Finding of No Significant Impact

Final Environmental Assessment

Buxton Streambank Restoration and Desert Canal Fish Screen Project

Teton County, Idaho

U.S. Department of the Interior
Bureau of Reclamation
Columbia-Pacific Northwest Region
Snake River Area Office

CPN FONSI # 22-05

Introduction

The Bureau of Reclamation (Reclamation) has prepared this Finding of No Significant Impact (FONSI) to comply with the Council on Environmental Quality regulations for implementing procedural provisions of the National Environmental Policy Act. This document briefly describes the Proposed Action, other alternatives considered, the scoping process, Reclamation's consultation and coordination activities, and Reclamation's finding. The Final Environmental Assessment (EA) fully documents the analyses of the potential environmental effects of implementing the changes proposed.

Location and Background

The Teton Watershed drains 1,133 square miles in eastern Idaho and areas near the western border of Wyoming. The Teton River spans 64 miles beginning near Victor, Idaho and extends to approximately Rexburg, Idaho, where it flows into the Henrys Fork of the Snake River. The project area is composed largely of agricultural fields but also includes recreational land in the form of designated wild and scenic rivers, ski areas, and national parks and forests.

Friends of the Teton River (FTR) is a non-profit 501(c)(3) organization based in Teton County, Idaho, that is working with the Teton Water Users Association (TWUA) members and the surrounding farming and ranching community to implement two priority watershed management projects: the Buxton streambank restoration project and the Desert Canal project. These projects are supported by the *TWUA Watershed Restoration Plan (2016),* which was developed through a WaterSMART Cooperative Watershed Management Program phase 1 grant. WaterSMART is a program of the Department of the Interior that focuses on improving water conservation and helping water-resource managers make sound decisions about water use. The program provides leadership by identifying strategies to ensure that this and future generations will have sufficient

supplies of clean water for drinking, economic activities, recreation, and ecosystem health. The Cooperative Watershed Management Program utilizes WaterSMART grants to provide funding to watershed groups to encourage diverse stakeholders to form local solutions to address their water management needs. Additionally, these projects would address management objectives which exist through the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service for the recovery of Yellowstone cutthroat trout (YCT) in the Teton watershed, such as restoring connectivity, minimizing loss of juvenile fish to irrigation diversions, and obtaining adult fish passage around/through entrapment.

The *TWUA Watershed Restoration Plan (2016)* encompasses multiple priority projects for the Teton watershed. However, this WaterSMART grant would only fund two watershed management projects in two separate locations within the Teton watershed. Neither of these projects would occur in a wild and scenic stretch of the Teton River. The Buxton streambank project is located on the upper Teton River approximately 6 miles west of Driggs, Idaho. The project is on the west side of the Teton River from the newly-formed Buxton River Park, downstream of the Bates Bridge. The 80-acre Buxton River Park property on the east side of the river is owned by Teton County, Idaho with 42 acres placed in a conservation easement. The west side of the river is grazed ranchland and is experiencing overutilized pasture and range land in the form of unsustainable cattle grazing which is causing damage and destabilization along the streambanks. Historical agricultural and grazing practices have also led to impaired water quality, including exceedances of total maximum daily load (TMDL) criteria, and degraded fish and wildlife habitat.

The Desert Canal project area is located approximately 5 miles east of Tetonia, Idaho on South Leigh Creek, a tributary to the Teton River. South Leigh Creek headwaters are on the western slope of the Teton Mountains (Caribou-Targhee National Forest) in Wyoming. South Leigh Creek is used as spawning habitat by YCT and is parallel to the Desert Canal yet no surface water connectivity between the creek and the canal currently exists. The Desert Canal has been observed to entrap multiple fish species including YCT. The lack of fish screen and bypass piping in Desert Canal means YCT cannot access spawning habitats in South Leigh Creek from the Desert Canal.

Purpose and Need

The purpose and need for the Proposed Action is to fulfill the WaterSMART grant allowing FTR to perform two watershed management projects. The WaterSMART grant projects would work cooperatively with local entities as they plan for and implement actions to increase water supply through investments to modernize existing infrastructure and avoid potential water conflicts. These projects would stabilize riparian areas and improve Teton River water quality by addressing TMDL exceedances for sediment and temperature in the upper Teton River, as well as help eliminate fish entrapment occurring at the Desert Canal while ensuring irrigators receive water. Reclamation's decision is whether to disperse funds through the WaterSMART grant program.

Alternatives Considered and Recommended Action

The range of alternatives developed for analysis of this Proposed Action was based on the purpose and need for the project, and on the issues raised during internal, external, and Tribal scoping. The alternatives analyzed include a No Action alternative (Alternative A) and the Proposed Action (Alternative B). The No Action alternative does not meet the defined purpose and need for action but was evaluated because it provides an appropriate baseline to which the recommended action is compared.

Summary of Environmental Effects

The following summarizes the effects that the preferred alternative – the Proposed Action (Alternative B) – would have on each resource category analyzed in the EA. Chapter 3 of the EA provides a full analysis and explanation of how each resource was evaluated.

Biota – Vegetation, Wetlands, Fish and Wildlife

Under Alternative B, actions at Buxton streambank would improve riparian/wetland health in the area. Some disturbance to meadow grass may occur when driving vehicles to get to the work site. The Proposed Action at Buxton streambank would positively affect mammals, birds, and amphibians in the area, especially moose due to the improved willow component. No significant displacement of mammals, birds, or amphibians should take place since most of the work would take place during daylight hours.

