
Subject: application 63-34348

Phill,
With respect to Elmore County water application 63-34348, SPF Water Engineering gave IDFG an opportunity to provide IDWR with a letter addressing potential effects on fish and wildlife resources. We appreciate the opportunity and would like to provide information related to the project.

Would it be workable for you if IDFG provided a letter to IDWR by September 14? I spoke with Terry Scanlan at SPF Water Engineering, and he indicated this date would not be a problem for them.

Best Regards,
Bill

Bill Bosworth
Environmental Staff Biologist
Southwest Region
3101 S. Powerline Dr.
Nampa ID 83686
208-465-8465

Summary of 2010 Water Demand Projections[1] (AF/Year)			
Year	DCMI	Agricultural[2]	Total
2010	228,535	1,487,412	1,715,947
2020	307,210	1,413,773	1,720,983
2030	416,050	1,375,116	1,791,166
2040	564,491	1,171,831	1,736,322
2050	759,797	977,256	1,737,053
2060	962,077	836,760	1,798,837
Net projected change, 2010-2060	733,542	-650,652	82,890
Percentage change, 2010-2060	321%	-44%	5%

Notes:
(1) Taken from WRIME (2010), Tables 6-1, 6-2, and 6-3.
(2) "Average" moisture conditions.

Table 1: Summary of WRIME's 2010 projections.

Conversation Contents

[EXTERNAL] Anderson Ranch Dam Reservoir Storage Increase
Attachments:
/7. [EXTERNAL] Anderson Ranch Dam Reservoir Storage Increase/1.1 PastedGraphic-1.tiff
/7. [EXTERNAL] Anderson Ranch Dam Reservoir Storage Increase/2.1 PastedGraphic-1.tiff

Jon Marvel <jhmarvel@gmail.com>

From:	Jon Marvel <jhmarvel@gmail.com>
Sent:	Mon Sep 09 2019 10:41:17 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Anderson Ranch Dam Reservoir Storage Increase
Attachments:	PastedGraphic-1.tiff

September 9, 2019

Jon Marvel
P.O. Box 1602
Hailey, Idaho 83333-1602
jhmarvel@gmail.com
cell: 208-720-1560

Re: Scoping Comments on the proposed Bureau of Reclamation action to increase the height of Anderson Ranch dam by 6 feet

To the Bureau of Reclamation:

These are my scoping comments to the Bureau of Reclamation (Bureau) regarding the study and National Environmental Policy Act (NEPA) Envrionmental Impact Statement (EIS) to consider and analyze alternatives to raising Anderson Ranch dam by 6 feet.

These comments are provided by email to BOR-SFA-BoiFeasibility@usbr.gov on September 9, 2019 within the prescribed scoping comment period that ends today, September 9, 2019.

The Bureau must provide a full analysis of all economic impacts including the costs of each alternative developed for the EIS and where funds would come from to pay for each proposed action. These analyses must include the costs to different government or private parties to carry out and complete any of the alternatives. As part of each economic analysis the Bureau needs to prepare a cost-benefit analysis that specifically includes monetary values for negative impacts to recreation, wildlife habitat, fisheries and ecological impacts on native plant communities.

As part of its economic analyses the Bureau must make clear what user gorups will be paying for the use of any additional stored water. For example, will any agriculture use be charged a subsidized rate per acre-foot of water use?

The Bureau needs to include in its EIS at least one alternative that assigns any increased water stored in the reservoir to be specifically authorized only for domestic, industrial, commercial, ecological, fisheries, flood control and recreation with no water use for agriculture. The reason for the importance of this proposed alternative is that in the past agriculture has been the dominant user of all reservoir water controlled by the Bureau in Idaho and agriculture is also the dominant cause of water pollution (primarily from non-point sources) in the Boise river watershed.

The Bureau must prepare a biological evaluation or assessment (BE or BA) analyzing the impacts to senstive and/or protected wildlife species. This is especially important for species listed as threatened or endangered under the Endangered Species Act (ESA) like Bull Trout which are present in Anderson Ranch reservoir and tributaries of the South Fork of the Boise River that are the headwater streams of Anderson Ranch Reservoir like Lime Creek. If the Bureau determines that listed species will be affected by any proposed action, the Bureau must consult with the requisite federal agency like the US Fish and Wildlife Service for the completion of a Biological Opinion (BO).

For each action alternative the Bureau must make clear what entities will control the use of additional stored water in Anderson Ranch reservoir. For example, in the past, Bureau projects routinely have assigned the majority of new water rights on increased or new storage to agriculture without regard for other uses such as ecological riverine health, fisheries or domestic, commercial and industrial uses as well as flood control, recreational uses and power generation. The Bureau must clearly identify the potential users of future stored water and the process by which the Idaho Department of Water Resources will assign the potential water rights for each use of potential additional stored water, and how the Bureau influences or chooses future assignment of all new water rights.

Please keep me on your email and/or mailing list for this analysis and EIS.

Thanks for the opportunity to comment,

Jon Marvel
Hailey, Idaho

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:55:01 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Anderson Ranch Dam Reservoir Storage Increase
Attachments:	PastedGraphic-1.tiff

---------- Forwarded message ---------
From: **Jon Marvel** <jhmarvel@gmail.com>
Date: Mon, Sep 9, 2019 at 10:41 AM
Subject: [EXTERNAL] Anderson Ranch Dam Reservoir Storage Increase
To: <BOR-SRA-BoiFeasibility@usbr.gov>

September 9, 2019

Jon Marvel
P.O. Box 1602
Hailey, Idaho 83333-1602
jhmarvel@gmail.com
cell: 208-720-1560

Re: Scoping Comments on the proposed Bureau of Reclamation action to increase the height of Anderson Ranch dam by 6 feet

To the Bureau of Reclamation:

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The Bureau must provide a full analysis of all economic impacts including the costs of each alternative developed for the EIS and where funds would come from to pay for each proposed action. These analyses must include the costs to different government or private parties to carry out and complete any of the alternatives. As part of each economic analysis the Bureau needs to prepare a cost-benefit analysis that specifically includes monetary values for negative impacts to recreation, wildlife habitat, fisheries and ecological impacts on native plant communities.

As part of its economic analyses the Bureau must make clear what user gorups will be paying for the use of any additional stored water. For example, will any agriculture use be charged a subsidized rate per acre-foot of water use?

The Bureau needs to include in its EIS at least one alternative that assigns any increased water stored in the reservoir to be specifically authorized only for domestic, industrial, commercial, ecological, fisheries, flood control and recreation with no water use for agriculture. The reason for the importance of this proposed alternative is that in the past agriculture has been the dominant user of all reservoir water controlled by the Bureau in Idaho and agriculture is also the dominant cause of water pollution (primarily from non-point sources) in the Boise river watershed.

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For each action alternative the Bureau must make clear what entities will control the use of additional stored water in Anderson Ranch reservoir. For example, in the past, Bureau projects routinely have assigned the majority of new water rights on increased or new storage to agriculture without regard for other uses such as ecological riverine health, fisheries or domestic, commercial and industrial uses as well as flood control, recreational uses and power generation. The Bureau must clearly identify the potential users of future stored water and the process by which the Idaho Department of Water Resources will assign the potential water

rights for each use of potential additional stored water, and how the Bureau influences or chooses future assignment of all new water rights.

Please keep me on your email and/or mailing list for this analysis and EIS.

Thanks for the opportunity to comment,

Jon Marvel
Hailey, Idaho

Conversation Contents

Boise Feasibility Inquiry

<chuck.crts@gmail.com>

From:	<chuck.crts@gmail.com>
Sent:	Sun Sep 08 2019 13:31:13 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	Boise Feasibility Inquiry

From Chuck and Annie Curtis (chuck.crts@gmail.com) on 09/08/2019 at 01:09:04MSGBODY: Thank you for sponsoring the very informative Open House at the South Fork of the Boise River Senior Center regarding raising Anderson Ranch Reservoir Dam six feet. My wife and I have lived year round in Pine for fifteen years and have been recreating here since 1980. In general we support raising the level of Anderson Ranch Reservoir.. We have a few concerns though. At the new full pool elevation, the reservoir will consume boat ramps, docks, campsites, etc. These assets have been paid for with tax payer dollars and are publicly owned. At the very least, these assets, docks and ramps, need to be lengthened to the new full pool reservoir elevation. Campsites will need to be relocated and/or rebuilt. Anderson Ranch Reservoir is experiencing unprecedented growth and with all of the agencies involved in this project, what a perfect time to put your heads together (instead of passing the buck) to allocate a few dollars to expand the recreational demands around the reservoir. Recreation is promoted as one of the substantial benefits provided by Reclamation. The United States Department of Reclamation's literature states “Reclamation is the largest wholesale water supplier in the United States, and the nation's second largest producer of hydroelectric power. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits.” **Media Contact: Peter Soeth, 303-445-3615, psoeth@usbr.gov For Release: September 05, 2019 The United States Forest Service and other involved government agencies could help with equipment, manpower, and funding. Users of this NEW water resource should contribute with an annual recreational usage fee when excess water is used. "Potential space holders include existing Reclamation contractors and Idaho Water Resource Board, which could in turn contract water to existing Water District 63 water users and/or may offer water through the Idaho water supply bank's Water District 63 rental pool." **Quoted from-Open House Announcement and Request for Public Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho. Idaho Power is a prime example of a publicly governed entity mitigating impacts to the general public caused by their hydro-electric projects by building and maintaining recreational facilities. Thank you for the opportunity to express our concerns. Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:55:07 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: Boise Feasibility Inquiry

---------- Forwarded message ---------
From: <chuck.crts@gmail.com>
Date: Sun, Sep 8, 2019 at 1:31 PM
Subject: Boise Feasibility Inquiry
To: <BOR-SRA-BoiFeasibility@usbr.gov>

From Chuck and Annie Curtis (chuck.crts@gmail.com) on 09/08/2019 at 01:09:04MSGBODY: Thank you for sponsoring the very informative Open House at the South Fork of the Boise River Senior Center regarding raising Anderson Ranch Reservoir Dam six feet. My wife and I have lived year round in Pine for fifteen years and have been recreating here since 1980. In general we support raising the level of Anderson Ranch Reservoir..

We have a few concerns though. At the new full pool elevation, the reservoir will consume boat ramps, docks, campsites, etc. These assets have been paid for with tax payer dollars and are publicly owned. At the very least, these assets, docks and ramps, need to be lengthened to the new full pool reservoir elevation. Campsites will need to be relocated and/or rebuilt. Anderson Ranch Reservoir is experiencing unprecedented growth and with all of the agencies involved in this project, what a perfect time to put your heads together (instead of passing the buck) to allocate a few dollars to expand the recreational demands around the reservoir.

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The United States Forest Service and other involved government agencies could help with equipment, manpower, and funding. Users of this NEW water resource should contribute with an annual recreational usage fee when excess water is used. "Potential space holders include existing Reclamation contractors and Idaho Water Resource Board, which could in turn contract water to existing Water District 63 water users and/or may offer water through the Idaho water supply bank's Water District 63 rental pool." **Quoted from-Open House Announcement and Request for Public Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho. Idaho Power is a prime example of a publicly governed entity mitigating impacts to the general public caused by their hydro-electric projects by building and maintaining recreational facilities.

Thank you for the opportunity to express our concerns.

Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

Conversation Contents

[EXTERNAL] Anderson Ranch Dam comments EIS
Attachments:
/9. [EXTERNAL] Anderson Ranch Dam comments EIS/1.1 Anderson dam BOR .pdf
/9. [EXTERNAL] Anderson Ranch Dam comments EIS/2.1 Anderson dam BOR .pdf

Ron Strolberg <ronstrolb@gmail.com>

From:	Ron Strolberg <ronstrolb@gmail.com>
Sent:	Sun Sep 08 2019 13:03:39 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Anderson Ranch Dam comments EIS
Attachments:	Anderson dam BOR .pdf

Attn: Jim Taylor
Attached are our comments regarding the Boise River Basin Feasibility Study, Environmental Impact Statement. The attachment should have comments on the front and back of your form.

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:54:19 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Anderson Ranch Dam comments EIS
Attachments:	Anderson dam BOR .pdf

---------- Forwarded message ---------
From: **Ron Strolberg** <ronstrolb@gmail.com>
Date: Sun, Sep 8, 2019 at 1:04 PM
Subject: [EXTERNAL] Anderson Ranch Dam comments EIS
To: <BOR-SRA-BoiFeasibility@usbr.gov>

Attn: Jim Taylor
Attached are our comments regarding the Boise River Basin Feasibility Study, Environmental Impact Statement. The attachment should have comments on the front and back of your form.

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
Scoping Comment Form

Please give us your comments!

Comments must be received by September 9, 2019, to be considered in the Draft Environmental Impact Statement. Comments may be submitted in the following ways:

- Submit a comment form at the public scoping meetings
- Submit verbal comments (with the scribe/recorder) at the public scoping meetings
- Mail comments to ATTN: Jim Taylor, Bureau of Reclamation-Snake River Area Office, 230 Collins Road, Boise, ID 83702
- Submit via email to BOR-SRA-BoiFeasibility@usbr.gov
- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

** **Required fields.** Please print clearly.*

Name (First and Last)*	Ron Strolberg				
Organization					
Title					
Address*	11735 W. Camas Street				
City*	Boise	***State****	IDaho	***Zip Code****	83709
E-mail	Ronstrolb@gmail.com			***Phone****	208-377-5210

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☒ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

While attending the informational meeting 8/28/2019 in Boise we were made aware that there were three separate proposals in regards to Anderson Ranch Reservoir. Our response as follows is focused on the future need for water supply in the Treasure Valley and Elmore County. I will add that if raising Anderson Ranch Dam in any way supports the Castle Rock Energy we are adamantly opposed.

Has consideration been given to simply increasing the water level in each of the three reservoirs by 1 foot as opposed to the current effort to increasing the height of Anderson Ranch reservoir dam by 6 feet. If Anderson Ranch, Arrow Rock and Lucky Peak could safely handle an additional foot of water when adequate water years permit would that not accomplish the same result. If the reservoir levels could safely handle the additional foot of water there would be minimal impact on some of the other concerns such as recreational and bridge and road replacements and false promises to Treasure Valley growth. One of the purposes to accommodate the projected growth in the Treasure Valley I believe sends a false message.

***Privacy Notice:** Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
Scoping Comment Form

Please give us your comments!

Additional room on reverse side.

Comments on the Scope of the Environmental Impact Statement (continued):

There appears to be no guarantee that winter snow accumulation will be sufficient to satisfy the need for water, yet growth in the Treasure Valley will assume that adequate water will be available if the Anderson Ranch Dam is elevated. I believe that Mountain Home has a more urgent need for water. Diversion of water from Anderson Ranch Reservoir to Mountain Home as I understand could not only benefit the shortage that exists but could also help to recharge the aquifer. Providing water to MHAFB and Elmore County is in the best interest of National Defense other than the narrative to promote growth in the Treasure Valley. The Treasure Valley transportation infrastructure and pollution levels are nearing its peak. By promoting additional growth through allegedly providing adequate water will further aggravate or add to the situation and harm the quality of life that we now appreciate and enjoy.

Added in support of my statements about refill concerns:

3. 4 HISTORICAL REFILL PROBABILITY Analysis of water right accounting records from the Idaho Department of Water Resources (IDWR), dating back to 1988 and summarized in Appendix Table 9.1, indicates that maximum accrual (excluding accrual to uncontracted space) was achieved in 55% of years for Anderson Ranch Reservoir, 91% of years for Arrowrock Reservoir, and 55% of years for Lucky Peak Reservoir, with all three reservoirs reaching maximum accrual together in only 41% of years. In terms of system fill, IDWR accounting data also suggests that the Boise Reservoir System reached or exceeded the volume of system contracted space (949,668 acre-feet) in 50% of years during the period spanning 1988 through 2009. Simulated results suggest a similar refill probability with the system reaching 949,668 acre-feet in approximately 48% of years for the 1988 through 2009 period and in approximately 46% of years for the full simulation period (1982 through 2009).

Privacy Notice: *Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

Conversation Contents

[EXTERNAL] Prairie Ranchers Comments
Attachments:
/10. [EXTERNAL] Prairie Ranchers Comments/1.1 Boise River Feasability Study_Prairie comments.docx
/10. [EXTERNAL] Prairie Ranchers Comments/2.1 Boise River Feasability Study_Prairie comments.docx

Clay Davison <ClayDavison2260@hotmail.com>

From:	Clay Davison <ClayDavison2260@hotmail.com>
Sent:	Sun Sep 08 2019 12:50:19 GMT-0600 (MDT)
To:	"BOR-SRA-BoiFeasibility@usbr.gov" <BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Prairie Ranchers Comments
Attachments:	Boise River Feasability Study_Prairie comments.docx

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:44 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Prairie Ranchers Comments
Attachments:	Boise River Feasability Study_Prairie comments.docx

---------- Forwarded message ---------
From: **Clay Davison** <ClayDavison2260@hotmail.com>
Date: Sun, Sep 8, 2019 at 12:51 PM
Subject: [EXTERNAL] Prairie Ranchers Comments
To: BOR-SRA-BoiFeasibility@usbr.gov <BOR-SRA-BoiFeasibility@usbr.gov>

Boise River Basin Feasibility Study

DATE: September 1, 2019

FROM: Prairie, Idaho Ranchers:

- L.G. Davison & Sons Inc, 2019 Prairie Rd., Prairie, ID 83647 (randy20219@msn.com)
- Ireland LLC, 1015 Prairie Rd., Prairie, ID 83647 (lojo21@hotmail.com)
- Calvin Ireland, 147 Ake Dr., Mtn. Home, ID 83647
- Steve Acarregui, 3000 N.E. Scenic Valley, Mtn. Home, ID 83647 (eacarregui@msn.com)
- Davison Ranch Llc, 160 Wylie, Prairie, ID 83647 (miked@rtci.net)

SUBJECT: EIS Scoping Comments

The afore mentioned ranchers from Prairie, Idaho understand how water resources are intricately tied to the socio-economic vitality of the intermountain west; therefore, we support the proposed project to increase water storage capacity at Anderson Ranch Dam. This particular project is forward thinking and will provide a broad spectrum of future benefits, yet this group of ranchers will suffer substantial detrimental effects during the construction phase of the project due to the impassability of the Anderson Dam road from Prairie to Highway 20.

All of our ranching operations are extremely dependent upon this roadway, as it is the only feasible roadway for heavy use and wide load semi-truck travel. Our use of the Anderson Dam roadway is extensive and critical to our businesses and livelihoods. Between the five ranches our collective annual use of this vital roadway is as follows:

- Approximately 4000 head of cattle are hauled in and out of this roadway during the spring and fall months.
- Approximately 4000 acres of hay are harvested, producing an average of 1.5 – 2 tons per acre. 90% of the annual hay harvest is transport to our valley calving operations via the Anderson Dam Road during the summer months. This equates to over 300 truckloads annually.
- Annually, numerous pieces of farming equipment are transported between Prairie and our valley agricultural operations.
- Ireland Ranch and Charlie Lyons have a cattle grazing permit with the US Forrest Service. This permit has grazing allotments on both sides of Anderson Dam. These cattle must be trailed over the dam 6 to 8 times a year between July and October, depending on that year's rotation.

If the Anderson Dam roadway is interrupted for the predicted 39 months, we no longer have viable cattle operations and we would definitely experience catastrophic economic impacts unless there are some alternatives made available. Some potential options to consider:

1. Utilize some of the project funds to improve the Cow Creek road to accommodate heavy use and wide load semi-truck traffic. This would give us the ability to continue to transport equipment and commodities. This option would require cooperation from the Forest Service and would require NEPA approval, which could likely cause significant delays.

2. The Anderson Dam project could compensate the affected ranchers to purchase hay grown in the valley. This would solve the paramount issue of not being able to transport our hay from Prairie to our winter ranches in the valley. Although inconvenient and time consuming, the movement of cattle can be mitigated by trailing cattle to various locations and then loading them on trucks for transportation. The hauling of farm equipment is on a much smaller scale than the transportation of hay, and may be able to be coordinated with construction efforts across Anderson Dam.

In summary, we support the Anderson Dam project and applaud the Bureau of Reclamation for their efforts, but we would like BOR to recognize the significance of the unintended consequences for the ranching community in Prairie, Idaho. The scope and duration of this project, without viable alternatives, could potentially destroy our businesses and drastically change our way of life.

Thank you for the opportunity to submit comments and we encourage you to contact and collaborate with any and all of us to mitigate the situation we face.

Conversation Contents

[EXTERNAL] placed on list

James <info@ccewsrps.net>

From:	James <info@ccewsrps.net>
Sent:	Fri Sep 06 2019 16:10:13 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] placed on list

To Whom it May Concern:

Please place Cat Creek Energy, LLC on any information and communications lists for the BOR-SRA-Boise Feasibility Studies.

Cat Creek Energy, LLC
298 S. 9th Street, Suite 240
Boise, ID 83702
P: 208.336.1370
https://www.catcreekenergy.com/

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"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:40 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] placed on list

---------- Forwarded message ---------
From: **James** <info@ccewsrps.net>
Date: Fri, Sep 6, 2019 at 4:10 PM
Subject: [EXTERNAL] placed on list
To: <BOR-SRA-BoiFeasibility@usbr.gov>
Cc: Gary Slette <gslette@rsidaholaw.com>, Mitch Arkoosh <markoosh@magiclink.com>

To Whom it May Concern:

Please place Cat Creek Energy, LLC on any information and communications lists for the BOR-SRA-Boise Feasibility Studies.

Cat Creek Energy, LLC
298 S. 9th Street, Suite 240
Boise, ID 83702
P: 208.336.1370
https://www.catcreekenergy.com/

Confidential & Proprietary from Cat Creek Energy, LLC. **CONFIDENTIALITY NOTICE**: This e-mail message is from Cat Creek Energy, LLC, and is intended only for the named recipients. It contains information that may be confidential, privileged, or otherwise exempt from disclosure under applicable law. If you have received this message in error, are not a named recipient, or are not the employee or agent responsible for delivering this message to a named recipient, be advised that any review, disclosure, use, dissemination, distribution, or reproduction of this message or its contents is strictly prohibited.

Conversation Contents

[EXTERNAL] 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf
Attachments:
/12. [EXTERNAL] 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf/1.1 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf
/12. [EXTERNAL] 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf/2.1 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf

Karen Edwards <iwua@iwua.org>

From:	Karen Edwards <iwua@iwua.org>
Sent:	Fri Sep 06 2019 10:25:53 GMT-0600 (MDT)
To:	"BOR-SRA-BoiFeasibility@usbr.gov" <BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf
Attachments:	20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf

To Whom it May Concern:

Attached you will find our comments on the Boise River Basin Feasibility – Anderson Ranch Dam Raise issue.

If you have any problems opening this document or need any additional information, please contact us.

Karen Edwards
Idaho Water Users Association, Inc.
1010 W. Jefferson St., #101
Boise, ID 83702
208-344-6690
iwua@iwua.org

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:35 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf
Attachments:	20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf

---------- Forwarded message ---------

From: **Karen Edwards** <iwua@iwua.org>
Date: Fri, Sep 6, 2019 at 10:26 AM
Subject: [EXTERNAL] 20190906 Scoping Comments (Anderson Ranch) (IWUA).pdf
To: BOR-SRA-BoiFeasibility@usbr.gov <BOR-SRA-BoiFeasibility@usbr.gov>

To Whom it May Concern:

Attached you will find our comments on the Boise River Basin Feasibility – Anderson Ranch Dam Raise issue.

If you have any problems opening this document or need any additional information, please contact us.

Karen Edwards

Idaho Water Users Association, Inc.
1010 W. Jefferson St., #101
Boise, ID 83702
208-344-6690
iwua@iwua.org

IDAHO WATER USERS ASSOCIATION

1010 W. Jefferson, Ste. 101, Boise, ID 83702 | www.iwua.org
P: 208-344-6690 F: 208-344-2744 E: iwua@iwua.org

September 6, 2019

Bureau of Reclamation
BOR-SRA-BoiFeasibility@usbr.gov

RE: Boise River Basin Feasibility – Anderson Ranch Dam Raise

To Whom it May Concern:

On behalf of the members of the Idaho Water Users Association (IWUA), I submit the following comments on the Boise River Basin Feasibility Study's environmental analysis pursuant to the National Environmental Policy Act (NEPA). IWUA supports efforts to enhance water supplies in the Boise River Basin.

IWUA is a non-profit corporation representing approximately 300 canal companies, irrigation districts, ground water districts, municipal and public water suppliers, hydroelectric companies, aquaculture interests, agri-businesses, professional firms and individuals throughout Idaho. Our purpose is to promote, aid and assist in the development, control, conservation, preservation and utilization of Idaho's water resources.

IWUA's membership has long supported efforts to identify and develop new water storage throughout Idaho. As to the Boise River Basin, specifically, IWUA members have adopted the following resolution:

2018-7: Boise River Storage Projects

WHEREAS, In the last several years, the Boise River Valley has experienced tremendous population growth and growth in industry, leading to increased demands for water for irrigation, domestic, municipal, commercial, industrial, recreation, and in-state fish and wildlife purposes; and

WHEREAS, Additional flood control is necessary to protect development in the Boise Valley, particularly in and around Eagle and Star, Idaho; and

WHEREAS, Water users in the Boise River Valley, along with the state and federal agencies, have been examining and studying potential storage sites in the Boise River Valley; and

WHEREAS, These studies have identified several potential new storage sites and raises of existing dams that are economically feasible for the Boise River Valley.

> ***NOW, THEREFORE, BE IT RESOLVED, That the Idaho Water Users Association supports the efforts to identify, study, and build new storage in the Boise River Valley.*** (Emphasis added)

Idaho needs new water storage. Changing precipitation patterns and population growth have increased demand for water supplies throughout the State. As to the Boise River Valley specifically, studies have shown that as much as 188,000 acre-feet/year will be needed to meet anticipated demands in 2065. (https://idwr.idaho.gov/files/publications/20160808-OFR-Treasure-Valley-Water-Demand-2015-2065.pdf).

IWUA has the following comments as the Bureau continues its analysis:

1. Benefit / Cost Allocations: It is anticipated that the costs associated with raising Anderson Ranch Dam will include financial contributions from federal, state and private stakeholders. During the 2019 Legislative Session, Idaho's legislature appropriated $20 million for large water infrastructure, like Anderson Ranch Dam. In addition, private stakeholders have expressed interest in the new storage that will be made available from this project.

Pursuant to the Water Infrastructure Improvements for our Nation (WINN) Act, up to 50% of the cost of construction of Reclamation projects will be paid by the federal government, based on the federal benefits derived from that project. Presently, federal benefits of the Anderson Ranch Dam include recreation, local flood control, hydropower and fish and wildlife purposes. It is anticipated that these benefits will extend to any new storage developed at the site. At the very least the same percentage of current federal benefits associated with Anderson Ranch should be assigned to this raise project. If Reclamation intends to keep any of the space from the raise for a federal benefit, such as stream flow maintenance or flow augmentation, the federal benefit associated with that reserved space would be in addition to the existing allocation of federal benefits. Reclamation's analysis of benefits and costs should ensure that stakeholders are able to maximize the use of any new storage water to meet the changing needs and demands of the local communities.

2. Space Allocation: Given the changing needs and demands for water in the region, it is not surprising that several parties have expressed interest in any water made available by raising Anderson Ranch Dam. This includes existing contractors, other local stakeholders, and the State Water Resource Board. We would urge Reclamation to provide clear guidance on a process for allocating any new storage space made available. In this allocation, a percentage of space should be made available to existing spaceholders and a percentage of space should be made available to Reclamation's funding partner in the raise studies, the Idaho Water Resource Board for the Board to use at its discretion, including by leasing water to the Water District 63 rental pool to be rented out in accordance with existing rental pool procedures.

IWUA appreciates Reclamation's efforts to study and develop new storage space in the Boise River Basin. We stand ready to assist Reclamation in this process.

Sincerely,

Paul Arrington, Executive Director
Idaho Water Users Association

Conversation Contents

Re: [EXTERNAL] Arthur Henry a cabin owner concerned about raising the damn! Our cabin is above the Pine docks. We oppose the project. There is no parking already and not many beaches in the water level now nown

"Springer, Roland" <rspringer@usbr.gov>

From:	"Springer, Roland" <rspringer@usbr.gov>
Sent:	Fri Sep 06 2019 09:06:55 GMT-0600 (MDT)
To:	art henry <arhfarms@gmail.com>
Subject:	Re: [EXTERNAL] Arthur Henry a cabin owner concerned about raising the damn! Our cabin is above the Pine docks. We oppose the project. There is no parking already and not many beaches in the water level now nown

Mr. Henry,
Thank you for your comment. I am cc'ing our comments mailbox so we have it in the record.
Roland

Roland Springer
Area Manager
Snake River Area Office
230 Collins Rd
Boise, ID 83702
(o) 208-383-2246 | (c) 208-432-2103 | rspringer@usbr.gov

I Care About Safety!

On Thu, Sep 5, 2019 at 2:16 PM art henry <arhfarms@gmail.com> wrote:

> Sent from my iPhone

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:30 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Arthur Henry a cabin owner concerned about raising the damn! Our cabin is above the Pine docks. We oppose the project. There is no parking already and not many beaches in the water level now nown

---------- Forwarded message ---------

From: **Springer, Roland** <rspringer@usbr.gov>
Date: Fri, Sep 6, 2019 at 9:07 AM
Subject: Re: [EXTERNAL] Arthur Henry a cabin owner concerned about raising the damn! Our cabin is above the Pine docks. We oppose the project. There is no parking already and not many beaches in the water level now nown
To: art henry <arhfarms@gmail.com>
Cc: BOR-SRA BoiFeasibility <bor-sra-boifeasibility@usbr.gov>

Mr. Henry,
Thank you for your comment. I am cc'ing our comments mailbox so we have it in the record.
Roland

Roland Springer
Area Manager
Snake River Area Office
230 Collins Rd
Boise, ID 83702
(o) 208-383-2246 | (c) 208-432-2103 | rspringer@usbr.gov

I Care About Safety!

On Thu, Sep 5, 2019 at 2:16 PM art henry <arhfarms@gmail.com> wrote:

> Sent from my iPhone

Conversation Contents

[EXTERNAL] EPA Scoping Comments Boise River Feasibility Study
Attachments:
/14. [EXTERNAL] EPA Scoping Comments Boise River Feasibility Study/1.1 19-0049-BOR Boise River Feasibility Study.pdf
/14. [EXTERNAL] EPA Scoping Comments Boise River Feasibility Study/2.1 19-0049-BOR Boise River Feasibility Study.pdf

"Hood, Lynne" <Hood.Lynne@epa.gov>

From:	"Hood, Lynne" <Hood.Lynne@epa.gov>
Sent:	Wed Sep 04 2019 16:09:47 GMT-0600 (MDT)
To:	"BOR-SRA-BoiFeasibility@usbr.gov" <BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] EPA Scoping Comments Boise River Feasibility Study
Attachments:	19-0049-BOR Boise River Feasibility Study.pdf

Hello, please find attached EPA's scoping comments on the Boise River Basin Feasibility Study. Please let me know if you have any questions or would like to discuss our comments.
Thank you,
Lynne

Lynne Ann Hood
Environmental Scientist, NEPA Review
EPA R10- Idaho Operations Office
950 W Bannock Street, Suite 900
Boise, Idaho 83702

Phone: 208-378-5757
Visit https://ceq.doe.gov/ for information about the National Environmental Policy Act

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:24 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] EPA Scoping Comments Boise River Feasibility Study
Attachments:	19-0049-BOR Boise River Feasibility Study.pdf

---------- Forwarded message ---------
From: **Hood, Lynne** <Hood.Lynne@epa.gov>

Date: Wed, Sep 4, 2019 at 4:11 PM
Subject: [EXTERNAL] EPA Scoping Comments Boise River Feasibility Study
To: BOR-SRA-BoiFeasibility@usbr.gov <BOR-SRA-BoiFeasibility@usbr.gov>

Hello, please find attached EPA's scoping comments on the Boise River Basin Feasibility Study. Please let me know if you have any questions or would like to discuss our comments.
Thank you,
Lynne

Lynne Ann Hood
Environmental Scientist, NEPA Review
EPA R10- Idaho Operations Office
950 W Bannock Street, Suite 900
Boise, Idaho 83702

Phone: 208-378-5757
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

REGIONAL
ADMINISTRATOR'S
DIVISON

September 4, 2019

Ms. Morgan Sloan
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, ID 83702

Dear Ms. Sloan:

The U.S. Environmental Protection Agency has reviewed the Federal Register Notice of Intent to prepare a Draft Environmental Impact Statement for the proposed Boise River Basin Feasibility Study (EPA Project Number 19-0049-BOR). Our review was conducted in accordance with EPA responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act.

The Water Infrastructure Improvements for the National Act of 2016 authorizes the Bureau of Reclamation to enter into agreements with requesting states to study, construct or expand federally owned storage projects. Under this legislation, Reclamation and the State of Idaho Water Resource Board entered into an agreement to study the feasibility of raising Anderson Ranch dam, a federally owned water storage facility. The proposal consists of raising Anderson Ranch Dam six feet (4,196 feet to 1,202 feet), which would allow for approximately 29,000 additional acre-feet of water. The increased dam would result in capturing additional water when available during wet years to supplement water supplies during dry years.

The Boise River is regulated by three federal storage projects on the upper river, which are jointly operated by the U.S. Army Corps of Engineers (Lucky Peak Dam) and Reclamation (Arrowrock and Anderson Ranch Dams). The Corps initiated a similar proposal in 2014 to the current Reclamation proposal, the Boise River General Investigation Feasibility Study.[1] The Corps intended to analyze storage needs and flood risk in the Boise River Basin, including a proposal to modify Arrowrock Dam. The EPA provided scoping comments on that proposal and an EIS has not been released to date. Reclamation's NOI does not discuss this history, nor provide an understanding of the connection between the two similar studies, both in partnership with the IWRB. We recommend that the EIS provide background about other feasibility studies that are occuring in the Boise River Basin watershed related to water storage and discuss the relationship of this proposal to other efforts.

In addition, the 2014 proposal discussed opportunities to provide ecosystem restoration benefits and minimize impacts to Endangered Species Act listed species (e.g., bull trout). The EPA supports evaluating flood risk, planning for future water needs and identifying opportunities to restore the natural hydrology and promote ecosystem functions. While we understand that the IWRB, the non-federal

[1] USACE. 2014. Boise River General Investigation Feasibility Study.
https://www.federalregister.gov/documents/2014/04/24/2014-09321/intent-to-prepare-an-environmental-impact-statement-for-the-boise-river-general-investigation

sponsor, is not authorized to expend funds for studying ecosystem restoration, we believe that analyzing and designing restoration of fish habitat is consistent with the 2006 U.S. Fish and Wildlife's Biological Opinion for the Bureau of Reclamation's Bull Trout Monitoring and Implementation Plan.[2] We encourage Reclamation to utilize the watershed approach in a basin-wide assessment to identify opportunities for restoration of fish habitat and natural function processes of the river.

We believe this study will be of interest to multiple stakeholders. We therefore also encourage Reclamation to identify other key partners, including potential Tribal government interests, as planning for this project moves forward. Thank you for the opportunity to participate early in the EIS process. If you would like to discuss our comments or approaches to the study, please feel free to contact me at 208-378-5757.

Sincerely,

Lynne Hood, NEPA Reviewer
Policy and Environmental Review Branch

[2] US Department of Interior. 2006. Bull Trout Monitoring and Implementation Plan; Bureau of Reclamation Operations and Maintenance in the Snake River Basin above Brownlee Reservoir. http://www.usbr.gov/pn/programs/UpperSnake/2004ba/pdf/FWS-Implement-and-Monitor.pdf

U.S. Environmental Protection Agency Scoping Comments for the Bureau of Reclamation Boise River Basin Feasibility Study

Purpose and Scope of the Project

We recommend that the NEPA analysis include a clear and concise statement of the underlying purpose and need for the proposed action, consistent with the implementing regulations for NEPA (see 40 CFR 1502.13). The purpose should include the identification of current and predicted water storage needs, flood risk management, address the needs of threatened and endangered species, and improve overall ecosystem health.

Alternatives

The EPA encourages Reclamation to consider alternatives to proposed structural measures or other measures that prevent natural river processes, particularly in locations that are undeveloped. We recommend that the EIS identify current water conservation efforts and future opportunities that could mitigate the increased need for storage. In addition, we recommend actions that restore natural processes and specifically recommend consideration of an EIS alternative which maximizes opportunities to restore natural hydrologic, geomorphic, biological processes. Natural process restoration and protection objectives with potential for both flood management and ecosystem benefits may include: improved floodplain connectivity; surface water and groundwater interactions; and riparian vegetation and wetland development. We suggest that Reclamation work with local groups to identify design alternatives that can address water storage, flood risk and improve watershed conditions.

Additionally, the Council on Environmental Quality recommends consideration of all reasonable alternatives, even if some of them could be outside the capability of the applicant or the jurisdiction of the agency. To the greatest extent possible, the EIS should quantify potential impacts of each alternative and present alternatives' impacts in a comparative form. It would also be useful to list each alternative action's impacts and corresponding mitigation measures.

Water Quality

Water quality degradation is one of EPA's primary concerns. Section 303(d) of the Clean Water Act requires the State of Idaho to identify water bodies that do not meet water quality standards and to develop water quality restoration plans to meet the state water quality criteria and associated beneficial uses. The lower Boise River, from Lucky Peak Dam to the Snake River, is listed as impaired under Section 303(d) with the following pollutants of concern: sediment, dissolved oxygen, oil and grease, nutrients, bacteria and temperature. A Boise River subbasin Total Maximum Daily Load and Implementation Plan was developed in September 2015 with load allocations for these pollutants of concern from point source and non-point sources. We recommend that the EIS discuss surface water quality in the watershed and identify how activities implemented as part of this project would comply with the TMDL targets.

The Lower Boise River is also listed as impaired on Idaho Department of Environmental Quality's 2016 Integrated Report for flow alteration and habitat modification. Although these are reserved as non-traditional pollutants for which a TMDL is not required, we recommend that the EIS disclose water quality conditions in the basin and identify opportunities to improve flow and habitat.

Water resources and impacts
Section 303(d) of the Clean Water Act requires the States and Tribes with the EPA-approved water quality standards to identify water bodies that do not meet water quality standards and to develop water quality restoration plans to meet established water quality criteria and associated beneficial uses. Because of that, we recommend the EIS include the following information:

- Impacted waters, the nature of the impacts, and specific pollutants likely to affect those waters;
- Water bodies potentially affected by the project that are on the most recent EPA-approved 303(d) list;
- Existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures implemented to avoid further degradation of impaired waters;
- How the project would meet the antidegradation provisions of the CWA. The provisions prohibit degrading water quality within water bodies that are currently meeting water quality standards;
- Cumulative effects from this and other projects on the hydrologic conditions of the analysis area and vicinity, including reasonably foreseeable direct, indirect and cumulative impacts to groundwater and surface water resources. For groundwater, identify potentially affected groundwater basins and any potential for subsidence, and analyze impacts to springs or other open water bodies and biological resources;
- Whether construction of the project would disturb a land area of one or more acres or not. If yes, the project would require a construction storm water discharge permit or the National Pollutant Discharge Elimination System (NPDES) permit for discharges to waters of the United States. The EIS would need to document the project's consistency with applicable storm water permitting requirements and discuss specific mitigation measures that may be necessary or beneficial in reducing adverse impacts to water quality and aquatic resources due to the discharges; and
- Potential contamination of drinking water sources that may result from the project, contaminants of concern, and measures that would be taken to protect drinking water for communities.