The fisheries community would benefit from the project in the long term. Willow planting along the river would help address TMDL exceedances for sediment and temperature in the Teton River and prevent stream bank erosion. Over time, these efforts would also help create pools in the river which benefit the fish community by allowing for more useable river habitat.

Under Alternative B, some removal of riparian vegetation at the Desert Canal action area would occur in order construct the new fish screen structure, and there would be some disturbance of terrestrial vegetation while driving across the meadows to work at the site. In the long term, the riparian vegetation would reestablish and meadow grass would grow back.

During the construction period, some mammals, birds, and amphibian species may be displaced at the Desert Canal action area but would return after the construction has been completed. Some amphibians may be lost in the specific construction zone of the project construction area since equipment would be working in the riparian/wetland zones.

Under Alternative B, a corrugated fish screen would be constructed to move fish into parallel-running Leigh Creek to eliminate entrapment and mortality of YCT in Desert Canal. FTR would place a bypass pipe at the installed fish screen, connecting Desert Canal and Leigh Creek. This would provide 11 miles of connectivity for YCT to complete their life cycle in this high-priority spawning tributary and source population of native trout for the Teton River. During construction there would be some removal of riparian vegetation in order construct the new fish screen structure.

This may cause some water quality problems in the short term, but in the long term the riparian zone would regrow and the fish species would move back into the area.

Threatened and Endangered Species

Under the Proposed Action, effects to Canada lynx, grizzly bear, and whitebark pine would continue to be minimal to nonexistent. Suitable habitat for these species would continue to be absent from either action area, and increased activity during the construction periods would not be expected to affect these species.

At the Desert Canal action area, there could be minimal, highly localized effects to vegetation during the installation of bypass piping and fish screen. This could cause short-term, small-scale disruption of monarch butterfly habitat use. Disturbed vegetation would be expected to re-seed or regenerate the following spring.

Disturbance at the Buxton action area could be more extensive due to the spatial extent of proposed planting activities. In the longer term, the stabilization activities to be performed at this site would provide an overall improvement to the quality and quantity of potential habitat for Ute ladies'-tresses. Disturbance via trampling to milkweed or monarch nectaring habitat, if present at this site, would be minimal in the context of the larger surrounding landscape, and would be temporary, as any trampled or disturbed vegetation would be expected to re-seed or re-generate in the following season. The expected seasonal timing of the proposed activities (likely very late summer to early fall) would also preclude impacts to monarch larvae, which would no longer be expected to be present at the site at that point in the year.

Water Quality

The water quality effects for the Teton River and South Leigh Creek are split into two categories: construction activities that are mostly short-term effects, and post-construction conditions that are mostly mid- to long-term effects.

Construction

Teton River construction effects include the increase disturbance of soil along the 1,500 feet of streambank during riparian planting. This could increase turbidity and sediment movement in the river. These effects would be short-term in nature and would be minimized by employing standard BMPs such as if/when using vehicles, keeping a distance from the river as not to create ruts or damage the streambank and ensuring any excess soil from plantings is removed to above the high-water line so that it cannot enter the river. Also, plantings would be done in drier seasons (after irrigation season), lessening the direct effects to the river. Idaho State water quality standards for turbidity (instantaneous and 10 consecutive days) and the sediment loading TMDL would not be violated during construction. No construction effects are expected on the grazing management and livestock watering best management practices within the riparian corridor.

South Leigh Creek construction effects include a minor increase in soil disturbance during pipe placement and possibly constructing/fitting the fish screen. This would be minor in disturbed area

and unlikely to result in an appreciable sediment movement. This activity is unlikely to affect water quality relative to Idaho State water quality standards.

Post-Construction

Once the riparian vegetation is established and the planned grazing management has been implemented on the Teton River, it would likely not take longer than a growing season or two for riparian corridor improvement. The riparian plantings would begin to hold the soil together through their extensive root systems, increasing streambank stability at high flows and shading the river; this would decrease overall water temperatures. The changes to grazing management would protect the riparian areas and decrease the likelihood of streambank and vegetation damage by livestock hoof impacts and herbivory.

Water quality effects would include an overall decrease in sediment/siltation load from the streambank. Water temperatures would be lowered due to shading from the riparian vegetation. These effects are in line with moving towards meeting the sediment and water temperature TMDLs.

There is a small risk of a sediment pulse if, when riparian plantings are first planted, there were a large storm event that caused a flood sufficient to wash out the new plantings. This could cause a pulse of sediment to enter the river, temporarily increasing turbidity and sedimentation in the localized area. However, the potential for this circumstance is decreased because plantings would be done in drier seasons (after irrigation season) and it is relatively rare to have those types of storm events in the mid- to late fall.

South Leigh Creek water quality effects would be the same as those analyzed for the No Action alternative; no changes are proposed to South Leigh Creek that would affect water quality.

Tribal Interests – Treaty Rights

Under Alternative B, there are anticipated beneficial long-term effects to reserved treaty rights, such as access to or impacts to traditional or customary places for hunting, fishing, or gathering, or for livestock grazing in the area. The anticipated benefit of the stabilizing a riparian buffer along 1,500 linear feet of streambank habitat is to help address TMDL exceedances for sediment and temperature in the Teton River, while constructing a corrugated fish screen to move fish into parallel-running Leigh Creek eliminates entrapment and mortality of YCT in the canal.

The proposed project construction ingress and egress routes may cause a temporary, short-term adverse effect on access to traditional or customary hunting, fishing, or gathering sites, or for livestock grazing areas during the construction periods.