Aquatic resources and impacts
Because the proposed action could impact waters of the United States, we recommend the EIS include the following information:

- Description of all waters of the U.S., including wetlands that could be affected by the project alternatives;
- Maps showing water locations;
- Habitat types, values, and functions associated with the waters;
- Potential discharge of dredged or fill materials into surface waters of the U.S. and related authorization by the U.S. Army Corps of Engineers;
- Mitigation plans, including compensatory mitigation required under the CWA, to reduce impacts to surface waters of the U.S.; and

- Floodplains impacts and actions to be taken to minimize the impacts. Activities affecting floodplains are regulated under the CWA §404 and Executive Order 11988, *Floodplain Management.*[3]

Consideration of Species and Habitat

We recommend that the EIS disclose the impacts of the various alternatives to endangered, threatened or candidate species listed under the Endangered Species Act. The EIS should also discuss the terms and conditions of the Biological Opinion for bull trout. For example, Term and Condition 1.a. states that drawdowns below 3,100 feet during fall migratory period (September 15 to October 31) should be reduced. Activities, such as operational flexibility of the Boise River system dams, are methods for maintaining the required flow. We recommend that the feasibility study/EIS examine and disclose practices that have been successful at improving flows as well as assess and disclose additional activities that promote fish habitat.

In addition to discussing listed species, the EIS should also describe the overall flora and fauna in the area and impacts of the project on biota. Given the watershed approach of this process, we recommend that the EIS provide details on the ecological interactions between species and habitats and the effects of the various alternatives on populations, habitats and ecological interactions.

Climate Adaptation

The EPA recommends that the EIS include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed program and the program area. This could help inform the development of measures to improve the resilience of the program. If projected changes could notably exacerbate the environmental impacts of the program, the EPA recommends these impacts also be considered as part of the NEPA analysis.

Consultation with Tribes

The proposed project may affect historical or traditional cultural places of importance to tribes in the project area. We recommend that the EIS identify historic resources and ensure that tribal treaty rights and privileges are addressed appropriately. If the proposed project will have impacts on Tribes, the development of the EIS should be conducted in consultation with all affected tribal governments, consistent with Executive Order 13175 (*Consultation and Coordination with Indian Tribal Governments).* EO 13175 states that the U.S. government will continue to work with Indian tribes on a government-to-government basis to address issues concerning Indian tribal self-government, trust resources, and Indian tribal treaty and other rights. Documentation of these consultations should be included in the EIS.

Environmental Justice and Public Participation

If there would be environmental justice populations around or near the VTR facilities, then, the EIS would need to address the potential for disproportionate adverse impacts to the populations. See Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.*[4] To locate Environmental Justice populations, you may use the EPA's Environmental Justice Screening and Mapping Tool or EJSCREEN.[5] For more information on effective public participation in the NEPA process, please also consult the following resources:

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[3] https://www.epa.gov/cwa-404/floodplain-management-executive-order-11988

[4] https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf

[5] https://www.epa.gov/ejscreen

- *Promising Practices for EJ Methodologies in NEPA Reviews;*[6]
- *The Citizen's Guide to the National Environmental Policy Act;*[7] and
- *Community Guide to Environmental Justice and NEPA Methods.*[8]

Cumulative and Indirect Impacts
We recommend that the cumulative effects analysis consider appropriate mitigation strategies to minimize adverse and enhance beneficial cumulative effects. Monitoring and evaluation of the mitigation strategies' effectiveness would also be an important component of the proposed action.

The EPA has issued guidance on how we are to provide comments on the assessment of cumulative impacts, *Consideration of Cumulative Impacts in EPA Review of NEPA Documents,* which can be found on EPA web site at: www.epa.gov/compliance/resources/nepa.html . The guidance states that in order to assess the adequacy of the cumulative impacts assessment, five key areas should be considered. The EPA tries to assess whether the cumulative effects' analysis:

- Identifies resources if any, that are being cumulatively impacted;
- Determines the appropriate geographic (within natural ecological boundaries) area and the time period over which the effects have occurred and will occur;
- Looks at all past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern;
- Describes a benchmark or baseline; and
- Includes scientifically defensible threshold levels.

Monitoring and Adaptive Management
The EIS should describe project monitoring in some detail. We recommend that the level of effort afforded to monitoring be commensurate with the complexity of the project and the risk to and sensitivity of the affected environment, if actions are approved. As a first step, we recommend that the NEPA analysis clearly define the goals and objectives of monitoring and present an overall monitoring strategy for the project. Second, the NEPA analysis should provide enough detail on the monitoring program for reviewers to evaluate whether the goals and objectives of monitoring will be achieved. This can generally be satisfied by providing summary information on monitoring (including a list of measurement parameters, methods, locations, frequency, data analysis, and reporting). In addition, we recommend that alternatives include clear requirements for regular analysis and reporting of data to oversight agencies and include a requirement that the operator submit a full sampling and quality assurance plan for agency approval. The EIS should discuss who will conduct monitoring, the frequency and how monitoring will direct management decisions.

We recommend that the EIS describe adaptive management and how monitoring results would inform a need to shift the management strategy. Adaptive management can be described as a systematic approach for improving resource management by learning from management outcomes. CEQ emphasizes adaptive management in the report "*Modernizing NEPA Implementation*",[9] and states that adding "monitor and

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[6] https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf
[7] https://ceq.doe.gov/get-involved/citizens_guide_to_nepa.html
[8] https://www.energy.gov/sites/prod/files/2019/05/f63/NEPA%20Community%20Guide%202019.pdf
[9] CEQ. The NEPA Task Force. 2003. *Modernizing NEPA Implementation.* Chapter 4. http://ceq.hss.doe.gov/ntf/report/chapter4.pdf

adapt" to the traditional environmental management model can account for unanticipated changes, inaccurate predictions, or emerging information.

Maps and Tables

We recommend including maps and diagrams of the area, each alternative, and any other relevant maps that assist in the understanding of the project area and proposed activities. We also recommend including tables that clearly compare the alternatives and their potential impacts to each resource and subbasin within the overall geographic area, as well as other tables that clearly compare and contrast the costs, benefits, and practicability of alternatives.

Conversation Contents

[EXTERNAL] Anderson Ranch Dam Raise

Doug Zamzow <dszamzow@gmail.com>

From:	Doug Zamzow <dszamzow@gmail.com>
Sent:	Tue Sep 03 2019 07:03:28 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Anderson Ranch Dam Raise

My comments are:
1)First, downstream users of this water need to CONSERVE water, which would probably delay the need for this dam raise by years if not decades. Idahoans are huge consumers of water, and could do just fine with considerably less water.
2)Agriculture is being replaced with homes/apartments/commercial buildings. As a result, the Treasure Valley should be using less water, not more. Why the need for raising the dam?
3)The dam raising presents a real possibility of contamination/sedimentation in the South Fork of the Boise River below the dam, and in the reservoir. This would be BAD for fish, wildlife, water quality, etc. What measures will be used to prevent this from happening?
4)Will the Cow Creek dirt road be improved and made more safe as there will be considerably more traffic on this road while the dam raising work is done?
5)What measures will be put in place to prevent oils, diesel, gas, petroleum products, etc. from getting into the river and reservoir?

Please email back to me that you received this email.

thanks
Doug Zamzow
415 Schmeizer Lane
Boise, Idaho 83706
208/863-2373

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Wed Sep 04 2019 08:34:03 GMT-0600 (MDT)
To:	Doug Zamzow <dszamzow@gmail.com>
Subject:	Re: [EXTERNAL] Anderson Ranch Dam Raise

Mr. Zamzow
Thank you for your comment. Reclamation will consider the issues you raised in the development of the environmental impact statement. Please continue to monitor our website for updates on the project.

Jim Taylor
Environmental Compliance Program Manager
Bureau of Reclamation | Snake River Area Office
Office 208-383-2260 | jbtaylor@usbr.gov

On Tue, Sep 3, 2019 at 7:03 AM Doug Zamzow <dszamzow@gmail.com> wrote:

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Doug Zamzow
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"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:19 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Anderson Ranch Dam Raise

---------- Forwarded message ---------
From: **BoiFeasibility, BOR-SRA** <bor-sra-boifeasibility@usbr.gov>
Date: Wed, Sep 4, 2019 at 8:34 AM
Subject: Re: [EXTERNAL] Anderson Ranch Dam Raise
To: Doug Zamzow <dszamzow@gmail.com>

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Doug Zamzow
415 Schmeizer Lane
Boise, Idaho 83706
208/863-2373

Conversation Contents

[EXTERNAL] Additional Comments on Anderson Ranch Dam Feasibility Study

Peter Humm <bigranvil@yahoo.com>

From:	Peter Humm <bigranvil@yahoo.com>
Sent:	Thu Aug 29 2019 11:28:25 GMT-0600 (MDT)
To:	"bor-sra-boifeasibility@usbr.gov" <bor-sra-boifeasibility@usbr.gov>
Subject:	[EXTERNAL] Additional Comments on Anderson Ranch Dam Feasibility Study

This e-mail contains additional comments on the Bureau of Reclamation's proposed Feasibility Study on raising Anderson Ranch Dam (in Elmore County) to increase water storage and flood control during high-runoff years. My previous comments were contained in an e-mail sent to your office on August 16, 2019. In that e-mail, I made the following statement: "Anderson Ranch Dam is located in rural Elmore County, Idaho, and the impacts of any future construction will occur in Elmore County. However, most if not all of the benefits of this project will occur in the Boise/Meridian metropolitan areas in Ada and Canyon Counties. The EIS for this project must address this disparate impacts/benefits issue as part of the Socioeconomic Impacts section of the document."

Elmore County has a significantly lower average income level and higher unemployment compared to the Treasure Valley/Boise metropolitan area. Any Environmental Impact analysis prepared for this proposed project must comply with Executive Order 12898, quoted below:

"Executive Order 12898 of February 11, 1994 -
Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations -
By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:
Section 1–1.Implementation. 1–101. Agency Responsibilities.

To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall 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 a**nd low-income populations** in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands."

All of the adverse effects of the proposed changes to Anderson Ranch Dam will take place in Elmore County, with the benefits occurring in the higher-income Boise Metropolitan area.
The EIS for this project should examine the potential mitigation of these disproportionate impacts by using some of the additional Anderson Dam water storage capability to transfer water from Anderson Ranch Reservoir to the aquifer serving the Mountain Home area, and the Anderson Ranch Project mitigation include construction of a pump and pipeline from Anderson Ranch Reservoir into the Elmore County aquifer recharge area. This will serve as mitigation for the disproportionate level of impacts on the low-income population in Elmore County, as required by EO 12898.

Peter Humm
PO Box 1377
Mountain Home, ID 83647

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:15 GMT-0600 (MDT)

To: rhobbs@sundance-inc.net

Subject: Fwd: [EXTERNAL] Additional Comments on Anderson Ranch Dam Feasibility Study

---------- Forwarded message ---------
From: **Peter Humm** <bigranvil@yahoo.com>
Date: Thu, Aug 29, 2019 at 11:29 AM
Subject: [EXTERNAL] Additional Comments on Anderson Ranch Dam Feasibility Study
To: bor-sra-boifeasibility@usbr.gov <bor-sra-boifeasibility@usbr.gov>
Cc: Courtney Lewis <CLewis@mountain-home.us>, Stephanie Root <editor@mountainhomenews.com>

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Peter Humm
PO Box 1377
Mountain Home, ID 83647

Conversation Contents

Boise Feasibility Inquiry

Sloan

From:	Sloan
Sent:	Wed Aug 28 2019 18:07:14 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	Boise Feasibility Inquiry

From Megan (Sloan) on 08/28/2019 at 06:08:01MSGBODY: TEST - from Megan Sloan
Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:10 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: Boise Feasibility Inquiry

---------- Forwarded message ---------
From: <Sloan>
Date: Wed, Aug 28, 2019 at 6:07 PM
Subject: Boise Feasibility Inquiry
To: <BOR-SRA-BoiFeasibility@usbr.gov>

From Megan (Sloan) on 08/28/2019 at 06:08:01MSGBODY:
TEST - from Megan Sloan

Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

Conversation Contents

[EXTERNAL] Add to email list

Terry Hasselbring <hterry50@msn.com>

From:	Terry Hasselbring <hterry50@msn.com>
Sent:	Wed Aug 28 2019 13:55:43 GMT-0600 (MDT)
To:	"BOR-SRA-BoiFeasibility@usbr.gov" <BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Add to email list

Please add Terry Hasselbring to your email list for the Boise River Basin Feasibility Study.
My email address is hterry50@msn.com

Sent from Mail for Windows 10

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:06 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Add to email list

---------- Forwarded message ---------
From: **Terry Hasselbring** <hterry50@msn.com>
Date: Wed, Aug 28, 2019 at 1:56 PM
Subject: [EXTERNAL] Add to email list
To: BOR-SRA-BoiFeasibility@usbr.gov <BOR-SRA-BoiFeasibility@usbr.gov>

Please add Terry Hasselbring to your email list for the Boise River Basin Feasibility Study.
My email address is hterry50@msn.com

Sent from Mail for Windows 10

Conversation Contents

Boise Feasibility Inquiry

<hterry50@msn.com>

From:	<hterry50@msn.com>
Sent:	Wed Aug 28 2019 13:53:03 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	Boise Feasibility Inquiry

From Terry and Mary Hasselbring (hterry50@msn.com) on 08/28/2019 at 01:08:02MSGBODY: To whom it may concern, Thank you for the opportunity to express our comments and questions. We understand the need for additional water storage as the demand grows in the future and agree that some sort of action is required to allow for the future water needs. However we would hope that there will be a study to make sure that the current amount of water in the system is being utilized in the most efficient manner with little or no waste. As a vacation home owner since 1983 and full time resident since 2016 in Pine, Idaho we have enjoyed the use of Anderson Ranch's recreational facilities/amenities and consider them a big part of the reason to live in Pine. We have the following concerns with raising Anderson Ranch reservoir 6 feet: 1.) What will be the effect on the existing recreational facilities; Boat ramps Parking for vehicles with boat trailers Boat docks Improved overnight camp and day use sites Existing beach areas 2.) What provisions are there to mitigate the loss of the above mentioned facilities and amenities? 3.) With the rise of slack water at the Pine end of the reservoir there will surely be a major increase in the breeding area for mosquitoes potentially carrying dangerous diseases. How will this be addressed and mitigated? 4.) What will be the effect on the bridges (Lime creek and Pine), will they need to be replaced? Please add us to the mailing list and/or email. Our address is; Terry Hasselbring 460 N Pine Meadows Circle Pine, Idaho 83647 Sincerely, Terry and Mary Hasselbring Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:57 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: Boise Feasibility Inquiry

---------- Forwarded message ---------
From: <hterry50@msn.com>
Date: Wed, Aug 28, 2019 at 1:53 PM
Subject: Boise Feasibility Inquiry
To: <BOR-SRA-BoiFeasibility@usbr.gov>

From Terry and Mary Hasselbring (hterry50@msn.com) on 08/28/2019 at 01:08:02MSGBODY:
To whom it may concern,

Thank you for the opportunity to express our comments and questions.
We understand the need for additional water storage as the demand grows in the future and agree that some sort of action is required to allow for the future water needs. However we would hope that there will be a study to make sure that the current amount of water in the system is being utilized in the most efficient manner with little or no waste.
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We have the following concerns with raising Anderson Ranch reservoir 6 feet:
1.) What will be the effect on the existing recreational facilities;
- Boat ramps
- Parking for vehicles with boat trailers
- Boat docks
- Improved overnight camp and day use sites
- Existing beach areas

2.) What provisions are there to mitigate the loss of the above mentioned facilities and amenities?
3.) With the rise of slack water at the Pine end of the reservoir there will surely be a major increase in the breeding area for mosquitoes potentially carrying dangerous diseases. How will this be addressed and mitigated?
4.) What will be the effect on the bridges (Lime creek and Pine), will they need to be replaced?
Please add us to the mailing list and/or email. Our address is;
Terry Hasselbring
460 N Pine Meadows Circle
Pine, Idaho 83647

Sincerely,

Terry and Mary Hasselbring

Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

Conversation Contents

Boise Feasibility Inquiry

<cwrmhi@yahoo.com>

From:	<cwrmhi@yahoo.com>
Sent:	Tue Aug 27 2019 16:51:52 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	Boise Feasibility Inquiry

From Joni Harris (cwrmhi@yahoo.com) on 08/27/2019 at 04:08:50MSGBODY: Sorry - not good for the community of Pine! Putting water to their back door and across the Pine airport. My vote is no - please don't. Manage water better so you don't flood Boise greenbelt in the spring. I think that is your concern - not the community of Pine and the residence around the reservoir.
Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:53:53 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: Boise Feasibility Inquiry

---------- Forwarded message ---------
From: <cwrmhi@yahoo.com>
Date: Tue, Aug 27, 2019 at 4:51 PM
Subject: Boise Feasibility Inquiry
To: <BOR-SRA-BoiFeasibility@usbr.gov>

From Joni Harris (cwrmhi@yahoo.com) on 08/27/2019 at 04:08:50MSGBODY:
Sorry - not good for the community of Pine! Putting water to their back door and across the Pine airport.
My vote is no - please don't. Manage water better so you don't flood Boise greenbelt in the spring. I think that is
your concern - not the community of Pine and the residence around the reservoir.

Previous Page: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

Conversation Contents

[EXTERNAL] Boise State Public Radio

Tess Goodwin <tessgoodwin@boisestate.edu>

From:	Tess Goodwin <tessgoodwin@boisestate.edu>
Sent:	Tue Aug 27 2019 09:14:18 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Boise State Public Radio

Hi Megan,

I am a reporter for Boise State Public Radio and I was wondering if you had time today for a short phone interview (about 10 minutes) about the Boise River Basin Feasibility Study Open Houses happening this week. Let me know what would work for you, I am available anytime before 2pm and am flexible after. Thank you!

Best,

Tess Goodwin
Boise State Public Radio Newsroom

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Wed Aug 28 2019 06:50:39 GMT-0600 (MDT)
To:	Megan Sloan <msloan@usbr.gov>
Subject:	Fwd: [EXTERNAL] Boise State Public Radio

FYI
---------- Forwarded message ---------
From: **Tess Goodwin** <tessgoodwin@boisestate.edu>
Date: Tue, Aug 27, 2019 at 9:14 AM
Subject: [EXTERNAL] Boise State Public Radio
To: <BOR-SRA-BoiFeasibility@usbr.gov>

Hi Megan,

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Best,

Tess Goodwin
Boise State Public Radio Newsroom

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:55:12 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Boise State Public Radio

---------- Forwarded message ---------
From: **BoiFeasibility, BOR-SRA** <bor-sra-boifeasibility@usbr.gov>
Date: Wed, Aug 28, 2019 at 6:50 AM
Subject: Fwd: [EXTERNAL] Boise State Public Radio
To: Megan Sloan <msloan@usbr.gov>
Cc: James Taylor <jbtaylor@usbr.gov>

FYI
---------- Forwarded message ---------
From: **Tess Goodwin** <tessgoodwin@boisestate.edu>
Date: Tue, Aug 27, 2019 at 9:14 AM
Subject: [EXTERNAL] Boise State Public Radio
To: <BOR-SRA-BoiFeasibility@usbr.gov>

Hi Megan,

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Best,

Tess Goodwin
Boise State Public Radio Newsroom

Conversation Contents

[EXTERNAL] Boise State Public Radio Inquiry

Tess Goodwin <tessgoodwin@boisestate.edu>

From:	Tess Goodwin <tessgoodwin@boisestate.edu>
Sent:	Mon Aug 26 2019 13:51:50 GMT-0600 (MDT)
To:	<BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Boise State Public Radio Inquiry

Hi Megan,

I am a reporter for Boise State Public Radio and I was wondering if you had time tomorrow for a short phone interview (about 10 minutes) about the Boise River Basin Feasibility Study Open Houses happening this week. Let me know what would work for you, I am available anytime before 2pm and am flexible after Thank you!

Best,

Tess Goodwin
Boise State Public Radio Newsroom

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:55:18 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Boise State Public Radio Inquiry

---------- Forwarded message ---------
From: **Tess Goodwin** <tessgoodwin@boisestate.edu>
Date: Mon, Aug 26, 2019 at 1:52 PM
Subject: [EXTERNAL] Boise State Public Radio Inquiry
To: <BOR-SRA-BoiFeasibility@usbr.gov>

Hi Megan,

I am a reporter for Boise State Public Radio and I was wondering if you had time tomorrow for a short phone interview (about 10 minutes) about the Boise River Basin Feasibility Study Open Houses happening this week. Let me know what would work for you, I am available anytime before 2pm and am flexible after Thank you!

Best,

Tess Goodwin
Boise State Public Radio Newsroom

Conversation Contents

[EXTERNAL] Anderson Ranch Dam

Dave Bacca <sgtchewey@gmail.com>

From:	Dave Bacca <sgtchewey@gmail.com>
Sent:	Wed Aug 21 2019 10:13:03 GMT-0600 (MDT)
To:	<bor-sra-boifeasibility@usbr.gov>
Subject:	[EXTERNAL] Anderson Ranch Dam

Climate change and water shortages lead my thinking ahead. We should insure the survival of Elmore and Ada counties. Build it.

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:52:54 GMT-0600 (MDT)
To:	rhobbs@sundance-inc.net
Subject:	Fwd: [EXTERNAL] Anderson Ranch Dam

---------- Forwarded message ---------
From: **Dave Bacca** <sgtchewey@gmail.com>
Date: Wed, Aug 21, 2019 at 10:13 AM
Subject: [EXTERNAL] Anderson Ranch Dam
To: <bor-sra-boifeasibility@usbr.gov>

Climate change and water shortages lead my thinking ahead. We should insure the survival of Elmore and Ada counties. Build it.

Conversation Contents

[EXTERNAL] Boise Basin/Anderson Ranch Dam Feasibility Study

Peter Humm <bigranvil@yahoo.com>

From:	Peter Humm <bigranvil@yahoo.com>
Sent:	Fri Aug 16 2019 10:52:16 GMT-0600 (MDT)
To:	"BOR-SRA-BoiFeasibility@usbr.gov" <BOR-SRA-BoiFeasibility@usbr.gov>
Subject:	[EXTERNAL] Boise Basin/Anderson Ranch Dam Feasibility Study

Megan Sloan, Study Manager
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, Idaho 83702
Dear Ms. Sloan:
This letter contains my comments on the request for scoping issues for the Boise River Basin Feasibility Study for increasing water storage capacity within the Boise River system, particularly at Anderson Ranch Dam.
1) Anderson Ranch Dam is located in rural Elmore County, Idaho, and the impacts of any future construction will occur in Elmore County. However, most if not all of the benefits of this project will occur in the Boise/Meridian metropolitan areas in Ada and Canyon Counties. The EIS for this project must address this disparate impacts/benefits issue as part of the Socioeconomic Impacts section of the document. Impacts in Elmore County will include, but not be limited to, destruction of county roads by construction traffic, delays of people using these roads (due to road closures caused by that construction traffic) to recreation sites ranches, farms, the town of Prairie and the Fall Creek Resort during construction, and the loss of recharge potential for the groundwater reserves in Elmore County.
2) Elmore County is experiencing growth due to the high price of housing in the Boise metropolitan area, with people buying and renting in Mountain Home and commuting to work in Boise. This growth can be confirmed by a survey of the realtors in the Mountain Home area. The Anderson Ranch Dam Project, by enabling additional growth in the Boise Metropolitan Area, will add to this “bedroom community” growth in Elmore County. As a result of this growth, the water table in the Mountain Home aquifer is declining yearly, and the City of Mountain Home has recently had to double their water storage capability by building a new municipal water tank north of town. The EIS for the Anderson Ranch Dam must include an analysis of the impacts of this additional growth on the local aquifer. The EIS should also examine the potential mitigation of this impact by using some of the additional Anderson Dam water storage capability to transfer water from Anderson Ranch Reservoir to the aquifer serving the Mountain Home area, which includes Mountain Home Air Force Base. This water transfer would serve as a partial mitigation to the disparate impacts of the Anderson Ranch Project on rural Elmore County.
3) Elmore County and the City of Mountain Home have filed for water rights on part of any high-water year runoff into the Boise Basin system, and the Anderson Ranch Project should consider including a pump and pipeline from Anderson Ranch Reservoir into the Elmore County aquifer recharge area (as mitigation for impacts on Elmore County), in coordination with Elmore County and the City of Mountain Home. This pipeline should also include electrical generation facilities as a side benefit, adding the potential for renewable energy generation to the project.
Additional comments on this project will be provided by the residents of the Mountain Home area during the August 29, 2019 scoping session here in Mountain Home.
Peter Humm
PO Box 1377
Mountain Home, ID 83647

"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>

From:	"BoiFeasibility, BOR-SRA" <bor-sra-boifeasibility@usbr.gov>
Sent:	Tue Sep 10 2019 11:52:56 GMT-0600 (MDT)

To: rhobbs@sundance-inc.net

Subject: Fwd: [EXTERNAL] Boise Basin/Anderson Ranch Dam Feasibility Study

---------- Forwarded message ---------
From: **Peter Humm** <bigranvil@yahoo.com>
Date: Fri, Aug 16, 2019 at 10:52 AM
Subject: [EXTERNAL] Boise Basin/Anderson Ranch Dam Feasibility Study
To: BOR-SRA-BoiFeasibility@usbr.gov <BOR-SRA-BoiFeasibility@usbr.gov>

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Bureau of Reclamation
Snake River Area Office
230 Collins Road
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Peter Humm
PO Box 1377
Mountain Home, ID 83647

---------- Forwarded message ---------
From: **Trent Jones** <tjones5b@gmail.com>
Date: Sun, Sep 15, 2019 at 9:02 PM
Subject: [EXTERNAL] comments on proposed expansion of Anderson Ranch Dam
To: <BOR-SRA-BoiFeasibility@usbr.gov>

I am not in favor of an expansion and would only be supportive if fish and wildlife impacts are minimized and access to and use of he river, roads, and lands below the dam are preserved without any impediment or impact. Boise and the Treasure Valley are growing without thought given to how to support the population and now are looking to neighbors such as Elmore County and wildlands such as the South Fork to "subsidize" what is largely unsustainable growth. Impacting existing rivers, wildlife habitat, open space, and working ag lands is not a solution and is unacceptable to all of us who actually live in rural Idaho. I suspect all of the BuRec officials who are evaluating this proposal live in Boise and the surrounding suburbs so of course will support it. Trent Jones, Hailey, ID 83333
tjones5b@gmail.com

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
Scoping Comment Form

Please give us your comments!

Comments must be received by September 9, 2019, to be considered in the Draft Environmental Impact Statement. Comments may be submitted in the following ways:

- Submit a comment form at the public scoping meetings
- Submit verbal comments (with the scribe/recorder) at the public scoping meetings
- Mail comments to ATTN: Jim Taylor, Bureau of Reclamation-Snake River Area Office, 230 Collins Road, Boise, ID 83702
- Submit via email to BOR-SRA-BoiFeasibility@usbr.gov
- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

***Required fields.** Please print clearly.*

Name (First and Last)*	E. REX				
Organization					
Title					
Address*	1225 ELM ST.				
City*	MOUNTAIN HOME	***State****	IDAHO	***Zip Code****	83647-1945
E-mail	—			***Phone****	—

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☐ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

Questions: #1 With the raising of the water table w/ the height of the new Dam, Who is going to "remove" all the timber debris that it starts to fall in the water due to soil erosion?? Are you? Hazards on Anderson Ranch Reservior for all. Below the South Fork also?

#2 How will the "Raising" of the dam effect private & Recreational mine claims?? Rocky Bar Rd. has numerous claims.

Please send written answer/coments. Thank You

***Privacy Notice:** Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
Scoping Comment Form

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- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

** **Required fields.** Please print clearly.*

Name (First and Last)*	JOHN TIEDEMAN				
Organization	PUBLIC				
Title	N/A				
Address*	7316 N. PRESCOTT AVE				
City*	BOISE	***State****	ID	***Zip Code****	83714
E-mail	JOHNT2@Q.COM			***Phone****	208-841-2357

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☐ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

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September 09, 2019

Comments to August 31, 2019 Open House on Raising the Crest of Anderson Ranch Dam

1) There was insufficient information on what the proposed action was supposed to do. Just stating the purpose was to raise the crest "6-feet", did little to explain or show what that really meant. A number of other participants also expressed this frustration. Cross sections and a plan view of what you are proposing in a handout would have been most helpful. As it is, the public nor myself has no way of knowing what is or will be happening or how to comment/or address this.

   I and others asked for/requested a copy of the inundation map resulting for the proposed project. We were told that we could download it off Reclamations project web-site, but nothing was there. Still would like the electronic copy of that.

   Need to analyze the affects of raising any crest height to the potential instability of the left side abutment. Note the excavated cut-backs in that area and the past landslide just downstream of this location.

   Also need to analyze the affects of raising any crest height to the potential geologic fault on the right side abutment just upstream of the current crest/access road intersection. In relation to this, need to consider how cattle trucks will be able to go up any significant grade to transition from the road to the proposed crest height; this was a significant issue on the last crest raise. Note: I believe the current road is near the maximum grade just to access this area.

2) Water Rights
   This whole presentation was confusing to me and others as to how this would all work out; especially in light of the Elmore County's Little Camas project and State "water right". (now going from 10K ac-ft to 20K ac-ft)(also, how does that work with the proposed 29K ac-ft you presented for this project). And also having no water service contract with Reclamation for this water. Really need to describe, explain and discuss (maybe in both the water rights and cumulative affects section).

   What does Reclamations water service contracts people say about this project? As far as I am aware, only Water District 63 has an authorized water service contract for any water in Anderson Ranch (AR).

   Also in FAQ No.1., you imply that water flows for irrigation purposes flows out of the watershed, but do not go on the say that these flows are for downstream beneficial uses (as per water right) (e.g. wildlife, recreation, etc.). Year round flows are not wasted and should be described as such. Also as far as I am aware, there is no Federal legislation changing the authorized purposes for this Federal project; such that for growth and development (see also your description of authorized purpose in FAQ 6. third paragraph). Need such legislation before anything can be decided and proceed.

3) Cumulative affects
There are many that need to be analyzed. Future water use, fish and wildlife, non-structural options, other projects that may be considered in the future, etc. I see this being a bell weather section.

4) Cost Benefit Analysis
There was nothing at all presented at this open house. Very hard to understand what the costs really are especially in light of the main costs of feasibility, design, non-contract, and contract/construction costs. This is very important to be described and presented to the public before any decisions are made (even a ROD).

5) From FAQ's:
No. 9. States that "any improvement to flood risk reduction will be analyzed as a secondary benefit". Why? When flood control risk is a primary authorized project purpose and use. Need to explain this diminishment of significant purpose.

No. 11. States that "other two dams" may be raised, but does not go into any further detail (if you say this, you better be willing to describe this). These structures need to be identified, analyzed, and at the very least included in the cumulative affects section.

No. 18. States that the Federal government may? (emphasis added) reserve some portion of this new water storage space for Federal needs; without saying how much and what the needs are (since Reclamation has gone on record that the Federal government has none). Need to expand on the above, why, and where is the specific Federal legislative authority to do this. Also, what water service contract do you anticipate using to codify this?

No. 22. Who is paying for this project, and how much each? Should state all the payers. Also on the Federal side (as far as I know), there is no specific Federal legislation authorizing, appropriating, or for construction to this project. Need to have and describe this prior to any significant decisions being made.

I hope this is of some help.

Thank you.

I remain,

John Tiedeman

John Tiedeman

August 26, 2019

Bureau of Reclamation
Jim Taylor, Environmental Resource Manager
230 Collins Road
Boise, ID 83702

Dear Mr. Taylor,

We are writing this letter of support in reference to increasing the maximum water level elevation at Anderson Dam in Elmore County. Our Elmore County Commissioners working with Bureau of Reclamation and Department of Water Resources have come through with a plan that will benefit all involved with these water avenues.

We request this process and plan be approved.

John & Sue Gross

John and Sue Gross
1310 Owyhee Drive
Mountain Home, ID 83647

STATE OF IDAHO
DEPARTMENT OF ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE
1445 North Orchard Street•Boise, ID 83706-2239•(208) 373-0550

DEQ Response to Request for Environmental Comment

Date:	*August 23, 2019*
Agency Requesting Comments:	*Bureau of Reclamation*
Date Request Received:	*August 9, 2019*
Applicant/Description:	*Boise River Basin Storage Feasibility/Anderson Ranch Dam EIS*

Thank you for the opportunity to respond to your request for comment. While DEQ does not review projects on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at http://www.deq.idaho.gov/ieg/.

The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:

1. Air Quality

- *Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).*

  For questions, contact David Luft, Air Quality Manager, at 373-0550.

- *IDAPA 58.01.01.201 requires an owner or operator of a facility to obtain an air quality permit to construct prior to the commencement of construction or modification of any facility that will be a source of air pollution in quantities above established levels. DEQ asks that cities and counties require a proposed facility to contact DEQ for an applicability determination on their proposal to ensure they remain in compliance with the rules.*

  For questions, contact the DEQ Air Quality Permitting Hotline at 1-877-573-7648.

2. Wastewater and Recycled Water

- *DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastewater and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the district health department.*

  All projects for construction or modification of wastewater systems require

preconstruction approval. Recycled water projects and subsurface disposal projects require separate permits as well.

- *DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect ground water.*
- *DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

For questions, contact Todd Crutcher, Engineering Manager, at 373-0550.

3. Drinking Water

- *DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.*
- *IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.*

  All projects for construction or modification of public drinking water systems require preconstruction approval.
- *DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system (refer to the DEQ website at http://www.deq.idaho.gov/water-quality/drinking-water.aspx). For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.*
- *If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.*
- *DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of ground water resources.*
- *DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

  For questions, contact Todd Crutcher, Engineering Manager at 373-0550.

4. Surface Water

- *A DEQ short-term activity exemption (STAE) from this office is required if the project will involve de-watering of ground water during excavation and discharge back into surface water, including a description of the water treatment from this process to prevent excessive sediment and turbidity from entering surface water.*
- *Please contact DEQ to determine whether this project will require a National Pollution*

Discharge Elimination System (NPDES) Permit. If this project disturbs more than one acre, a stormwater permit from EPA may be required.

- *If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.*

- *The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call 208-334-2190 for more information. Information is also available on the IDWR website at:*
  http://www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/AlterationPermit/AlterationPermit.htm

- *The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.*

For questions, contact Lance Holloway, Surface Water Manager, at 373-0550.

5. Hazardous Waste And Ground Water Contamination

- ***Hazardous Waste.*** *The types and number of requirements that must be complied with under the federal Resource Conservations 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 waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.*

- *No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project 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.*

- ***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 (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.02.851 and 852).*

  Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.02.851.01 and 04. Hazardous material releases to state waters, or to land such that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.

- ***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."

For questions, contact Albert Crawshaw, Waste & Remediation Manager, at 373-0550.

6. ***Additional Notes***
   - *If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, the site should be evaluated to determine whether the UST is regulated by DEQ. EPA regulates ASTs. UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at 373-0550, or visit the DEQ website (http://www.deq.idaho.gov/waste-mgmt-remediation/storage-tanks.aspx) for assistance.*

   - *If applicable to this project, DEQ recommends that BMPs be implemented for any of the following conditions: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, and ponds. Please contact DEQ for more information on any of these conditions.*

We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any our technical staff at 208-373-0550.

Sincerely,

Aaron Scheff

Aaron Scheff
aaron.scheff@deq.idaho.gov
Regional Administrator
Boise Regional Office
Idaho Department of Environmental Quality

ec: CM#2019AEK161

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
Scoping Comment Form

Please give us your comments!

Comments must be received by September 9, 2019, to be considered in the Draft Environmental Impact Statement. Comments may be submitted in the following ways:

- Submit a comment form at the public scoping meetings
- Submit verbal comments (with the scribe/recorder) at the public scoping meetings
- Mail comments to ATTN: Jim Taylor, Bureau of Reclamation-Snake River Area Office, 230 Collins Road, Boise, ID 83702
- Submit via email to BOR-SRA-BoiFeasibility@usbr.gov
- Online at the project website: https://www.usbr.gov/pn/studies/boisefeasibility/index.html

* ***Required fields.*** *Please print clearly.*

Name (First and Last)*	Sidney Erwin				
Organization	Elmore County Farm Bureau				
Title	Board member				
Address*	29711 State Hwy. 51				
City*	Bruneau	***State****	ID	***Zip Code****	83604
E-mail	snjerwin@gmail.com			***Phone****	208-845-2756

*Completing this form will **not** automatically add you to the mailing list for project updates and notices of document availaibility.*

☐ *If you prefer to be on the mailing list, please check this box*

Comments on the Scope of the Environmental Impact Statement:

The EIS for increasing the height of Anderson Ranch Dam must consider all opportunities for uses of the additional water which will be stored in the reservoir.

The citizens of Elmore County and Groundwater District No. 161 will appreciate any additional water which will be available for their use either as recharge or for supplemental purposes.

the benefit to the area and the local citizens is much greater through flood control versus allowing the City of Boise to suffer flooding.

continued

Privacy Notice: *Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

RECLAMATION
Managing Water in the West

Boise River Basin Feasibility Study
Environmental Impact Statement
Scoping Comment Form

Please give us your comments!

Additional room on reverse side.

Comments on the Scope of the Environmental Impact Statement (continued):

The 1,600 members of the Elmore County Farm Bureau wish to thank the BOR for the opportunity to comment on the raising of Anderson Ranch Dam.

Privacy Notice: *Please be aware that names and addresses of respondents may be released if requested under the Freedom of Information Act. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your written comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.*

Alain Isaac
1490 Centennial DR
Mtn Home ID 83647
8/28/2019

Dear Mr Jim Taylor,

I am writing in support of the efforts of the Elmore County Commissioners in securing water from the Anderson Dam level increase under the Omnibus Public Land Management Act of 2009.

Capturing, storing and allowing these 29,00 acre-feet of water to be stored and secured for Elmore County is critical in securing future sustainability and economic viability for Elmore County businesses and it's citizens. The water source is generated by the snow pack in Elmore County and should be for use in Elmore County.

Elmore County's aquifer is dropping at nearly 3 feet a year challenging the future of the County. Economics, quality of life, and ability to protect our current lifestyle is at stake for us.

Thank you,

Alain Isaac

Ron Monasterio
1490 Centennial DR
Mtn Home ID 83647
8/28/2019

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Elmore County's aquifer is dropping at nearly 3 feet a year challenging the future of the County. Economics, quality of life, and ability to protect our current lifestyle is at stake for us.

Thank you,

Ron Monasterio

Mountain Home
Chamber of Commerce

205 North 3rd East • Mountain Home, Idaho 83647
(208) 587-4334
www.mountainhomechamber.com

August 26, 2019

Jim Taylor
Environmental/Cultural Resource Manager
Bureau of Reclamation
Snake River Area Office
230 Collins Rd
Boise, ID 83702

Dear Mr. Jim Taylor,

It is our pleasure to write this letter of support in reference to increasing the maximum water level elevation at Anderson Ranch Dam 6 feet (from 4,196 feet to 4,202 feet) in Elmore County under the Omnibus Public Land Management Act of 2009, Public Law (Pub. L.) 111-11, Section 9001.

Capturing, storing and allowing these 29,000 acre-feet (i.e. ~9.4 billion gallons) of water to be stored and secured for Elmore County is critical in securing future sustainability and economic viability for Elmore County businesses and citizens. The water source is generated by the snowpack in the Boise National Forest, located in Elmore County.

Recharging our depleting aquifer is a must for all the citizens in Elmore County as most of our water is pumped from deep wells. It is estimated that our aquifer is dropping at nearly 3 feet per year, which is why we adamantly support this project. Water is life and without this water there are limited opportunities for the future of Elmore County.

Though there will be some very minimal recreational impacts (e.g. camping spots, boat docks, fishing areas, parking, ramps etc.), a new water district (Water District 63) and some new taxes we realize the importance of this project and decision faced by the United States Department of the Interior, Bureau of Reclamation and the Department of Water Resources for the future of Elmore County. The Mountain Home Chamber of Commerce supports raising the Anderson Ranch Dam and the water rights associated with this project.

We fully support the efforts of the Elmore County Commissioners in this endeavor.