Reclamation requested information from the Shoshone-Paiute Tribes of the Duck Valley Reservation, the Shoshone-Bannock Tribes of the Fort Hall Reservation, the Northwestern Band of the Shoshone Indians, and the Eastern Shoshone Tribe, who traditionally and currently use the area for hunting, fishing, and gathering of plants; however, no responses were received. The lack of specific information about the area is not indicative of a lack of importance to Tribes. With no specific response, Reclamation assumes that there would be no adverse effects to reserved treaty rights, such as access or impacts to areas for hunting, fishing, or gathering, or for livestock grazing.

Mitigation efforts may be required to reduce the effects of construction ingress and egress on Tribal access to hunting, fishing, or gathering should construction ingress and egress activity take place in the same location and at the same time of year as traditional or customary hunting, fishing, and gathering of plants, or for livestock grazing. If this were to occur, Reclamation would meet with Tribes to formulate an appropriate mitigation measure before construction occurs.

Indian Trust Assets

Under Alternative B, the Proposed Action, Reclamation proposes to provide funding through a WaterSMART grant for FTR to perform the two identified watershed management projects. If the Proposed Action occurs, there are no known beneficial or adverse effects to Indian Trust Assets (ITAs).

Reclamation requested information from the Shoshone-Paiute Tribes of the Duck Valley Reservation, the Shoshone-Bannock Tribes of the Fort Hall Reservation, the Northwestern Band of the Shoshone Indians, and the Eastern Shoshone Tribe who traditionally or currently use the area under their reserved treaty rights; however, no responses were received. The lack of specific information about the area is not indicative of a lack of importance to Tribes. With no specific responses, Reclamation assumes that there would be no adverse effects to Indian Trust Assets, such as adverse impacts to water, water rights, or land held in trust for the Tribes.

Mitigation Summary

Mitigation efforts may be required to reduce the effects of construction ingress and egress on Tribal access to hunting, fishing, or gathering should construction ingress and egress activity take place in the same location and at the same time of year as traditional or customary hunting, fishing, and gathering of plants, or for livestock grazing. If this were to occur, Reclamation would meet with Tribes to formulate an appropriate mitigation measure.

Recreation

With the Proposed Action, recreators utilizing the Teton River from the Buxton River Park may experience minimal visual resources disruption for a small window of time while the restoration work was being performed. The time frames and the physical size of the project would result in very small disruptions and minimal impacts. As bank restoration progressed, the visual resource of the area would improve along that section of the streambank and water quality increases would benefit recreation on the river. Informational signage for the public would be used to explain the project, its partners, the process, and the planned benefits. No significant impacts to overall recreation are projected.

The Desert Canal area has little to no recreational value as public access is extremely limited. The Proposed Action would create benefits for recreationists on the Teton River through better fish recruitment with improved access for YCT spawning. Physical construction in the action area would have little or no foreseen impacts to recreation in the area.

Unaffected Resources

The Proposed Action would not cause any short- or long-term direct, indirect, or cumulative effects to the following resource categories:

- Cultural resources
- Indian sacred sites
- Environmental justice

Consultation, Coordination, and Public Involvement

In compliance with Section 106 of the National Historic Preservation Act of 1966 (as amended in 1992), Reclamation consulted with the Idaho State Historic Preservation Office to identify cultural and historic properties in the area of potential effect. Reclamation initiated consultation with the Idaho SHPO on March 4, 2022. SHPO concurrence with Reclamation's finding of No Effect to Historic Properties for the action area was received on March 23, 2022 (see Appendix B of the Final EA).

Reclamation mailed scoping letters to the Shoshone-Bannock Tribes, Shoshone-Paiute Tribes, and Eastern Shoshone Tribe on March 18, 2022, and to the Northwestern Band of the Shoshone Nation Tribe on April 14, 2022. No responses or concerns from the Tribes were brought forward during the scoping period. The mailing list, scoping letters, and comments received are presented in Appendix C of the Final EA.

Finding

Based on the analysis of the environmental effects presented in the Final EA and consultation with potentially affected agencies, Tribes, organizations, and the general public, Reclamation concludes that implementation of the preferred alternative – the Proposed Action (Alternative B) – will not have a significant impact on the quality of the human environment or natural and cultural resources. The effects of the Proposed Action will be minor, temporary, and localized. Therefore, preparation of an Environmental Impact Statement (EIS) is not required.

Decision

Based on the analysis in the EA, it is my decision to select for implementation the preferred alternative (i.e., the Proposed Action, Alternative B). The Proposed Action will best meet the purpose and need identified in the EA.

Recommended:

ROCHELLE OCHOA Digitally signed by ROCHELLE OCHOA
Date: 2022.09.30 16:15:31 -06'00'

Rochelle Ochoa
Natural Resources Specialist
Snake River Area Office, Boise, Idaho

Date

Approved:

MELANIE PAQUIN Digitally signed by MELANIE PAQUIN
Date: 2022.10.03 17:02:28 -06'00'

Melanie Paquin
Snake River Area Manager
Columbia-Pacific Northwest Region, Boise, Idaho

Date

BUREAU OF RECLAMATION

Environmental Assessment

Buxton Streambank Restoration and Desert Canal Fish Screen Project

Teton County, Idaho

Columbia-Pacific Northwest Region

U.S. Department of the Interior

September 2022

Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

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.

Cover photograph: A fence protects newly restored streambank along a portion of the upper Teton River.