With all of our support,

Alain Isaac
President, Board of Directors
Mountain Home Chamber of Commerce

Julie Davis
Executive Director
Mountain Home Chamber of Commerce

PROGRESS
ECONOMY
EDUCATION
ENVIRONMENT
PLANNING
ON THE MOVE

MOUNTAIN HOME CHAMBER OF COMMERCE
WORKING TOGETHER FOR PROGRESS

BOARD OF DIRECTORS MEETING 2019 MINUTES
ONLINE VOTE
Date: August 26, 2019

I. **Business:**

1. **Anderson Ranch Dam / Water Rights Letter of Support**
   At the Board of Directors meeting on August 26, 2019 at noon, discussion took place regarding a letter of support letter for the raising of Anderson Ranch Dam and the water rights associated with the project.

   A motion to accept the letter with corrections with a final virtual vote to confirm corrections was made by Nancy Brletic, seconded by Goisalde Jausoro. The motion was passed unanimously.

   Final letter was sent for review by email on August 26, 2019 at 2:56. Letter was accepted unanimously.

Minutes recorded by: Julie Davis, Executive Director

Appendix C

This appendix includes the comments received during the scoping process organized by resource area.

Comment Code	Commenter's Nam	Organization	Title	City	Comment Location	Code	Comment Format	Code	Primary Resource Concern	Code	Secondary Resource Concern	Code	Comment Number	Comment
PINWT-RENA-1	Rick Franklin	Rising Spring	Plant Manage	Pine	Pine Open House	PIN	Written	WT	Recreation	RE	None	NA	1	What are your plans to improve the access to camping and boating around the reservoir?
PINWT-RESO-2	Debra Gates	Hayhurst Bed	Owner	Pine	Pine Open House	PIN	Written	WT	Recreation	RE	Socioeconomics	SO	2	Please keep in mind the campers, boaters, fishermen above the dam. Will there be additional camping sites to replace those lost along the reservoir when the water level increases? Businesses like mine depend upon access. What becomes of the roadways & bridges in and out of Pine? If they are to be replaced will there be alternate accesses? The airstrip will be impacted. What steps will be taken & where to replace?
PINWT-LUTI-3	John Rose Curry	retired	Pine property	Garden City	Pine Open House	PIN	Written	WT	Land Use	LU	Transportation and Infrastructure	TI	3	Will any private property be affected? When will project start and complete if OKed? Will Lime Creek Bridge have to be raised or any other bridge be affected? Will work on this project continue during the harsh winter time frame? Will project have its own cement plant & overhead crane? What impact will the Forest Service have?
BOIWT-FIWR-4	Richard Prange	Trout Unlimit	member	Boise	Boise Open House	BOI	Written	WT	Biological Resources: Fish	FI	Water Rights	WR	4	The EIS must have good coverage of how Anderson Dam has been historically operated depicting the river flows throughout the year. Then there needs to be the with project flow changes that recent. I am concerned about the reduction in springtime flushing flows (flood control releases to Reclamation). From a cumulative effects perspective, there is not only the 29,000 AF [acre-feet] of new storage for consumptive uses, there is also the recently proposed 20,000 AF permit for Elmore Co. to pump water from Anderson Ranch Reservoir and the Cat Creek Summit pump storage project proposal. These projects combined have the potential to remove about 80,000 AF from springtime flows.
BOIWT-SOAS-5	Albert Hofer	Elmore Coun	Commissioner	Mountain Home	Boise Open House	BOI	Written	WT	Socioeconomics	SO	Aesthetics	AS	5	I love the project. I just wish the name was different. The people of Elmore where all the water comes from. Maybe EL-ADA or something.
MTHWT-SAFL-6	Steve Williams	xx	xx	Mountain Home	Mountain Home Open	MTH	Written	WT	Safety	SA	Floodplains	FL	6	Does the additional water storage cause any increase risks to downstream developments should Anderson Ranch dam fail as result of a catastrophic event? The downstream canyon narrows in a highly constricted canyon(shear rock walls) between Neil Bridge and the Cow Creek Bridge. Could the constricted canyon cause flood waters to back up and flow through the saddle in the Danskin Mountains at Cow Creek where it would then flow south toward Mountain Home?
MTHWT-WRNA-7	John Hiler	Hiler Bros. C	Partner	Mountain Home	Mountain Home Open	MTH	Written	WT	Water Rights	WR	None	NA	7	Considering what is available at this meeting, I again find it impossible to believe that the BBCC will ever allow any of their dedicated water rights to be distributed anywhere but thru their system. They may allow the purchase of "surplus" water to an outside agency - but "water rights," no. The dedicated water right in the Anderson Dam pool for the city of Mountain Home domestic purposes passed into other hands -- in Boise Valley -- when the city did not act. I guess I just don't see how, considering current Idaho water law, how there would or would ever be any water consistently available to any other agency from the Boise River system. Historically, the Boise River water rights, other than the Garrett filing on the east fork of Lime Creek and the projected canal to Camas and the proposed diversion dam and tunnel below the proposed Anderson Dame site, as per the original Guffy Project & a few {can't read] diversion then & present. No water will ever go anywhere except as allocated BBOC purchase of surplus water -- well, maybe -- otherwise, the whole system will remain dedicated to the Ada Canyon metro & ag area.
MTHWT-SOTI-8	Peter Humm	xx	xx	x	Mountain Home Open	MTH	Written	WT	Socioeconomics	SO	Transportation and Infrastructure	TI	8	This letter contains my comments on the request for scoping issues for the Boise River Basin Feasibility Study for increasing water storage capacity within the Boise River system, particularly at Anderson Ranch Dam. 1. Anderson Ranch Dam is located in rural Elmore County, Idaho, and the impacts of any future construction will occur in Elmore County. However, most if not all of the benefits of this project will occur in the Boise/Meridian metropolitan areas in Ada and Canyon Counties. The EIS for this project must address this disparate impacts/benefits issue as part of the Socioeconomic Impacts section of the document. Impacts in Elmore County will include, but not be limited to, destruction of county roads by construction traffic, delays of people using these roads (due to road closures caused by that construction traffic) to recreation sites ranches, farms, the town of Prairie and the Fall Creek Resort during construction, and the loss of recharge potential for the groundwater reserves in Elmore County.
MTHWT-WRPO-8.1	Peter Humm	xx	xx	x	Mountain Home Open	MTH	Written	WT	Water Rights	WR	Power	PO	8.1	2. Elmore County is experiencing growth due to the high price of housing in the Boise metropolitan area, with people buying and renting in Mountain Home and commuting to work in Boise. This growth can be confirmed by a survey of the realtors in the Mountain Home area. The Anderson Ranch Dam Project, by enabling additional growth in the Boise Metropolitan Area, will add to this "bedroom community" growth in Elmore County. As a result of this growth, the water table in the Mountain Home aquifer is declining yearly, and the City of Mountain Home has recently had to double their water storage capability by building a new municipal water tank north of town. The EIS for the Anderson Ranch Dam must include an analysis of the impacts of this additional growth on the local aquifer. The EIS should also examine the potential mitigation of this impact by using some of the additional Anderson Dam water storage capability to transfer water from Anderson Ranch Reservoir to the aquifer serving the Mountain Home area, which includes Mountain Home Air Force Base. This water transfer would serve as a partial mitigation to the disparate impacts of the Anderson Ranch Project on rural Elmore County. Elmore County and the City of Mountain Home have filed for water rights on part of any high-water year runoff into the Boise Basin system, and the Anderson Ranch Project should consider including a pump and pipeline from Anderson Ranch Reservoir into the Elmore County aquifer recharge area (as mitigation for impacts on Elmore County), in coordination with Elmore County and the City of Mountain Home. This pipeline should also include electrical generation facilities as a side benefit, adding the potential for renewable energy generation to the project. Additional comments on this project will be provided by the residents of the Mountain Home area during the August 29, 2019 scoping session here in Mountain Home.
MTHWT-EJSO-9	Peter Humm	xx	xx	x	Mountain Home Open	MTH	Written	WT	Environmental Justice	EJ	Socioeconimics	SO	9	This letter contains additional comments on the Bureau of Reclamation's proposed Feasibility Study on raising Anderson Ranch Dam (in Elmore County) to increase water storage and flood control during high runoff years. My previous comments were contained in a letter sent to your office on August 16, 2019. In that letter1, I made the following statement: "Anderson Ranch Dam is located in rural Elmore County, Idaho, and the impacts of any future construction will occur in Elmore County. However, most if not all of the benefits of this project will occur in the Boise/Meridian metropolitan areas in Ada and Canyon Counties. The EIS for this project must address this disparate impacts/benefits issue as part of the Socioeconomic Impacts section of the document. "Elmore County has a significantly lower average income level and higher unemployment compared to the Treasure Valley/Boise metropolitan area. Any Environmental Impact analysis prepared for this proposed project must comply with Executive Order 12898, quoted below: "Executive Order 12898 of February 11, 1994 - Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations -By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows: Section 1-1.Implementation. 1-101. Agency Responsibilities. To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall 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 in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands." All of the adverse effects of the proposed changes to Anderson Ranch Dam will take place in Elmore County, with the benefits occurring in the higher-income Boise Metropolitan area. The EIS for this project should examine the potential mitigation of these disproportionate impacts by using some of the additional Anderson Dam water storage capability to transfer water from Anderson Ranch Reservoir to the aquifer serving the Mountain Home area, and the Anderson Ranch Project mitigation should include construction of a pump and pipeline from Anderson Ranch Reservoir into the Elmore County aquifer recharge area. This will serve as mitigation for the disproportionate level of impacts on the low-income population in Elmore County, as required by EO 12898.

Comment Code	Commenter's Nam	Organization	Title	City	Comment Location	Code	Comment Format	Code	Primary Resource Concern	Code	Secondary Resource Concern	Code	Comment Number	Comment
BOIVB-WRSO-10	Scott Campbell	xx	xx	xx	Boise public scoping	BOI	Verbal	VB	Water Rights	WR	Socioeconimics	SO	10	My name is Scott Campbell. I am an attorney here in Boise. I've lived in Boise my entire life. I was born in 1952. My family goes back to 1865 in the little community of Mayfield, Idaho, in Elmore County. My great-grandfather was the owner of a trading post on the Oregon Trail called Corder Station, C-o-r-d-e-r, Station and was involved in the early development of southern Idaho. I'm appearing here and providing my comments for Elmore County. I've practiced water law in the state since approximately 1984. And Elmore County hired me in 2014 to assist them in their efforts to solve their water supply deficiencies. And as part of that, I've pursued a number of water rights, including a water right that was just -- a water permit that was just issued by the Director in his decision of August 13 of this year approving a permit No. 63-34348 to allow Elmore County to develop a diversion system and divert water from the South Fork of the Boise River in the quantity of 200 cubic feet per second, including storage in Little Camas Reservoir, and then conveying the water down through the Mountain Home Irrigation District canal system for beneficial use for aquifer recharge and for supplemental irrigation in the Mountain Home area. Through our work, including that of Terry Scanlan, S-c-a-n-l-a-n, a well respected engineer and geologist with SPF Water Engineering, his study that was completed in February of 2017 calculated that the groundwater aquifers in the Mountain Home area are experiencing an annual deficit of in excess of 40,000-acre feet a year. And that condition has existed for many, many years, decades. In 1982 the Department of Water Resources issued an order establishing the Mountain Home Groundwater Management Area prohibiting any new water rights for development in that area. Prior to that, 1981, the Department created the Cinder Cone Butte Critical Groundwater Management Area. And so this condition has been in existence for 40 years, yet nothing's been done about it. This opportunity to acquire a portion of the Anderson Ranch Reservoir increased space through this project to raise the dam is critical for Elmore County. Elmore County supports the proposal, as long as Elmore County will be provided at least 10,000-acre feet of storage space and the accrued water from that space as part of the process. If not, Elmore County vigorously opposes the project. Anderson Ranch Reservoir and the volumes of water stored there all originate in Elmore County. Elmore County has never gotten any benefit of the reservoir or the river. It's all been the benefit of the Treasure Valley. And now finally the opportunity arises for the federal government and the Idaho Water Resource Board to correct that deficiency and help Elmore County down the road to have potentially a stable aquifer. Although this water is not going to solve the problem alone, with the new permit, with the diversion system that the County is going to build, with the stored water in Anderson, it would provide in good water years up to 30,000-acre feet for use in the area. There's still a 10,000-acre feet per year deficit based upon the calculations of Terry Scanlan's company. However, this is a huge step forward for Elmore County and it's something that is desperately needed. And there should be no question that it is in the public interest to provide this quantity of water through this project to Elmore County. And with that, I'll conclude my comments.
BOIVB-SOWR-11	Albert Hofer	Elmore Coun	Commissioner	x	Boise public scoping	BOI	Verbal	VB	Socioeconomics	SO	Water Rights	WR	11	My name is Albert Hofer, A-l-b-e-r-t H-o-f-e-r, Elmore County Commissioner, Third District. I love the project. I wish the project had a different name. It shouldn't have been the Boise project. It should have been the Elmore-Ada project. All that water that comes out of Elmore goes to Ada County. That's all I got.
BOIVB-WRTI-12	Wesley Wootan	Elmore Coun	Commissioner	xx	Boise public scoping	BOI	Verbal	VB	Water Rights	WR	Transportation and Infrastructure	TI	12	My name is Wes Wootan. And it's actually Wesley R. Wootan, Elmore County Commissioner. And the comments I'd like to add was that Elmore County should get the water just like a beneficial use. It's just like you prove up on a beneficial use, they put all the infrastructure in, the County does, and puts the water up there, they have that water to use, not pay for it as a rental from the Bureau of Reclamation, because it's water coming off of their water shed and going into this facility. And I think they need the opportunity to use that water wisely for a drought-stricken area that's short of water. There was one more comment I had. Let's see. I don't remember what it was now. Okay. That's good. Thanks.
BOIVB-SOWR-13	Christine Wootan	xx	xx	xx	Boise public scoping	BOI	Verbal	VB	Socioeconomics	SO	Water Rights	WR	13	This is Christine Wootan. And when I read the sign that was talking about the water flow and everything, I just noticed that Mountain Home was not mentioned at all. And so that's just kind of -- well, I think it would be more appropriate to mention Mountain Home also. And also that the name of the project, as has been suggested, we really like the idea of El-Ada, which shows that it's both places and not just worried about the people in Boise.
PINVB-SORE-14	Woody Winter	Pine Resort	Groundskeepe	xx	Pine public scoping m	PIN	Verbal	VB	Socioeconomics	SO	Recreation	RE	14	Woody, W-o-o-d-y, Winter, W-i-n-t-e-r. I'm the groundskeeper at Pine, Idaho, Pine Resort. Okay. My big concern is the affect it's going to have economically on the businesses in this valley when most of that camping around the lake disappears for even a month, if you understand what I'm saying. That could be a real concern. Real concern. So other than that, I have no other problem with it. It looks like a good idea in a lot of ways. But at the same time it's going to have some negative effects. Everything has its effects, good and bad.
PINVB-LURE-15	Rosanna Ford	xx	xx	xx	Pine public scoping m	PIN	Verbal	VB	Land Use	LU	Recreation	RE	15	Rosanna Ford, R-o-s-a-n-n-a, Ford, F-o-r-d. And where am I from? I have a cabin between Pine and Featherville. I would like to know where the Forest Service involvement is in this, because the impact when they start the work of the people that use the free areas, there are not enough camping areas in our forest to accommodate them. And us as private owners already feel that impact and have to defend our private property. So I want to know where their impact is. And they should be involved, majorly, as a property owner.
PINVB-WRSO-16	David Oden	xx	xx	xx	Pine public scoping m	PIN	Verbal	VB	Water Rights	WR	Socioeconomics	SO	16	David, D-a-v-i-d, O-d-e-n. And I just want to make a statement that I'd sure be in support of the project. There's only one condition that I would recommend they not do is let some outside, private individual come in and file on the water. I think it should be kept to Elmore County, the existing farmers down below, and the City of Boise, water for the population down there. That would be neat. And I think that get off their butts here get this job done would be my recommendation to you. But it's a good idea. A lot of water that we have to let down the river, that it would sure be nice if we could hold it for a while and utilize it here locally. The other thing that I recommend, and I can't see that -- and I have no idea. I suppose nobody knows what the charges are going to be for this, this water, excess water that they're able to store. And I can't see any reason for Elmore County to be paying for any of it. All this water accumulates in Elmore County, and I think the County should be able to get it at a minimal cost. You know, maybe the pumping cost or something like that. But, you know, if they're going to prorate it out over an acre-foot or gallons or however they come up to do, I don't think the County, the taxpayers here in the county should have to pay for the water. I live a mile and a half up the road here. And, you know, we -- I just -- I just don't believe that the County should have to pay the going rate for water. So -- and how they appropriate it, I -- you know, I don't know. Is this going to be set up to be a repayment cost to the federal government? Or is this just part of the federal government doing their job? So that's a question I have that I don't know. But anyway, it's a good idea. Get on it. Get her going.
PINVB-SORE-17	Sue Fish	xx	xx	xx	Pine public scoping m	PIN	Verbal	VB	Socioeconomics	SO	Recreation	RE	17	I'm Sue Fish, S-u-e, Fish, F-i-s-h. And I do live here in Pine, Idaho, for the last 23 years. And before that I was a recreation user up here. I have no problems with the dam being raised. I know Elmore County needs some water, and they're hopeful to get some of the water to recharge the aquifer. I am concerned about the economic impact with the construction time zone, especially for Fall Creek, because they have to close the road over the dam, and that's the fastest way for people to get to Fall Creek. So I'm concerned about some of the economic impacts there. We're going to lose some recreation area, at least initially, during high water seasons. The recreation use here in this valley has just exploded the last couple of years. Maybe that goes to the Boise Valley also, population is exploding. Even the effect of water for recreation on the -- for boating, the boat docks, the boat ramps will have to be extended. There's -- and I'm sure maybe that's part of the process, all the -- what do you call it? All the factors that they've been looking at. But I just -- that would be my biggest concern was this is a recreation district. It's not a district. This is a recreation area. And we depend upon that for our livelihoods here in this valley and want to see the best outcome for everybody.