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
APE	Area of potential effect
BLM	Bureau of Land Management
BMP	Best management practices
BP	Before present
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
DOI	Department of the Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive order
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
FTR	Friend of the Teton River
GIS	Geographic information systems
GLO	General Land Office
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IPaC	Information for Planning and Conservation
ISHS	Idaho State Historic Society
ITAs	Indian trust assets
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NTU	Nephelometric turbidity units
Reclamation	Bureau of Reclamation
SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Office
TMDL	Total maximum daily load
TWUA	Teton Water Users Association

Acronym or Abbreviation	Definition
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
YCT	Yellowstone cutthroat trout

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Chapter 1 Purpose and Need

1.1 Introduction

The Bureau of Reclamation (Reclamation) prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA). This EA analyzes the potential environmental effects that could result from the proposed construction activities necessary for the Buxton Streambank Restoration and Desert Canal Fish Screen Project.

This EA serves as a tool to aid the authorized official in making an informed decision that is in conformance with applicable federal laws and regulations. The proposed action and additional alternatives are described in Chapter 2 of this document, and the effects (short- and long-term, adverse and beneficial, public health and safety, and effects that would violate federal, state, Tribal, or local law protecting the environment) of each alternative are evaluated for each of the affected resource areas in Chapter 3 of this document.

The NEPA process requires analysis of any federal action that may have an impact on the human environment. This EA is being prepared to assist Reclamation in finalizing a decision on the proposed action, and to determine whether to issue a Finding of No Significant Impact (FONSI) or a notice of intent to prepare an Environmental Impact Statement (EIS).

1.2 Location, Background, and Action Areas

1.2.1 Location and Background

The Teton watershed drains 1,133 square miles in eastern Idaho and areas near the western border of Wyoming. The Teton River spans 64 miles beginning near Victor, Idaho and extends to approximately Rexburg, Idaho, where it flows into the Henrys Fork of the Snake River. The project area is composed largely of agricultural fields but also includes recreational land in the form of designated wild and scenic rivers, ski areas, and national parks and forests.

Friends of the Teton River (FTR) is a non-profit 501(c)(3) organization based in Teton County, Idaho that is working with the Teton Water Users Association (TWUA) members and the surrounding farming and ranching community to implement two priority watershed management projects: the Buxton streambank restoration project and the Desert Canal project. Figure 1 shows the general location of both projects. These projects are supported by the *TWUA Watershed Restoration Plan* (TWUA 2016), which was developed through a WaterSMART Cooperative Watershed Management Program phase 1 grant. WaterSMART is a program of the Department of the Interior that focuses on improving water conservation and helping water-resource managers make sound decisions about water use. The program provides leadership by identifying strategies to ensure that this and future generations will have sufficient supplies of clean water for drinking, economic activities, recreation, and ecosystem health. The Cooperative Watershed Management Program utilizes WaterSMART grants to provide funding to watershed

groups to encourage diverse stakeholders to form local solutions to address their water management needs. Additionally, these projects would address management objectives which exist through the Idaho Department of Fish and Game (IDFG) and the U.S. Fish and Wildlife Service (USFWS) for the recovery of Yellowstone cutthroat trout (YCT) in the Teton watershed, such as restoring connectivity, minimizing loss of juvenile fish to irrigation diversions, and obtaining adult fish passage around/through entrapment.

Figure 1. Project locations in eastern Idaho

The *TWUA Watershed Restoration Plan* (TWUA 2016) encompasses multiple priority projects for the Teton watershed. However, this WaterSMART grant would only fund two watershed management projects in two separate locations within the Teton watershed. Neither of these projects would occur in a wild and scenic stretch of the Teton River. The Buxton streambank project is located on the upper Teton River approximately 6 miles west of Driggs, Idaho (Figure 2). The project is on the west side of the Teton River from the newly-formed Buxton River Park, downstream of the Bates Bridge. The 80-acre Buxton River Park property on the east side of the river is owned by Teton County, Idaho with 42 acres placed in a conservation easement. The west side of the river is grazed ranchland and is experiencing overutilized pasture and range land in the form of unsustainable cattle grazing which is causing damage and destabilization along the streambanks. Historical agricultural and grazing practices have also led to impaired water quality, including exceedances of total maximum daily load (TMDL) criteria, and degraded fish and wildlife habitat.

The Desert Canal project area is located approximately 5 miles east of Tetonia, Idaho on South Leigh Creek, a tributary to the Teton River. South Leigh Creek headwaters are on the western slope of the Teton Mountains (Caribou-Targhee National Forest) in Wyoming (Figure 3). South Leigh Creek is used as spawning habitat by YCT and is parallel to the Desert Canal yet no surface water connectivity between the creek and the canal currently exists past the canal

diversion. Due to this, the Desert Canal has been observed to entrap multiple fish species including YCT. The lack of fish screen and bypass piping in Desert Canal means YCT cannot access spawning habitats in South Leigh Creek from the Desert Canal.

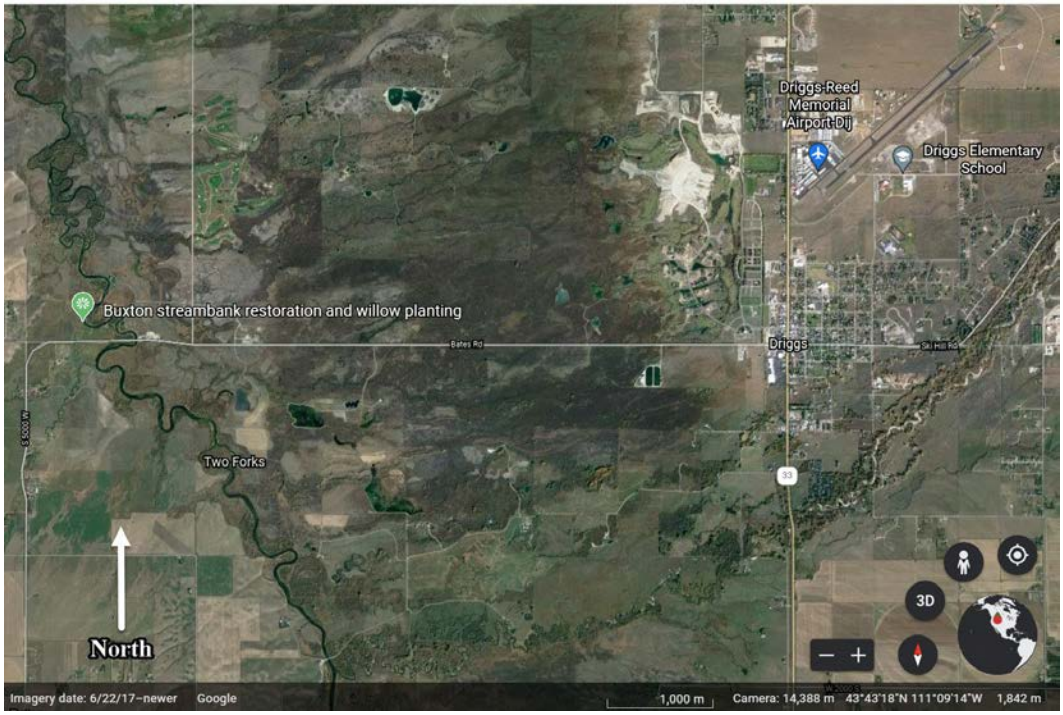


Figure 2. Buxton streambank restoration project location in proximity to Driggs, Idaho

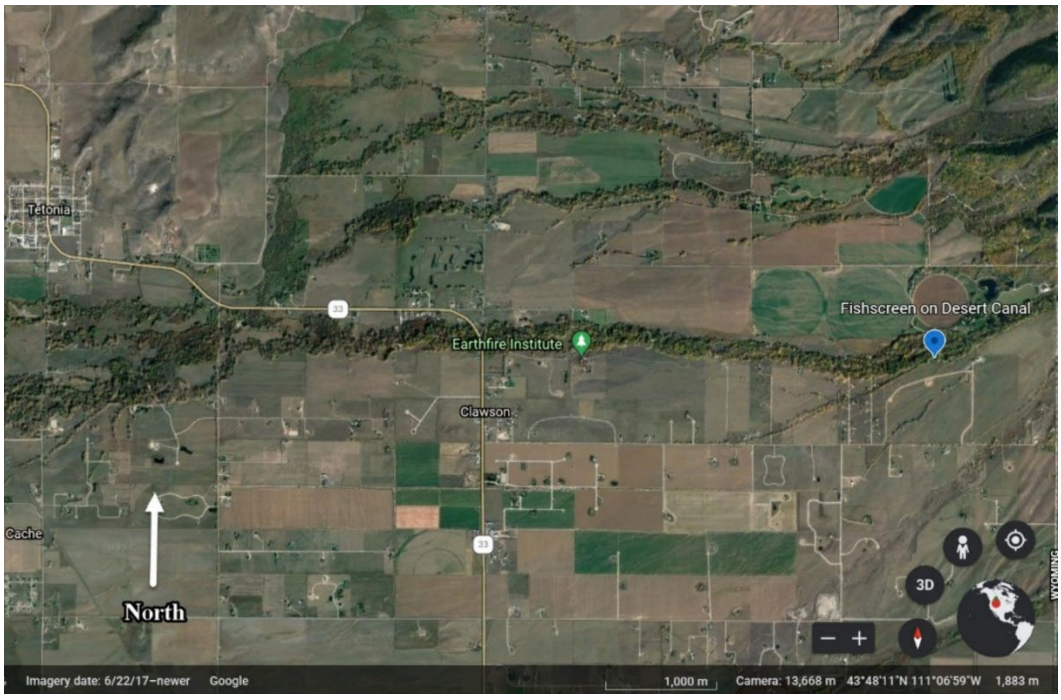


Figure 3. Desert Canal fish screen project location in proximity to Tetonia, Idaho

1.3 Purpose and Need

The purpose and need for the Proposed Action is to fulfill the WaterSMART grant allowing FTR to perform two watershed management projects. The WaterSMART grant projects would work cooperatively with local entities as they plan for and implement actions to increase water supply through investments to modernize existing infrastructure and avoid potential water conflicts. These projects would stabilize riparian areas and improve Teton River water quality by addressing TMDL exceedances for sediment and temperature in the upper Teton River, as well as help eliminate fish entrapment occurring at the Desert Canal while ensuring irrigators receive water. Reclamation's decision is whether to disperse funds through the WaterSMART grant program.