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PINVB-WRTI-18	Wesley Wootan	Elmore Coun	Commissione	xx	Pine public scoping m	PIN	Verbal	VB	Water Rights	WR	Transportation and Infrastructure	TI	18	My name is Wesley R. Wootan. And the Wesley is W-e-s-l-e-y, R is the middle initial. Last name is Wootan, W-o-o-t-a-n. Okay. I'm Elmore County Commissioner. I represent the area District 2. And this water project has been something we've worked for as a County, and we're glad to see this raise happen as a County, because we think it's going to lend more availability of water that Elmore County would be able to use proficiently in our area. We have a declining water area. We need to do something. And I think this offers us the opportunity. We are -- this water comes out of Elmore County. We feel that Elmore County needs to have some form of right or way of obtaining the right to use water that may become available. Other issues that have come up today dealt with the airstrip here in Pine, that it would -- the end of it would be under water. I think that's an easy fix. I think we just raise that end and provide -- still provide the same abilities for people to fly in or to have coverage when we have a fire for the helicopters. The other ones, the new bridge that's just been put in, we need more clarification on that. And all the other areas, the Lime Creek looks like it's going to be all right. I need to find out how high that water gets on the bottom of that bridge. But I think we're going to be all right with that Lime Creek. Other issues that were covered today is I guess Elmore County feels like they want some of the ability to procure water and water rights, same as anyone else and that this is something that comes out of our county, that we have those opportunities. I think that's all I have at this time. And I thank the people for coming today.
MTHVB-WRNA-19	Albert Hofer	Elmore Coun	Commissioner	Mountain Home	Mountain Home publ	MTH	Verbal	VB	Water Rights	WR	None	NA	19	Albert Hofer, 51 Southwest Sunrise Drive, Mountain Home, Idaho, Commissioner in the Third District for Elmore County. My comments are any dam raises in Idaho are beneficial. Any water we can hold in this state is beneficial. That's it.
MTHVB-SONA-20	Joe Bier	xx	xx	xx	Mountain Home publ	MTH	Verbal	VB	Socioeconomics	SO	None	NA	20	Joe Bier, J-o-e, B-i-e-r. And I feel that the number one thing that I look at in everything that's happening in our community is number one how much money is this going to cost the taxpayer? I'm a taxpaying person, and I don't like when something that's going to be used and hardly anybody benefits but a lot of money comes out of our taxes. A lot of us like in this area are retired people. And this town is turning into a military retirement center. The military people that are retired here, they get their paycheck every month, rain or shine. But there's a lot of us older people that are retired here but still living on social security. So every time when somebody starts talking about, well, the money is going to be out of the federal budget or the money is coming out of a grant, it still comes right back to the number one person, the taxpayer, the blue collar person. And I don't -- I don't see -- I'm looking at what they have here to raise the water up, how many years has this been sitting here now? Have we grown that large enough to get this raising the lake? The questions you want to ask. Is this going to raise the lake to benefit the taxpayers that's putting out the money? Because that's the number one person that they should benefit first, the taxpayer. So well, that's all I got to say. That's all. I don't know anything else. By the way, one more thing. Has this been approved by Brad Little? That's what I'd like to ask.
EMAWT-RENA-21	Arthur Henry	xx	cabin owner	Pine	Email	EMA	Written	WT	Recreation	RE	None	NA	21	Arthur Henry - a cabin owner concerned about raising the dam! Our cabin is above the Pine docks. We oppose the project. There is no parking already and not many beaches in the water level now.
EMAWT-WRSO-22.1	Paul Arrington	Idaho Water	Executive Dire	Boise	Email	EMA	Written	WT	Water Rights	WR	Socioeconomics	SO	22.1	On behalf of the members of the Idaho Water Users Association (IWUA), I submit the following comments on the Boise River Basin Feasibility Study's environmental analysis pursuant to the National Environmental Policy Act (NEPA). IWUA supports efforts to enhance water supplies in the Boise River Basin. IWUA is a non-profit corporation representing approximately 300 canal companies, irrigation districts, ground water districts, municipal and public water suppliers, hydroelectric companies, aquaculture interests, agri-businesses, professional firms and individuals throughout Idaho. Our purpose is to promote, aid and assist in the development, control, conservation, preservation and utilization of Idaho's water resources. IWUA's membership has long supported efforts to identify and develop new water storage throughout Idaho. As to the Boise River Basin, specifically, IWUA members have adopted the following resolution: 2018-7: Boise River Storage Projects WHEREAS, In the last several years, the Boise River Valley has experienced tremendous population growth and growth in industry, leading to increased demands for water for irrigation, domestic, municipal, commercial, industrial, recreation, and in-state fish and wildlife purposes; and WHEREAS, Additional flood control is necessary to protect development in the Boise Valley, particularly in and around Eagle and Star, Idaho; and WHEREAS, Water users in the Boise River Valley, along with the state and federal agencies, have been examining and studying potential storage sites in the Boise River Valley; and WHEREAS, These studies have identified several potential new storage sites and raises of existing dams that are economically feasible for the Boise River Valley. NOW, THEREFORE, BE IT RESOLVED, That the Idaho Water Users Association supports the efforts to identify, study, and build new storage in the Boise River Valley. Idaho needs new water storage. Changing precipitation patterns and population growth have increased demand for water supplies throughout the State. As to the Boise River Valley specifically, studies have shown that as much as 188,000 acre-feet/year will be needed to meet anticipated demands in 2065. (https://idwr.idaho.gov/files/publications/20160808-OFR-Treasure-Valley-Water-Demand-2015-2065.pdf). IWUA has the following comments as the Bureau continues its analysis: 1. Benefit / Cost Allocations: It is anticipated that the costs associated with raising Anderson Ranch Dam will include financial contributions from federal, state and private stakeholders. During the 2019 Legislative Session, Idaho's legislature appropriated $20 million for large water infrastructure, like Anderson Ranch Dam. In addition, private stakeholders have expressed interest in the new storage that will be made available from this project. Pursuant to the Water Infrastructure Improvements for our Nation (WINN) Act, up to 50% of the cost of construction of Reclamation projects will be paid by the federal government, based on the federal benefits derived from that project. Presently, federal benefits of the
EMAWT-WRSO-22.2	Paul Arrington	Idaho Water	Executive Dire	Boise	Email	EMA	Written	WT	Water Rights	WR	Socioeconomics	SO	22.2	2. Space Allocation: Given the changing needs and demands for water in the region, it is not surprising that several parties have expressed interest in any water made available by raising Anderson Ranch Dam. This includes existing contractors, other local stakeholders, and the State Water Resource Board. We would urge Reclamation to provide clear guidance on a process for allocating any new storage space made available. In this allocation, a percentage of space should be made available to existing spaceholders and a percentage of space should be made available to Reclamation's funding partner in the raise studies, the Idaho Water Resource Board for the Board to use at its discretion, including by leasing water to the Water District 63 rental pool to be rented out in accordance with existing rental pool procedures. IWUA appreciates Reclamation's efforts to study and develop new storage space in the Boise River Basin. We stand ready to assist Reclamation in this process.
EMAWT-xxNA-23	Terry Hesselbring	xx	xx	xx	Email	EMA	Written	WT	xx	xx	None	NA	23	Please add Terry Hasselbring to your email list for the Boise River Basin Feasibility Study

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EMAWT-WRSO-24	Ron Strolberg	xx	xx	Boise	Email	EMA	Written	WT	Water Rights	WR	Socioeconomics	SO	24	While attending the informational meeting 8/28/2019 in Boise we were made aware that there were three separate proposals in regards to Anderson Ranch Reservoir. Our response as follows is focused on the future need for water supply in the Treasure Valley and Elmore County. I will add that if raising Anderson Ranch Dam in any way supports the Castle Rock Energy we are adamantly opposed. Has consideration been given to simply increasing the water level in each of the three reservoirs by 1 foot as opposed to the current effort to increasing the height of Anderson Ranch reservoir dam by 6 feet. If Anderson Ranch, Arrow Rock and Lucky Peak could safely handle an additional foot of water when adequate water years permit would that not accomplish the same result. If the reservoir levels could safely handle the additional foot of water there would be minimal impact on some of the other concerns such as recreational and bridge and road replacements and false promises to Treasure Valley growth. One of the purposes to accommodate the projected growth in the Treasure Valley I believe sends a false message. There appears to be no guarantee that winter snow accumulation will be sufficient to satisfy the need for water, yet growth in the Treasure Valley will assume that adequate water will be available if the Anderson Ranch Dam is elevated. believe that Mountain Home has a more urgent need for water. Diversion of water from Anderson Ranch Reservoir to Mountain Home as I understand could not only benefit the shortage that exists but could also help to recharge the aquifer. Providing water to MHAFB and Elmore County is in the best interest of National Defense other than the narrative to promote growth in the Treasure Valley. The Treasure Valley transportation infrastructure and pollution levels are nearing its peak. By promoting additional growth through allegedly providing adequate water will further aggravate or add to the situation and harm the quality of life that we now appreciate and enjoy. Added in support of my statements about refill concerns: 3. 4 HISTORICAL REFILL PROBABILITY Analysis of water right accounting records from the Idaho Department of Water Resources (IDWR), dating back to 1988 and summarized in Appendix Table 9.1, indicates that maximum accrual (excluding accrual to uncontracted space) was achieved in 55% of years for Anderson Ranch Reservoir, 91% of years for Arrow Rock Reservoir, and 55% of years for Lucky Peak Reservoir, with all three reservoirs reaching maximum accrual together in only 41% of years. In terms of system fill, IDWR accounting data also suggests that the Boise Reservoir System reached or exceeded the volume of system contracted space (949,668 acre-feet) in 50% of years during the period spanning 1988 through 2009. Simulated results suggest a similar refill probability with the system reaching 949,668 acre-feet in approximately 48% of years for the 1988 through 2009 period and in approximately 46% of years for the full simulation period (1982 through 2009).
EMAWT-WRSO-25.1	Doug Zamzow			Boise	Email	EMA	Written	WT	Water Rights	WR	Socioeconomics	SO	25.1	My comments are: 1)First, downstream users of this water need to CONSERVE water, which would probably delay the need for this dam raise by years if not decades. Idahoans are huge consumers of water, and could do just fine with considerably less water.
EMAWT-LUWR-25.2	Doug Zamzow			Boise	Email	EMA	Written	WT	Land Use	LU	Water rights	WR	25.2	2)Agriculture is being replaced with homes/apartments/commercial buildings. As a result, the Treasure Valley should be using less water, not more. Why the need for raising the dam?
EMAWT-WQFI-25.3	Doug Zamzow			Boise	Email	EMA	Written	WT	Water Quality	WQ	Biological Resources: Fish	FI	25.3	3)The dam raising presents a real possibility of contamination/sedimentation in the South Fork of the Boise River below the dam, and in the reservoir. This would be BAD for fish, wildlife, water quality, etc. What measures will be used to prevent this from happening?
EMAWT-TISA-25.4	Doug Zamzow			Boise	Email	EMA	Written	WT	Transportation and Infrastructure	TI	Safety	SA	25.4	4)Will the Cow Creek dirt road be improved and made more safe as there will be considerably more traffic on this road while the dam raising work is done?
EMAWT-WQHT-25.5	Doug Zamzow			Boise	Email	EMA	Written	WT	Water Quality	WQ	Hazardous and Toxic Materials	HT	25.5	5)What measures will be put in place to prevent oils, diesel, gas, petroleum products, etc. from getting into the river and reservoir?
EMAWT-SOWR-26.1	Jon Marvel			Hailey	Email	EMA	Written	WT	Socioeconomics	SO	Water Rights	WR	26.1	The Bureau must provide a full analysis of all economic impacts including the costs of each alternative developed for the EIS and where funds would come from to pay for each proposed action. These analyses must include the costs to different government or private parties to carry out and complete any of the alternatives. As part of each economic analysis the Bureau needs to prepare a cost-benefit analysis that specifically includes monetary values for negative impacts to recreation, wildlife habitat, fisheries and ecological impacts on native plant communities. As part of its economic analyses the Bureau must make clear what user groups will be paying for the use of any additional stored water. For example, will any agriculture use be charged a subsidized rate per acre-foot of water use?
EMAWT-WRLU-26.2	Jon Marvel			Hailey	Email	EMA	Written	WT	Water Rights	WR	Land Use	LU	26.2	The Bureau needs to include in its EIS at least one alternative that assigns any increased water stored in the reservoir to be specifically authorized only for domestic, industrial, commercial, ecological, fisheries, flood control and recreation with no water use for agriculture. The reason for the importance of this proposed alternative is that in the past agriculture has been the dominant user of all reservoir water controlled by the Bureau in Idaho and agriculture is also the dominant cause of water pollution (primarily from non-point sources) in the Boise river watershed.
EMAWT-FIWI-26.3	Jon Marvel			Hailey	Email	EMA	Written	WT	Biological Resources: Fish	FI	Biological Resources: Wildlife	WI	26.3	The Bureau must prepare a biological evaluation or assessment (BE or BA) analyzing the impacts to sensitive and/or protected wildlife species. This is especially important for species listed as threatened or endangered under the Endangered Species Act (ESA) like Bull Trout which are present in Anderson Ranch reservoir and tributaries of the South Fork of the Boise River that are the headwater streams of Anderson Ranch Reservoir like Lime Creek. If the Bureau determines that listed species will be affected by any proposed action, the Bureau must consult with the requisite federal agency like the US Fish and Wildlife Service for the completion of a Biological Opinion (BO).
EMAWT-WRNA-26.4	Jon Marvel			Hailey	Email	EMA	Written	WT	Water Rights	WR	None	NA	26.4	For each action alternative the Bureau must make clear what entities will control the use of additional stored water in Anderson Ranch reservoir. For example, in the past, Bureau projects routinely have assigned the majority of new water rights on increased or new storage to agriculture without regard for other uses such as ecological riverine health, fisheries or domestic, commercial and industrial uses as well as flood control, recreational uses and power generation. The Bureau must clearly identify the potential users of future stored water and the process by which the Idaho Department of Water Resources will assign the potential water rights for each use of potential additional stored water, and how the Bureau influences or chooses future assignment of all new water rights.
EMAWT-CVSO-27	Dave Bacca	xx	xx	xx	Email	EMA	Written	WT	Climate Variability	CV	Socioeconomics	SO	27	Climate change and water shortages lead my thinking ahead. We should insure the survival of Elmore and Ada counties. Build it.

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EMAWT-TEFI-28	Lynne Ann Hood	EPA	Environmenta	Boise	Email	EMA	Written	WT	Threatened and Endangered Species	TE	Biological Resources: Fish	FI	28	Hello, please find attached EPA's scoping comments on the Boise River Basin Feasibility Study. Please let me know if you have any questions or would like to discuss our comments. Dear Ms. Sloan: The U.S. Environmental Protection Agency has reviewed the Federal Register Notice of Intent to prepare a Draft Environmental Impact Statement for the proposed Boise River Basin Feasibility Study (EPA Project Number 19-0049-BOR). Our review was conducted in accordance with EPA responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act. The Water Infrastructure Improvements for the National Act of2016 authorizes the Bureau of Reclamation to enter into agreements with requesting states to study, construct or expand federally owned storage projects. Under this legislation, Reclamation and the State of Idaho Water Resource Board entered into an agreement to study the feasibility of raising Anderson Ranch dam, a federally owned water storage facility. The proposal consists of raising Anderson Ranch Dam six feet (4, 196 feet to 1,202 feet), which would allow for approximately 29,000 additional acre-feet of water. The increased dam would result in capturing additional water when available during wet years to supplement water supplies during dry years. The Boise River is regulated by three federal storage projects on the upper river, which are jointly operated by the U.S. Army Corps of Engineers (Lucky Peak Dam) and Reclamation (Arrowrock and Anderson Ranch Dams). The Corps initiated a similar proposal in 2014 to the current Reclamation proposal, the Boise River General Investigation Feasibility Study. The Corps intended to analyze storage needs and flood risk in the Boise River Basin, including a proposal to modify Arrowrock Dam. The EPA provided scoping comments on that proposal and an EIS has not been released to date. Reclamation's NOI does not discuss this history, nor provide an understanding of the connection between the two similar studies, both in partnership with the IWRB. We recommend that the EIS provide background about other feasibility studies that are occuring in the Boise River Basin watershed related to water storage and discuss the relationship of this proposal to other efforts. In addition, the 2014 proposal discussed opportunities to provide ecosystem restoration benefits and minimize impacts to Endangered Species Act listed species (e.g., bull trout). The EPA supports evaluating flood risk, planning for future water needs and identifying opportunities to restore the natural hydrology and promote ecosystem functions. While we understand that the IWRB, the non-federal sponsor, is not authorized to expend funds for studying ecosystem restoration, we believe that analyzing and designing restoration of fish habitat is consistent with the 2006 U.S. Fish and Wildlife's Biological Opinion for the Bureau of Reclamation's Bull Trout Monitoring and Implementation Plan. We encourage Reclamation to utilize the watershed approach in a basin-wide assessment to identify opportunities for restoration of fish
EMAWT-FLWE-28.1	Lynne Ann Hood	EPA	Environmenta	Boise	Email	EMA	Written	WT	Floodplains	FL	Wetlands	WE	28.1	U.S. Environmental Protection Agency Scoping Comments for the Bureau of Reclamation Boise River Basin Feasibility Study Purpose and Scope of the Project We recommend that the NEPA analysis include a clear and concise statement of the underlying purpose and need for the proposed action, consistent with the implementing regulations for NEPA (see 40 CFR 1502.13). The purpose should include the identification of current and predicted water storage needs, flood risk management, address the needs of threatened and endangered species, and improve overall ecosystem health. Alternatives The EPA encourages Reclamation to consider alternatives to proposed structural measures or other measures that prevent natural river processes, particularly in locations that are undeveloped. We recommend that the EIS identify current water conservation efforts and future opportunities that could mitigate the increased need for storage. In addition, we recommend actions that restore natural processes and specifically recommend consideration of an EIS alternative which maximizes opportunities to restore natural hydrologic, geomorphic, biological processes. Natural process restoration and protection objectives with potential for both flood management and ecosystem benefits may include: improved floodplain connectivity; surface water and groundwater interactions; and riparian vegetation and wetland development. We suggest that Reclamation work with local groups to identify design alternatives that can address water storage, flood risk and improve watershed conditions. Additionally, the Council on Environmental Quality recommends consideration of all reasonable alternatives, even if some of them could be outside the capability of the applicant or the jurisdiction of the agency. To the greatest extent possible, the EIS should quantify potential impacts of each alternative and present alternatives' impacts in a comparative form. It would also be useful to list each alternative action's impacts and corresponding mitigation measures.
EMAWT-WQWE-28.2	Lynne Ann Hood	EPA	Environmenta	Boise	Email	EMA	Written	WT	Water Quality	WQ	Wetlands	WE	28.2	Water Quality Water quality degradation is one of EPA's primary concerns. Section 303(d) of the Clean Water Act requires the State of Idaho to identify water bodies that do not meet water quality standards and to develop water quality restoration plans to meet the state water quality criteria and associated beneficial uses. The lower Boise River, from Lucky Peak Dam to the Snake River, is listed as impaired under Section 303(d) with the following pollutants of concern: sediment, dissolved oxygen, oil and grease, nutrients, bacteria and temperature. A Boise River subbasin Total Maximum Daily Load and Implementation Plan was developed in September 2015 with load allocations for these pollutants of concern from point source and non-point sources. We recommend that the EIS discuss surface water quality in the watershed and identify how activities implemented as part of this project would comply with the TMDL targets. The Lower Boise River is also listed as impaired on Idaho Department of Environmental Quality's 2016 Integrated Report for flow alteration and habitat modification. Although these are reserved as non-traditional pollutants for which a TMDL is not required, we recommend that the EIS disclose water quality conditions in the basin and identify opportunities to improve flow and habitat. Water resources and impacts Section 303(d) of the Clean Water Act requires the States and Tribes with the EPA-approved water quality standards to identify water bodies that do not meet water quality standards and to develop water quality restoration plans to meet established water quality criteria and associated beneficial uses. Because of that, we recommend the EIS include the following information: •Impacted waters, the nature of the impacts, and specific pollutants likely to affect those waters; •Water bodies potentially affected by the project that are on the most recent EPA-approved 303(d) list; •Existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures implemented to avoid further degradation of impaired waters; •How the project would meet the antidegradation provisions of the CW A. The provisions prohibit degrading water quality within water bodies that are currently meeting water quality standards; •Cumulative effects from this and other projects on the hydrologic conditions of the analysis area and vicinity, including reasonably foreseeable direct, indirect and cumulative impacts to groundwater and surface water resources. For groundwater, identify potentially affected groundwater basins and any potential for subsidence, and analyze impacts to springs or other open water bodies and biological resources; •Whether construction of the project would disturb a land area of one or more acres or not. If yes, the project would require a construction storm water discharge permit or the National Pollutant Discharge Elimination System (NPDES) permit for discharges to waters of the United States. The EIS would need to document the project's consistency with applicable storm water permitting requirements and