1.4 Regulatory Compliance

The following major laws, executive orders, and secretarial orders apply to the proposed project, and compliance with their requirements is documented in this EA:

- NEPA
- Endangered Species Act (ESA)
- National Historic Preservation Act (NHPA)
- Clean Water Act (CWA)
- Executive Order (EO) 13007 Indian Sacred Sites
- EO 12898 Environmental Justice
- EO 13175 Consultation and Coordination with Tribal Governments
- Secretarial Order 3175 Department Responsibilities for Indian Trust Assets (ITAs)
- Secretarial Order 3355 Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects"

1.5 Scoping Summary

The scoping process provides an opportunity for the public, governmental agencies, and Tribes to identify their concerns or other issues and aids in developing a full range of potential alternatives that address meeting the project's purpose and need as stated in this document. To accomplish this, Reclamation provided information to the public through a mailed information package and solicited comments from the public, governmental agencies, and potentially affected Tribes. Details regarding the public and agency scoping are presented in Chapter 4.

Chapter 2 Description of Alternatives

2.1 Introduction

This chapter describes the two alternatives analyzed in this EA: Alternative A, the No Action alternative; and Alternative B, the Proposed Action alternative.

2.2 Alternative Development

The alternatives presented in this chapter were developed based on the purpose and need for the project, as described in Chapter 1, and the issues raised during internal, external, and Tribal scoping. The alternatives analyzed in this document include the No Action alternative, which would result in no projects occurring due to the WaterSMART grant not being administered, and the Proposed Action alternative, which would result in administering the WaterSMART grant and FTR proceeding with implementation of both watershed management projects. This would include stabilization of streambank along the upper Teton River and placing a fish screen within Desert Canal and a bypass pipe to connect the canal to South Leigh Creek. A no action alternative is evaluated because it provides an appropriate basis to which the other alternative is compared. No new alternatives were identified during the scoping process.

2.3 Alternative A – No Action

Under the No Action alternative, Reclamation would not fulfill the WaterSMART grant that is designed to support FTR completing two watershed management projects. The upper Teton River would likely continue to have water quality issues and fish would continue to be entrapped within the Desert Canal. Irrigation water would still be delivered from the Desert Canal. For the purposes of this analysis, the assumption is that the project would not go forward so that the environmental effects associated with taking no action can be compared to the other alternatives as required under NEPA.

2.4 Alternative B – Proposed Action

Reclamation proposes to provide funding through a WaterSMART grant for FTR to perform two watershed management projects, both occurring within Teton County in southeastern Idaho (Figure 1). These management projects are part of the *TWUA Watershed Restoration Plan* which aims to address a suite of watershed management issues, including water quality and water quantity issues for fish and wildlife, agricultural and recreational use, and management issues that specifically impact YCT. The first action is located on the streambanks of Buxton River Park and includes stabilizing a riparian buffer along 1,500 linear feet of streambank habitat (Figure 4)

on the upper Teton River approximately 6 miles west of Driggs, Idaho. FTR would work with a local rancher on private land to accomplish the stabilization through willow planting as well as implementation of recommended grazing management and livestock watering best management practices (BMPs) within the riparian corridor. This would help address TMDL exceedances for sediment and temperature in the Teton River.

Each hole for willow clumps would be dug out to a volume of 1 cubic yard and spaced 5 feet apart along the bank; approximately 300 willow clumps would be placed in every hole. Additionally, brush trenches would be dug to plant willow poles every 20 feet, then backfilled. These trenches would be 6 feet deep and 6 feet long. Containerized native plantings would be placed within trenches as well. All new plants would be fenced to improve establishment in the first few years. All work would be completed above the high-water mark and out of the stream channel itself (Figure 4). Signage with useful information about the Buxton project, including the action description, goals, and timelines, would be posted at public access sites above and below the project area prior to project initiation and would remain in place through project completion.

Figure 4. Location of riparian buffer restoration on the upper Teton River

FTR would work with the unincorporated irrigators on the Desert Canal approximately 5 miles east of Tetonia, Idaho to construct a corrugated fish screen to move fish into parallel-running Leigh Creek (Figure 5). This would eliminate entrapment and mortality of YCT in the canal. FTR would place a bypass pipe at the installed fish screen, connecting Desert Canal and Leigh Creek. This would provide 11 miles of connectivity for YCT to complete their life cycle in this high-priority spawning tributary and source population of native trout for the Teton River. This action would also provide improvements to canal infrastructure and reliable delivery of irrigation water.

A track hoe and trucking equipment would access the project site by the existing road access to the project site. The installation of the fish screen structure would consist of building the screen structure (a concrete and steel "box") on the irrigation ditch itself. A 6-foot-deep trench would

be dug to lay an 8-inch pipe that is approximately 62 feet long. The pipe would return any trout to the natural creek (Figure 5). Once excavation was complete, disturbances would be backfilled and native grass seed would be spread. It will be the responsibility of the irrigators to maintain the fish screen and routinely check functionality for the long-term.

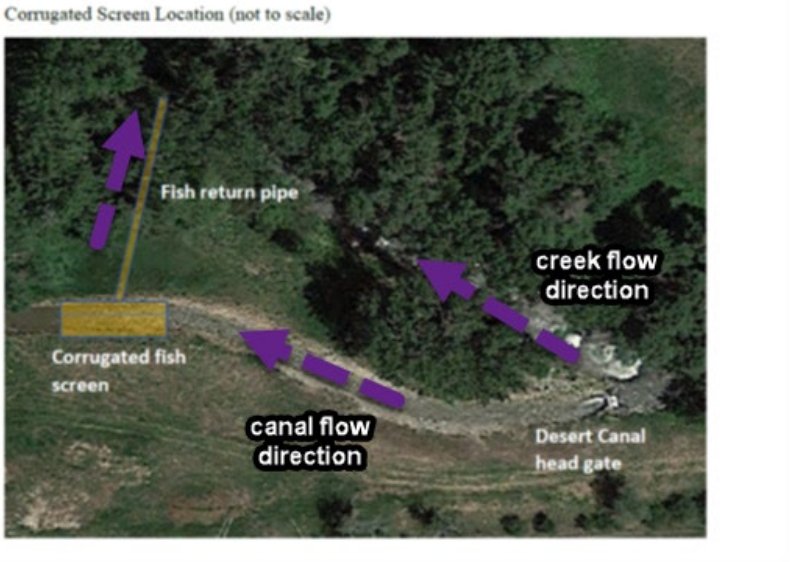


Figure 5. Corrugated fish screen and return pipe location on Desert Canal

2.5 Alternatives Considered but Eliminated from Further Study

NEPA requires Reclamation to consider alternatives developed through public scoping. However, only those alternatives that are reasonable and meet the purpose and need of the proposed action must be analyzed. There were no additional alternatives presented through the public and agency scoping process.

2.6 Actions Considered for Cumulative Effects

Cumulative Effects are defined in 40 CFR 1508.7 as the effect on the environment that results from the incremental effects of the action when added to other past, present, and reasonably foreseeable future actions. The Council on Environmental Quality (CEQ) interprets this regulation as referring only to the cumulative effect of the direct and indirect effects of the proposed action and its alternatives when added to the aggregate effects of past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Past, present, and reasonably foreseeable actions identified in the area (public or private) that could adversely affect the same resource areas evaluated in this EA would be additive effects to the proposed project.

Chapter 3 Affected Environment and Environmental Consequences

3.1 Introduction

This chapter evaluates the environmental consequences of implementing each of the alternatives described in Chapter 2. The level and depth of the environmental analysis corresponds to the potentially affected environment and the degree of the effects of the action anticipated for each environmental component (resource). The affected environment (proposed action area) addressed in this EA is defined in varying contexts, depending on the affected resource being analyzed.

Resources evaluated in this document and analyzed in this chapter were selected based on: Reclamation requirements; compliance with laws, statutes, and executive orders; public and internal scoping; and the potential for resources to be affected by the proposed project.

3.2 Biota – Vegetation, Wetlands, Fish and Wildlife

3.2.1 Affected Environment

Habitat – Terrestrial and Riparian/Wetland Vegetation

The Teton Basin is predominantly a valley habitat. There are riparian areas of grasses, sedges, and low brushes on the valley floor. Sagebrush communities are common at lower elevations and on south- and southwest-facing slopes. The lower elevations transition to mixed conifer forests in most of the county, with mixed fir (*Abies spp.*) at higher elevations on north and east aspects. Spruce (*Picea spp.*)/fir and lodgepole pine (*Pinus contorta var. latifolia*) forests are also common at higher elevations (Teton County 2008).

Vegetation along the upper Teton River is characterized by drought-tolerant species capable of withstanding brief periods of inundation. Vegetative cover types found in both action areas consist mostly of grazed agricultural meadow (various grass species) and willows (*Salix spp.*). The dominant woody shrub species include chokecherry (*Prunus virginiana*), serviceberry (*Amelanchier alnifolia*), hawthorn (*Crataegus sp.*), and aspen (*Populus tremuloides*). Small pockets of dogwood (*Cornus sericea*) also exist along the active channel along with some cottonwoods (*Populus balsamifera*).

Eight rare plant species are known to occur in the Teton Basin (Jankovsky-Jones 1996). They include gay-flowered groundsel, green muhly, Kelsey's phlox, Jones' primrose, hoary willow, livid sedge, green kneeled cotton-grass, simple kobresia, and Ute ladies'-tresses. None of these species are expected to occur within the project areas due to habitat suitability and previous grazing and/or use practices.

Noxious and invasive weed species have been identified in the existing natural habitat and disturbed areas around the upper Teton River. Canada thistle (*Cirsium arvense*) is the most prevalent weed within this corridor and occurs in most of the disturbed areas. Other common weeds here include but are not limited to musk thistle (*Carduus nutans*), bull thistle (*Cirsium vulgare*), yellow toadflax (*Linaria vulgaris*), spotted knapweed (*Centaurea stoebe*), and leafy spurge (*Euphorbia esula*) (Mainstream 2009).

Wildlife – Mammals

Grizzly bear, Canada lynx, and wolverine are present in Teton County and are protected by state and federal wildlife laws. The most common ungulates in the Teton Basin are elk, white-tailed deer, mule deer, and moose. Antelope, although common in the Teton Basin prior to settlement, are uncommon today. Common mammals known to occur around both action areas are listed below in Table 1.

Table 1. Common mammals known to occur near the project action areas

Common Name	Scientific Name
Mule deer	*Odocoileus hemionus*
Shiras Moose	*Alces alces*
White-tailed deer	*Odocoileus virginianus*
Elk	*Cervus elaphus*
Mountain lion	*Felis concolor*
Bobcat	*Felis rufus*
Coyote	*Canis latrans*
Red fox	*Vulpes*
Gray wolf	*Canis lupus*
Black bear	*Ursus americanus*
Grizzly bear	*Ursos arctos*
Yellow-bellied marmot	*Marmota flaviventris*
American beaver	*Castor canadensis*
American mink	*Neovison vison*
American marten	*Martes americana*
Weasel	*Mustela spp.*
Racoon	*Procyon lotor*
Skunk	*Mephitis*
Badger	*Taxidea taxus*
Porcupine	*Erethizon dorsatum*
Several rodent spp.	*Peromyscus maniculatus spp.*

Common Name	Scientific Name
Several bat spp.	*Vespertilionidae*
Several squirrel spp.	*Sciuridae*

Sources: Reclamation 2003; Groves et al. 1997

The online IDFG maps containing modeled probabilities of elk winter range, elk summer range, elk migration corridors, mule deer winter range, and mule deer summer range (IDFG 2020a) were reviewed for both action areas. Species Observation data from the Idaho Species Diversity Database were also reviewed for occurrences of other wildlife indicator species in the vicinity of the action areas (IDFG 2020b).