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EMAWT-TECV-28.3	Lynne Ann Hood	EPA	Environmenta	Boise	Email	EMA	Written	WT	Threatened and Endangered Species	TE	Climate Variability	CV	28.3	Consideration of Species and Habitat We recommend that the EIS disclose the impacts of the various alternatives to endangered, threatened or candidate species listed under the Endangered Species Act. The EIS should also discuss the terms and conditions of the Biological Opinion for bull trout. For example, Term and Condition I .a. states that drawdowns below 3, I 00 feet during fall migratory period (September 15 to October 31) should be reduced. Activities, such as operational flexibility of the Boise River system dams, are methods for maintaining the required flow. We recommend that the feasibility study/EIS examine and disclose practices that have been successful at improving flows as well as assess and disclose additional activities that promote fish habitat. In addition to discussing listed species, the EIS should also describe the overall flora and fauna in the area and impacts of the project on biota. Given the watershed approach of this process, we recommend that the EIS provide details on the ecological interactions between species and habitats and the effects of the various alternatives on populations, habitats and ecological interactions. Climate Adaptation The EPA recommends that the EIS include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed program and the program area. This could help inform the development of measures to improve the resilience of the program. If projected changes could notably exacerbate the environmental impacts of the program, the EPA recommends these impacts also be considered as part of the NEPA analysis.
EMAWT-EJSO-28.4	Lynne Ann Hood	EPA	Environmenta	Boise	Email	EMA	Written	WT	Environmental Justice	EJ	Socioeconomics	SO	28.4	Consultation with Tribes The proposed project may affect historical or traditional cultural places of importance to tribes in the project area. We recommend that the EIS identify historic resources and ensure that tribal treaty rights and privileges are addressed appropriately. If the proposed project will have impacts on Tribes, the development of the EIS should be conducted in consultation with all affected tribal governments, consistent with Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments). EO 13175 states that the U.S. government will continue to work with Indian tribes on a government-to-government basis to address issues concerning Indian tribal self-government, trust resources, and Indian tribal treaty and other rights. Documentation of these consultations should be included in the EIS. Environmental Justice and Public Participation If there would be environmental justice populations around or near the VTR facilities, then, the EIS would need to address the potential for disproportionate adverse impacts to the populations. See Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.4 To locate Environmental Justice populations, you may use the EPA's Environmental Justice Screening and Mapping Tool or EJSCREEN.5 For more information on effective public participation in the NEPA process, please also consult the following resources: Promising Practices for EJ Methodologies in NEPA Reviews; •The Citizen's Guide to the National Environmental Policy Act: and •Community Guide to Environmental Justice and NEPA Methods. Cumulative and Indirect Impacts We recommend that the cumulative effects analysis consider appropriate mitigation strategies to minimize adverse and enhance beneficial cumulative effects. Monitoring and evaluation of the mitigation strategies' effectiveness would also be an important component of the proposed action. The EPA has issued guidance on how we are to provide comments on the assessment of cumulative impacts, Consideration of Cumulative Impacts in EPA Review of NEPA Documents, which can be found on EPA web site at: www.epa.gov/compliance/resources/nepa.html. The guidance states that in order to assess the adequacy of the cumulative impacts assessment, five key areas should be considered. The EPA tries to assess whether the cumulative effects' analysis: •Identifies resources if any, that are being cumulatively impacted; •Detennines the appropriate geographic (within natural ecological boundaries) area and the time period over which the effects have occurred and will occur;
EMAWT-WQWR-29.1	Marie Callaway K	Idaho Conse	Conservation	Boise	Email	EMA	Written	WT	Water Quality	WQ	Water rights	WR	29.1	Dear Bureau of Reclamation: The Idaho Conservation League (“ICL”) submits these comments in response to the BOR’s Notice of Intent to Prepare an Environmental Impact Statement for the Boise River Basin Feasibility Study, Elmore County, Idaho. Since 1973, ICL has been Idaho’s voice for clean water, clean air and public lands—values that are the foundation of Idaho’s extraordinary quality of life. ICL works to protect these values through public education, outreach, advocacy and policy development. As Idaho’s largest statewide non-profit conservation organization, we represent members who want to ensure that public resource developments are as respectful and protective of Idaho’s natural resources as possible. ICL actively engages in opportunities related to improving Boise River health including, though not limited to: reviewing and commenting on Clean Water Act permits; participating in the creation of water quality rules; partnering with local governments, NGOs and other stakeholders on river floats, clean-up efforts, and riparian restoration projects; and reviewing, and engaging when appropriate, in water right applications and other permitting and project opportunities. ICL staff and members care deeply about the health of the Boise River. Staff has closely followed the BOR’s Boise River Feasibility project, including meeting with BOR staff, Idaho Water Resource Board (“IWRB”) members and their staff, attending relevant Open Houses, and meeting with various stakeholders in the impacted area. ICL asks the BOR to consider the following factors as it moves forward with its analysis and compiles its Environmental Impact Statement (“EIS”):

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EMAWT-WRLU-29.2	Marie Callaway K	Idaho Conse	Conservation	Boise	Email	EMA	Written	WT	Water Rights	WR	Land Use	LU	29.2	Need for Anticipated Future Demand Updates for Both DCMI and Irrigation, and Acknowledgment of Their Relationship to Each Other The BOR's Boise River Basin Feasibility Study, Frequently Asked Questions, August 2019, cites the 2016 SPF Water Engineering study's finding that, by 2065, the Boise River Basin will need between 109,000 and 188,000 additional acre-feet for DCMI uses. ICL directs the BOR's attention to a 2010 report commissioned by the IWRB and cited by SPF at page 7 in its 2016 study,1 which indicates both anticipated increased DCMI demand and anticipated lesser irrigation demand. In the 2010 study, when the increasing need for DCMI is coupled with the decreasing need for irrigation, the need for additional DCMI dropped to ~83,000 acre-feet. No matter the appropriate number, the discrepancy between the 2010 and 2016 studies demonstrates that: 1) there are differences in professional opinion as to the accurate anticipated future need, and 2) it is misleading and inaccurate to evaluate anticipated future DCMI demand without also calculating and incorporating anticipated lessened irrigation demand at that time. As this study continues, ICL urges the BOR to evaluate ALL anticipated future needs and to recognize the declining need for irrigation water in the Treasure Valley as its population becomes increasingly urban. In suggesting this, ICL underscores and seeks to refute a commonly held belief that Treasure Valley water needs will only increase with a growing population. While Idaho Code codifies that Treasure Valley water will be delivered at the same rate it has always been delivered no matter the beneficial use to which it is put, the gravity of expense and impact proposed by a dam raise warrants a hard look at this increasingly outdated practice. Instead of accepting that current water delivery needs remain the same no matter the actual beneficial use to which water is being put, the BOR should analyze storage opportunities created by a more robust Boise Basin water market; canal and diversion infrastructure efficiencies, with the caveat that there is a fine line between establishing efficiency but not having a negative impact on helpful amounts of incidental recharge; and possibly other efficiency opportunities to "store" water via more efficient use of existing water rights.
EMAWT-TIWR-29.3	Marie Callaway K	Idaho Conse	Conservation	Boise	Email	EMA	Written	WT	Transportation and Infrastructure	TI	Water rights	WR	29.3	Alternatives - ICL understands that there are currently three proposed alternatives: a 6' raise of Anderson Ranch Dam, increased irrigation efficiencies through automation in Water District 63, and no action. ICL advocates that "irrigation efficiencies" should be broadened to all water use efficiencies. Additionally, ICL urges the BOR to include at least two additional alternatives: one alternative that jointly evaluates a combined raise coupled with increased water use efficiencies, as opposed to only evaluating the raise and efficiencies separately, and 2) an alternative that evaluates managed aquifer recharge or other downstream off-channel storage as a storage option.
EMAWT-FITE-29.4	Marie Callaway K	Idaho Conse	Conservation	Boise	Email	EMA	Written	WT	Biological Resources: Fish	FI	Threatened and endangered species	TE	29.4	Ecological Concerns & Cumulative Impacts: NEPA requires the BOR to consider the cumulative impacts of this project with other known situations. As the 6' Anderson Ranch Dam raise is studied, ICL urges the BOR to consider the following in the spirit of both environmental concerns and cumulative impacts: Fishery and River Health Impacts and Opportunities Anderson Ranch Dam is on the South Fork of the Boise River ("SFBR"). Both the reservoir and the SFBR below the dam are habitat for bull trout, a species designated as threatened by the Endangered Species Act. The SFBR hosts a native trout fishery that, in addition to its inherent value, provides a popular recreational fishery and injects millions of dollars into the regional economy. Impacts to and protection of all of these fish must be a study priority. The Boise River system is heavily manipulated and managed, and agreements between the BOR, Water District 63, Idaho Dep't of Fish & Game ("IDFG"), and other water users and stakeholders allow for minimum amounts of flow in all reaches of the river throughout the year for fish and other ecological and recreational reasons. For bull trout, at least 600 cfs flows through the SFBR in the irrigation season and at least 300 cfs flows through the SFBR in the non-irrigation season. In addition to these base flows, an IDFG study conducted last year2 estimated that periodic high flows of at least 2400 cfs for 8+ days are the bare minimum necessary to maintain the ecological health of the SFBR. Further down river, at least 240 cfs is released between Lucky Peak and the Glenwood Gage in the nonirrigation season to maintain the most basic river health. Also relevant, approximately 50,000 acre-feet of Boise River water is used for salmon flow augmentation in the Columbia-Snake River System, of which the Boise River Basin is part. This underscores the Boise's relationship to the northwest US's critically endangered salmon and steelhead populations. BOR's analysis should investigate how holding back the additional 29,000 acre-feet will impact these agreed upon flows and practices? And what mitigation could adequately address any negative impacts not just to these amounts of available water but also to river and fishery health? Could other water sources be found to meet any of these obligations so that the need for additional Boise Basin storage would be obviated?
EMAWT-WRNA-29.5	Marie Callaway K	Idaho Conse	Conservation	Boise	Email	EMA	Written	WT	Water Rights	WR	None	NA	29.5	Water Rights In this instance, at least three (and possibly more) large water rights have priority to the water right the BOR will need to seek for this proposed dam raise. Elmore County's water right no. 63-34348, and Cat Creek Energy LLC's nos. 63-34403 and 63-34652. If granted, ICL understands that any and all three of these rights will have priority over the 29,000 sought here. If ICL's understanding is incorrect, and the BOR has already applied for the water right necessary to store 29,000 acre-feet, the questions remain: how will these water rights interact with each other? And how can they be managed so as to protect the fishery and other relevant ecological needs?
EMAWT-WQNA-29.6	Marie Callaway K	Idaho Conse	Conservation	Boise	Email	EMA	Written	WT	Water Quality	WQ	None	NA	29.6	Water Quality All of the Boise River Basin municipalities, and numerous commercial and industrial dischargers, have Clean Water Act discharge permits via the Idaho Pollution Discharge Elimination System ("IPDES"). The pollution discharge limits established by these permits rely on certain flows in the river. How will the 29,000 acre-feet held upstream impact and/or interact with the existing myriad IPDES permits on the same system? ICL has also reviewed and joins in Trout Unlimited's comments in this matter. ICL thanks the BOR for its thoughtful consideration of our ideas and concerns, and we stand ready to actively participate in any work groups or other opportunities that may be created in furtherance of the BOR's Boise River Feasibility Study. Please keep ICL on the notice list for all communications related to this project.

Comment Code	Commenter's Nam	Organization	Title	City	Comment Location	Code	Comment Format	Code	Primary Resource Concern	Code	Secondary Resource Concern	Code	Comment Number	Comment
EMAWT-WRLU-30.1	Bryan Searle	Idaho Farm B	President	Boise	Email	EMA	Written	WT	Water Rights	WR	Land Use	LU	30.1	Comment submitted via the website by Braden Jensen, Deputy Director of Governmental Affairs, Idaho Farm Bureau Federation; bjensen@idahofb.org. RE: Bureau of Reclamation – Anderson Ranch Increased Water Storage Project Dear Mr. Jim Taylor: On behalf of the more than 80,000 member-families of the Idaho Farm Bureau Federation, I write to provide comments in support of the Bureau of Reclamation ("BOR or Agency") moving forward with the study and analysis of increased water storage behind Anderson Ranch Dam. This topic is important to our members and we are grateful for the opportunity to provide our insight. The Idaho Farm Bureau Federation ("IFBF" or "Farm Bureau") has been recognized as the state's leading advocate for private property rights and sustained prosperity, for more than 75 years. Our members represent water-users from across the state – farmers, ranchers, families, and property owners. Responsible stewardship of our water resources is appreciated, honored, and practiced by our members. Additional water storage facilities are a top priority for Farm Bureau. As the fastest growing state in the nation, the demand on our water resources will only increase in the future. IFBF policy supports the construction, improvement and increased size of storage facilities that provide multiple beneficial uses of Idaho's water. Farm Bureau asks the BOR to fully consider the existing and future demand for water in Water District 63, and how the approximate 29,000 additional acre-feet of water storage will benefit water-user needs. IFBF was a strong supporter of HJM4 that was passed in the 2019 Idaho Legislative Session. This joint memorial expressed the Idaho Legislature's support to designate the raising of Anderson Ranch Dam as one of the State's priorities. We believe that this memorial sends an important message to BOR that the state legislature, and the constituents that they represent, are supportive of these water infrastructure projects. We encourage the Agency to move forward with this project as quickly and responsibly as possible.
EMA-SOLU-30.2	Bryan Searle	Idaho Farm B	President	Boise	Email	EMA	Written		Socioeconomics	SO	Land Use	LU	30.2	Farm Bureau recognizes the potential impact that such a project may have on private property. IFBF policy supports the protection of property rights and the just compensation for any takings of any private property. Farm Bureau asks the BOR to fully consider any loss of, or impact to, the full enjoyment of private property with this proposed project. On behalf of the entire membership of the Idaho Farm Bureau, I thank you for your consideration of these comments. We look forward to being involved in this process as the Agency's analysis continues. Please contact Braden Jensen at 208-342-2688, if you have any questions regarding this topic. Sincerely, Bryan Searle, President Idaho Farm Bureau Federation
EMAWT-TEFI-31	Scott Pugrud	Idaho Gover	Administrator	Boise	Email	EMA	Written	WT	Threatened and Endangered Species	TE	Biological Resources: Fish	FI	31	Comment submitted via the website by Pete Katsilometes, Project Manager, Governor's Office of Species Conservation. Pete.Katsilometes@osc.idaho.gove. Scoping Comments for the Notice of Intent to Prepare an Environmental Impact Statement for the Boise River Basin Feasibility Study, Elmore County, Idaho. Dear Project Manager Sloan, The Idaho Governor's Office of Species Conservation (OSC) appreciates the opportunity to provide comments on the Bureau of Reclamation's Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Boise River Basin Feasibility Study; proposing to raise the Anderson Ranch Dam reservoir pool six (6) feet, Elmore County, Idaho. OSC provides the following comments for the proposed project: Comments Related to Bull Trout: Anderson Ranch Reservoir hosts a fluvial population of bull trout that exhibit adfluvial characteristics and seasonally migrate between the reservoir and the South Fork Boise River above the reservoir. This population is listed under the Endangered Species Act as threatened and is contained in the Upper Snake Recovery Unit in the Upper Snake Recovery Unit Implementation Plan for Bull Trout (RUIP). The Anderson Ranch Core Area contains 11 local populations of bull trout. In 2014, the Idaho Department of Fish and Game determined that the Anderson Ranch Core area had an increasing population trend (page E-98 Upper Snake RUIP). No threats to this Core Area were identified in the Upper Snake RUIP. OSC requests that the analysis of increasing the height of the earthen dam six feet consider effects to listed bull trout in the Anderson Ranch Core Area. Specifically, potential changes to the habitat space available for overwintering, connectivity during the spawning migration, changes to water quality including temperature, changes to their exposure to anglers, and predators should be considered. Additionally, an analysis of the effects of this proposed action should consider the Terms and Conditions from Section D of the 2005 US Fish and Wildlife Service Biological Opinion to minimize the effect of the operation of Anderson Ranch Dam on listed bull trout. Effects identified in the Biological Opinion were related to ramping rates and management of flows (USFWS 2005, pg. 259). Comments related to Sage-Grouse: Based on Idaho's sage-grouse strategy and Executive Order 2015-04 (Idaho Plan), sections of the land surrounding Anderson Ranch Reservoir is designated as a General Habitat Management Area and the adjacent southern plateau above the reservoir is designated as an Important Habitat Management Area. Although the reservoir contains Habitat Management Areas the proposed project is not considered to be within key habitat based on the Key Habitat Planning map used by the Bureau of Land Management and the U.S. Forest Service for planning purposes (Appendix F, BLM 2019 ARMPA). The area contained between the proposed elevation of 4,196 and 4,202 is not assigned a habitat class. Even though habitat upslope of the reservoir is classified as key habitat and contains several sage-grouse telemetry and GPS locations, none of the point locations are within the area of inundation. Much of the area directly affected by raising the
EMAWT-xxNA-32		Cat Creek Energy		Boise	Email	EMA	Written	WT	xx	xx	None	NA	32	Please place Cat Creek Energy, LLC on any information and communications lists for the BOR-SRA-Boise Feasibility Studies.

Comment Code	Commenter's Nam	Organization	Title	City	Comment Location	Code	Comment Format	Code	Primary Resource Concern	Code	Secondary Resource Concern	Code	Comment Number	Comment
EMAWT-SOTI-33	Clay Davison	Prairie Idaho Ranchers		Various	Email	EMA	Written	WT	Socioeconomics	SO	Transportation and Infrastructure	TI	33	Submitted to website by Clay Davison; ClayDavison2260@hotmail.com;FROM: · L.G. Davison & Sons Inc, 2019 Prairie Rd., Prairie, ID 83647 (randy20219@msn.com) · Ireland LLC, 1015 Prairie Rd., Prairie, ID 83647 (lojo21@hotmail.com) · Calvin Ireland, 147 Ake Dr., Mtn. Home, ID 83647 · Steve Acarregui, 3000 N.E. Scenic Valley, Mtn. Home, ID 83647 (eacarregui@msn.com) · Davison Ranch Llc, 160 Wylie, Prairie, ID 83647 (miked@rtci.net): SUBJECT: EIS Scoping Comments The afore mentioned ranchers from Prairie, Idaho understand how water resources are intricately tied to the socio-economic vitality of the intermountain west; therefore, we support the proposed project to increase water storage capacity at Anderson Ranch Dam. This particular project is forward thinking and will provide a broad spectrum of future benefits, yet this group of ranchers will suffer substantial detrimental effects during the construction phase of the project due to the impassability of the Anderson Dam road from Prairie to Highway 20. All of our ranching operations are extremely dependent upon this roadway, as it is the only feasible roadway for heavy use and wide load semi-truck travel. Our use of the Anderson Dam roadway is extensive and critical to our businesses and livelihoods. Between the five ranches our collective annual use of this vital roadway is as follows: •Approximately 4000 head of cattle are hauled in and out of this roadway during the spring and fall months. •Approximately 4000 acres of hay are harvested, producing an average of 1.5 – 2 tons per acre. 90% of the annual hay harvest is transport to our valley calving operations via the Anderson Dam Road during the summer months. This equates to over 300 truckloads annually. •Annually, numerous pieces of farming equipment are transported between Prairie and our valley agricultural operations. •Ireland Ranch and Charlie Lyons have a cattle grazing permit with the US Forrest Service. This permit has grazing allotments on both sides of Anderson Dam. These cattle must be trailed over the dam 6 to 8 times a year between July and October, depending on that year's rotation. If the Anderson Dam roadway is interrupted for the predicted 39 months, we no longer have viable cattle operations and we would definitely experience catastrophic economic impacts unless there are some alternatives made available. Some potential options to consider: 1. Utilize some of the project funds to improve the Cow Creek road to accommodate heavy use and wide load semi-truck traffic. This
EMAWT-FIWI-34	Craig White	Idaho Depart	Magic Valley R	Jerome	Email	EMA	Written	WT	Biological Resources: Fish	FI	Biological Resources; Wildlife	WI	34	Dear Mr. Taylor: The Idaho Department of Fish and Game (IDFG) received the Bureau of Reclamation (BOR) request for input regarding the feasibility study for increased water storage opportunities behind Anderson Ranch Dam located on the South Fork Boise River (SFBR). BOR wishes to evaluate raising the earthen embankment dam crest by 6 feet, which would increase storage capacity in Anderson Ranch Reservoir (ARR) by approximately 29,000 acre-feet. This new space would allow BOR to capture additional water during wet years. The purpose of these comments is to assist BOR in scoping for its environmental impact statement and complying with the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c), which applies to the project. The Act requires BOR to "first coordinate with state fish and wildlife management agencies to assess potential impacts to fish and wildlife resources and to avoid, minimize, and mitigate for those impacts" related to a water resource development. IDFG provides the following technical information in this regard. It is not the purpose of the Idaho Department of Fish and Game to support or oppose this proposal. IDFG staff attended public meetings regarding this project, including a scoping open house in Boise on August 28, 2019. BOR staff specifically solicited IDFG feedback on how this project could be structured to benefit fish and wildlife resources. IDFG management goals and objectives The Idaho Fish and Game 2015 Strategic Plan, developed through public input and approved by the Idaho Fish and Game Commission, describes IDFG's primary goals for sustaining Idaho's wildlife and the habitats on which they depend and to meet the demand for fish and wildlife recreation. Specific management objectives are outlined in IDFG management plans; which are reviewed and approved by the Idaho Fish and Game Commission. Relevant and important management plans include the Fisheries Management Plan 2019-2024, Elk Management Plan 2014-2024, and the Mule Deer Management Plan 2020-2025, and the State Wildlife Action Plan (2016). These documents are available on the Department's website (http://fishandgame.idaho.gov/). As more specific proposed actions are identified, IDFG staff will be available to highlight specific management objectives outlined in these plans that should serve as the metric against which assessments are made. Fish and Wildlife resource considerations The SFBR and ARR support popular and economically important wildlife and fishery resources. IDFG suggests the following general
EMAWT-RESO-35	Chuck and Annie C	xx	xx	Pine	Email (website)	EMA	Written	WT	Recreation	RE	Socioeconomics	SO	35	Thank you for sponsoring the very informative Open House at the South Fork of the Boise River Senior Center regarding raising Anderson Ranch Reservoir Dam six feet. My wife and I have lived year round in Pine for fifteen years and have been recreating here since 1980. In general we support raising the level of Anderson Ranch Reservoir.. We have a few concerns though. At the new full pool elevation, the reservoir will consume boat ramps, docks, campsites, etc. These assets have been paid for with tax payer dollars and are publicly owned. At the very least, these assets, docks and ramps, need to be lengthened to the new full pool reservoir elevation. Campsites will need to be relocated and/or rebuilt. Anderson Ranch Reservoir is experiencing unprecedented growth and with all of the agencies involved in this project, what a perfect time to put your heads together (instead of passing the buck) to allocate a few dollars to expand the recreational demands around the reservoir. Recreation is promoted as one of the substantial benefits provided by Reclamation. The United States Department of Reclamation's literature states "Reclamation is the largest wholesale water supplier in the United States, and the nation's second largest producer of hydroelectric power. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits." **Media Contact: Peter Soeth, 303-445-3615, psoeth@usbr.gov For Release: September 05, 2019 The United States Forest Service and other involved government agencies could help with equipment, manpower, and funding. Users of this NEW water resource should contribute with an annual recreational usage fee when excess water is used. "Potential space holders include existing Reclamation contractors and Idaho Water Resource Board, which could in turn contract water to existing Water District 63 water users and/or may offer water through the Idaho water supply bank's Water District 63 rental pool." **Quoted from-Open House Announcement and Request for Public Comments Regarding the Boise River Basin Storage Feasibility Study Environmental Impact Statement, Boise Project, Elmore County, Idaho. Idaho Power is a prime example of a publicly governed entity mitigating impacts to the general public caused by their hydro-electric projects by building and maintaining recreational facilities. Thank you for the opportunity to express our concerns.

Comment Code	Commenter's Nar	Organizatio	Title	City	Comment Location	Code	Comment Format	Code	Primary Resource Concern	Code	Secondary Resource Concern	Code	Comment Number	Comment
EMAWT-SOTI-36	Joni Harris	xx	xx	Pine	Email (website)	EMA	Written	WT	Socioeconomics	SO	Transportation and Infrastructure	TI	36	Sorry - not good for the community of Pine! Putting water to their back door and across the Pine airport. My vote is no - please don't. Manage water better so you don't flood Boise greenbelt in the spring. I think that is your concern - not the community of Pine and the residence around the reservoir.
EMAWT-RETI-37.1	Terry and Mary Ha	XX		Pine	Email (website)	EMA	Written	WT	Recreation	RE	Transportation and infrastructure	TI	37.1	Thank you for the opportunity to express our comments and questions. We understand the need for additional water storage as the demand grows in the future and agree that some sort of action is required to allow for the future water needs. However we would hope that there will be a study to make sure that the current amount of water in the system is being utilized in the most efficient manner with little or no waste. As a vacation home owner since 1983 and full time resident since 2016 in Pine, Idaho we have enjoyed the use of Anderson Ranch's recreational facilities/amenities and consider them a big part of the reason to live in Pine. We have the following concerns with raising Anderson Ranch reservoir 6 feet: 1.) What will be the effect on the existing recreational facilities; Boat ramps Parking for vehicles with boat trailers Boat docks Improved overnight camp and day use sites Existing beach areas 2.) What provisions are there to mitigate the loss of the above mentioned facilities and amenities? 3.) With the rise of slack water at the Pine end of the reservoir there will surely be a major increase in the breeding area for mosquitoes potentially carrying dangerous diseases. How will this be addressed and mitigated? 4.) What will be the effect on the bridges (Lime creek and Pine), will they need to be replaced? Please add us to the mailing list and/or email.
EMAWT-SANA-37.2	Terry and Mary Ha	XX		Pine	Email (website)	EMA	Written	WT	Safety	SA	None	NA	37.2	3.) With the rise of slack water at the Pine end of the reservoir there will surely be a major increase in the breeding area for mosquitoes potentially carrying dangerous diseases. How will this be addressed and mitigated?
EMAWT-TIFI-38.1	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Transportation and Infrastructure	TI	Biological Resources: Fish	FI	38.1	1. How will 30 KAF of release affect Reclamation water management operations when the calls for this new storage water is simultaneous with the current operational releases governing the Boise operations?
EMAWT-REFI-38.2	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Recreation	RE	Biological Resources: Fish	FI	38.2	2. How will the releases affect: a. Recreation floaters on the South Fork and in Boise? b. How will the extra release affect fisheries and fishing in the S. Fork? c. Will these releases affect the riparian areas now accustomed to the operation parameters of Reclamation?
EMAWT-TIRE-38.3	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Transportation and Infrastructure	TI	Recreation	RE	38.3	3. What is the timing of the new full pool level elevation annually? 4. What is the duration of the new full pool elevation annually? 5. What weekends and holidays will be affected by the new full pool elevation? 6. How will the new high pool level in Anderson Ranch Reservoir affect: a. Any roads? b. Each of the 10 designated campgrounds? c. Any undesignated campground? d. The 4 boat ramps? e. Pine? f. Pine airstrip?
EMAWT-WISG-38.4	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Biological Resources: Wildlife	WI	Soils and Geology	SG	38.4	Littoral area displacement: i. Amount of acreage? ii. Does any physical removal of man-made or natural elements need to occur? iii. How long will it take before the littoral area stabilizes in sediment runoff? iv. How does the displacement of the literal area affect additional levels of sedimentation? v. What current littoral aquatic species inhabit the existing littoral area? vi. What littoral flora inhabit the existing littoral area? vii. What land animals take advantage of the existing littoral area?
EMAWT-RENA-38.5	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Recreation	RE	None	NA	38.5	7. Doesn't the extra 30 KAF result in unreplaceable location losses for recreation during those months of new full pool elevation?
EMAWT-WQSG-38.6	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Water Quality	WQ	Soils and Geology	SG	38.6	8. How does the addition of 30 KAF affect sediment washing from ARR downstream? 9. How will the additional water affect water temperature in: a. Anderson Ranch Reservoir over the year? b. South Fork of the Boise River?
EMAWT-SOTI-38.7	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Socioeconomics	SO	Transportation and Infrastructure	TI	38.7	10. Have any monetary losses been calculated for restricted recreation opportunities: a. On Anderson Ranch Reservoir? b. Downstream on the South Fork? c. The communities of Mountain Home, Fairfield, Pine and Featherville? 11. Have any additional expenditures been calculated for: a. Road re-building or bulwarks necessary for new full pool elevation? b. New campgrounds? c. Modification of existing campgrounds? d. New boat docks? e. Modifications to existing boat docks? f. Pine airstrip?
EMAWT-WIFI-38.8	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Biological Resources: Wildlife	WI	Biological Resources: Fish	FI	38.8	12. How will the 30 KAF, if unused in any given season, affect: a. Icing? b. Ungulate movement? c. Fish species?
EMAWT-WQFL-38.9	Anonymous	xx	xx	xx	Email (website)	EMA	Written	WT	Water Quality	WQ	Floodplains	FL	38.9	13. In any given excess-water year, will releases to keep Anderson Ranch Reservoir from overflowing be more dramatic and intense with the additional 30 KAF volume to be dispersed?
EMAWT-xxNA-39	Tess Goodwin	Boise State P	xx	xx	Email	EMA	Written	WT	xx	xx	None	NA	39	I am a reporter for Boise State Public Radio and I was wondering if you had time tomorrow for a short phone interview (about 10 minutes) about the Boise River Basin Feasibility Study Open Houses happening this week. Let me know what would work for you, I am available anytime before 2pm and am flexible after Thank you! [Jim Tayor forwarded this email to Megan Sloan]

The SHOSHONE-BANNOCK TRIBES

FORT HALL INDIAN RESERVATION
PHONE (208) 478-3700
FAX # (208) 237-0797

FORT HALL BUSINESS COUNCIL
P.O. BOX 306
FORT HALL, IDAHO 83203

Ms. Teresa Stella
Native American Affairs Advisor
Bureau of Reclamation
Snake River Area Office
230 Collins Road
Boise, Idaho 83702

August 27, 2019

Re: Formal scoping comments of the Shoshone-Bannock Tribes regarding (SRA-1200, 2.1.4.13) the Boise River Basin Storage Feasibility Study Environmental Impact Statement (EIS), Boise Project, Elmore County, Idaho

Dear Ms. Stella,

The Shoshone Bannock Tribes (Tribes), a federally recognized tribes located on the Fort Hall Indian Reservation (Reservation) in Southeast Idaho, appreciate the opportunity to provide scoping comments on this EIS. As we understand, Congress authorized the Bureau of Reclamation (BOR) to conduct feasibility studies on projects that address water shortages within the Boise River Basin System and that are considered appropriate for study by BOR's 2006 Boise/Payette Water Storage Assessment Report (Assessment). The proposed action includes a six foot raise of Anderson Ranch Dam allowing additional water capture of approximately 29,000 acre feet for the purpose of supplemental supply for contracted use. The Tribes reserved guaranteed continuous use Rights to utilize resources within the region that encompasses and includes lands of the Snake River basin. As a preliminary comment, the Tribes oppose land tenure adjustments where there is a 'net-loss' in acreage of federal lands and where appropriate mitigations have not been identified to address losses to Treaty reserved rights of the Tribes.

We expect the BOR to fulfill its solemn treaty and other legal and trust obligations to the Tribes to protect our off-Reservation rights reserved by the Fort Bridger Treaty of July 3, 1868 (15 Stat 673) (Treaty). The Tribes' property rights on federal lands include subsistence hunting, fishing, trapping, and gathering of wild foods, plants, and other items for medicines, traditional foods, and cultural and religious activities; practicing of religious and spiritual ceremonies; monitoring and protecting their sacred areas and ensuring access. The Tribes strongly oppose federal legislation or other actions that would infringe upon these vested rights. We request that you consider the following scoping issues for this EIS.

Background

The various bands of the Shoshone and Bannock people traditionally roamed extensively throughout the Great Basin and Intermountain region; with specific bands occupying the landscapes of the Boise Valley and surrounding mountains from time immemorial. Prior to non-Indian settler's entry into the region, Indians utilized the rich natural resources, and enjoyed the cultural traditions and lifestyles unique to our people. The Tribes called their aboriginal territory, "*bia sokoppe*" the Shoshoni term referring to Mother Earth, or literally, "our big lands". The removal of our people to reservations remains a dark moment in our history, with generations carrying on stories of our homelands.

Prior to the Treaty, the U.S. and the Tribes negotiated and signed numerous unratified treaties, including the 1863 Soda Springs Treaty, the 1866 Bruneau Treaty, the 1867 Treaty of Long Tom Creek, and the 1868 Lemhi Treaty. Federal and Territorial officials negotiating these treaties acknowledged the Tribes' nomadic subsistence lifestyle and our rights/needs to gather, fish, and hunt within the public domain.

The Executive Order (EO) of June 14, 1867, signed by President Andrew Johnson established the Reservation, identifying 1.8 million acres of land that would be set aside for the Tribes' sole and undisturbed use. Subsequently, due to a series of cession agreements, direct abrogation of the Treaty, and "surveying errors," the current Reservation has been reduced to approximately 544,000 acres. However, the Tribes expressly reserved by Treaty the specific usufructuary rights for lands remaining in the public domain, including retained priority rights to hunt, fish, gather, graze, and cut timber for personal use.

On July 3rd, 1868, the Tribes and the U.S. signed the Fort Bridger Treaty which was ratified by the Senate on Feb. 16, 1869. This Treaty was part of the "Great Peace Commission" that was a massive effort of the U.S. from 1968-69 to relinquish Indian title to land throughout the American West and to negotiate treaties to that end. Under the Treaty, the Tribes agreed to settle on the Reservation as their "permanent home." However, the Tribes reserved the following off reservation rights: **"the right to hunt on the unoccupied lands of the United States so long as game may be found thereon, and so long as peace subsists among the whites and Indians on the borders of the hunting districts."** Article IV.

In the 1972 landmark *State v. Tinno* decision, the Idaho Supreme Court affirmed the Tribes' hunting, fishing, and gathering rights extend to any unoccupied off reservation lands that are part of the aboriginal (or pre-Treaty) domain of the Shoshoni and the Bannock peoples. These rights are not "privileges" given to the Tribes by the U.S. but instead are **property interests** that the Tribes reserved when we agreed to peace and moved to our permanent homeland.

The construction and operation of hydroelectric projects have contributed extensively to the loss of these crucial resources and reduced the productive capabilities of the Snake River and its tributaries. The Fort Hall Business Council, governing body of the Tribes, has recognized the contemporary importance of our resource rights and interests and stress the importance of initiating efforts to restore the Snake River system and affected unoccupied lands to a natural condition through our Policy for Management of the Snake River Basin Resources which states:

The Shoshone Bannock Tribes (Tribes) will pursue, promote, and where necessary, initiate efforts to restore the Snake River systems and affected unoccupied lands to a natural condition. This includes the restoration of component resources to conditions which most closely represents the ecological features associated with a natural riverine ecosystem. In addition, the Tribes will work to ensure the protection, preservation, and where appropriate-the enhancement of Rights reserved by the Tribes under the Fort Bridger Treaty of 1868 (Treaty) and any inherent aboriginal rights.

Scoping Issues

2006 Boise/Payette Water Storage Assessment Report - The BOR has a Congressionally authorized opportunity to conduct feasibility studies on projects that address water shortages within the Boise River Basin System that are considered appropriate for study by the 2006 Assessment. This Assessment narrowly focuses on new or enhanced storage capabilities, including new on-stream and off-stream reservoir storage facilities, and retrofitting of existing reservoir facilities. A number of non-physical or administrative water storage opportunities were identified by the Assessment stakeholder working group but were not evaluated. The Tribes are concerned that the BOR may have misses the full intent of the Congressional authorization by narrowly focus on the water storage portion of the problems and needs when there is existing information to explore other conceptual solutions to water shortages. The Tribes do not agree with this approach and recommend a comprehensive assessment of the water shortage issue be completed before committing tax payer dollars to this proposed feasibility study.

NEPA Alternatives – The Congressional authorization to complete a feasibility study is tied to those projects that were recommended in the Assessment. The Tribes are concerned that the limited scope of the Assessment will limit the range of NEPA alternatives to a single action or no-action decision; raise the height of Anderson Ranch Dam or do nothing. The Tribes do not agree with this approach and recommend a comprehensive assessment of the water shortage issue so that a range of alternative may be evaluated in the NEPA process.

Protection of Native Fish and Wildlife – The Tribes recommend that the BOR promote the protection, preservation, and enhancement of native species populations and habitats that will support the Tribes' Treaty reserved rights and interests. A change in Reservoir pool elevations may have negative effects on Endangered Species Act (ESA) listed species (Bull Trout and/or Snails); and, Tribes, State and/or federally recognized sensitive species (West Slope Cutthroat Trout). The Tribes recommend the BOR engage the U.S. Fish and Wildlife Service for ESA section 7 consultations to fully evaluate effects of a change in pool elevation at Anderson Ranch Dam on listed species.

Wildlife Mitigation – The Northwest Power and Conservation Council's Fish and Wildlife Mitigation Plan, funded by Bonneville Power Administration, is currently providing wildlife mitigating associated with the construction and inundation of the Anderson Ranch Dam; secondary impacts from operations have not been assessed. A Wildlife Loss Assessment was developed and a ledger identifying the number of lost Habitat Units (currency) was developed for replacement by authorized fish and wildlife managers (Shoshone-Bannock Tribes, Shoshone-

Paiute Tribes, and the State of Idaho). The Tribes recommend the BOR recognize this mitigation activity and the potential to expand the Wildlife Loss Assessment to include impacts from the change in pool elevation proposed at Anderson Ranch Dam. Also, consider the need to develop a resident fish loss assessment associated with the action at this federal facility.

Other Wildlife Impacts – The Tribes recommend that the BOR assess impacts caused from the proposed change in pool elevation to wildlife migratory routes and disease transmission. The potential for additional negative wildlife/reservoir contacts such as reports of elk herds falling through reservoir ice and drownings must be considered. Also, the potential impacts to avian populations from disease outbreaks associated with increased populations that the expanded body of water may draw during migratory times. Furthermore, there may be impacts to shoreline and waterfowl, as seen at other BOR facilities, where expansive mud flats create conditions that promote the spread of disease such as avian botulism.

Cultural Resources – Many of the Tribes' cultural and sacred areas are located off reservation on federal lands in the public domain, including areas encompassing forested areas, plains, rivers, high mountain peaks, geysers, and hot springs. From time immemorial, the Tribes and their ancestors have utilized their aboriginal lands to conduct traditional practices, to conduct ceremonies, and to practice their religion. Further, many of the Tribes' burial sites are located on these federal lands. These aboriginal lands of the Tribes are an integral component of the Tribes' cultural and spiritual identity and where sacred places are located that must be protected as well as ensuring continued access for the Tribes. The U.S. Forest Service recently acknowledged that tribes' historical and spiritual connections to these lands have not been extinguished. *Report to the Secretary of Agriculture, USDA Policy and Procedures Review and Recommendations: Indian Sacred Sites* (December 2012). A number of federal laws acknowledge legal rights of access to federal lands of religious significance to American Indians and require federal consultation with affected tribal governments prior to commencing federal action impacting such lands. E.O. 13007, Indian Sacred Sites, requires federal agencies responsible for the management of federal lands to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. Also, the American Indian Religious Freedom Act (AIRFA), the Archaeological Resources Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), the Religious Freedom Restoration Act (RFRA), and the National Historic Preservation Act (NHPA) seek to protect Native sacred areas located on federal lands. Some of these laws impose legal requirements on federal land agencies to consult with Indian tribes prior to taking any action that would impact the integrity of federal lands encompassing Native sacred areas.

The BOR and the Tribes have identified cultural resources and we maintain there is a potential for burial sites in the project area that may be negatively impacted as a result of the proposed construction, inundation, and future operations of Anderson Ranch Dam. The loss of our cultural resources is not acceptable for the Tribes. We are requesting a Cultural Resource survey as well as an ethnographic study of the impacted area.

Closing

It has always been the intent and action of the Tribes to promote the conservation, protection, restoration, and enhancement of natural resources during the processes that consider the

operation and management of Federal projects and land management activities of other entities. The Tribes encourage the BOR to explore other options for retaining water in a drainage. We have seen the success in other watersheds from using alternative methods that increase water retention in the headwaters that do not include increasing the height of a dam. Additional waters may also be realized through increased efficiencies during transference. These opportunities were not assessed so the tools available to the BOR and water users is limited as is the ability to study the feasibility of their potential benefits to the Boise River Basin System.

Thank you for considering our comments during the scoping period of this document and we look forwarding to working with you as the EIS progresses. Should you have any questions please feel free to contact Christina Cutler, Environmental Coordinator, Fish and Wildlife Department, ccutler@sbtribes.com or Claudeo Broncho, Policy Representative, Fish and Wildlife Department, cbroncho@sbtribes.com.

Sincerely,

Ladd R. Edmo, Chairman
Fort Hall Business Council

Attachment; Policy statements