Elk

The Teton Valley is noted to have abundant spring, summer, and fall habitat for elk (IDFG 2019). Elk typically migrate from higher elevations to lower elevations in the winter. The amount of winter range for elk in Teton Valley is limited and has characteristics more similar to mule deer habitat than elk habitat (IDFG 2019). Known locations of elk herds in the Teton Basin include a herd east and south of Victor, and a herd along the Teton River in the Teton Basin (IDFG 2019). Elk may pass through the action areas during seasonal migrations, and the agricultural meadows on the area may be used in the winter as elk foraging areas. On a larger scale, both action areas are mapped as low probability winter range for elk (IDFG 2020a; Appendix C). Both action areas are also mapped as low probability summer range for elk with low to moderate summer range for elk (IDFG 2020a).

Mule Deer

Mule deer migrate seasonally from higher to lower elevations between summer and winter ranges. Both action areas mapped as low probability mule deer winter range (IDFG 2020a; Appendix C). The project areas do not contain the south-facing shrub dominated slopes that define mule deer winter range (TRLT 2006). The project areas are also primarily mapped as low probability mule deer summer range with some moderate probability summer range in the southeast corner (IDFG 2020a). Maps of mule deer migration corridors were not publicly available through IDFG; however, the riparian corridor where deciduous forest with dense shrub understory is present along the Teton River would provide suitable habitat for mule deer migration with mule deer also passing through undeveloped areas and agricultural meadows.

Moose

Moose generally use deciduous and coniferous forests and wetland habitats with a shrub understory in close proximity to waterbodies for winter and summer range in Idaho (TRLT 2006). Based on both action areas being mostly comprised of agricultural meadows, it is unlikely that moose will use it as primary winter or summer range, but they may occasionally move through both areas. The riparian forest with shrub understory habitat located along the Teton River further north of both action areas provides the most suitable habitat for moose in the area.

Wildlife – Birds

Bird species of special concern that are documented to use the Teton Basin include: Calliope Hummingbird, Red-naped Sapsucker, Willow Flycatcher, Dusky Flycatcher, Swainson's Thrush, Loggerhead Shrike, Virginia's Warbler, Bobolink, Green-tailed Towhee, Brewer's Sparrow, MacGillivray's Warbler, and Yellow-headed Blackbird. The peregrine falcon (*Falco peregrinus*) is known to occur in this part of eastern Idaho (Levine et al. 1998), although none are known to nest in the immediate analysis areas. There are several nests within 100 miles of the analysis area and peregrines certainly pass-through during migration and juvenile dispersal.

Numbers of nesting waterfowl are low in the immediate analysis areas. Mallards (*Anas platyrhynchos*) and Canada geese (*Branta Canadensis)* are the most common species within the Teton Basin, along with a few trumpeter swans (*Cygnus buccinator*). Many bald eagles (*Haliaeetus leucocephalus*) nest in the Teton canyon and use the canyon to feed year-round, but they are rarely seen in either of the analysis areas. A few of the more common avian species include those listed in Table 2 as well as many neotropical migrants.

Table 2. Common birds known to occur near the project action areas

Common Name	Scientific Name
Mallard	*Anas platyrhynchos*
Canada geese	*Branta Canadensis*
Trumpeter swans	*Cygnus buccinator*
Bald eagle	*Haliaeetus leucocephalus*
Golden eagle	*Aquila chrsaetos*
Northern harrier	*Circus cyaneus*
Red-tailed hawk	*Falco sparverius*
Mourning dove	*Zenaida macroura*
Black-billed magpie	*Pica pica*
Sharptailed grouse	*Tympanuchus phasianellus*
Common nighthawk	*Chordeiles minor*
Hummingbirds	*Trochilidae*
Killdeer	*Charadrius vociferus*
Sandpipers and allies	*Scolopacidae*
Osprey	*Pandion haliaetus*
Several owl spp.	*Strigidae*
Several woodpecker spp.	*Picidae*
American robin	*Turdus migratorius*

Sources: Reclamation 2003; Groves et al. 1997

Raptors

There are no bald eagle nests near the action areas, but there is suitable winter bald eagle habitat within a few miles of the Desert Canal action area in the cottonwood riparian forest corridor along the Teton River, which provides important roosting habitat for wintering bald eagles (TRLT 2006). However, the action area itself does not provide any roosting habitat for bald eagles. Other raptors that may occur within half a mile of the Desert Canal action area include those classified as Species of Greatest Conservation Need (SGCN) by the Idaho Comprehensive Wildlife Strategy: Great Gray Owl, Ferruginous Hawk, Golden Eagle, and Short-eared Owl (IDFG 2017). The Teton River riparian corridor on the Buxton streambank provides potential nesting habitat for these species, but the agricultural meadows in the action area do not provide suitable nesting habitat for these raptors and there are no known raptor nests located near the area. Raptors are most likely to utilize the agricultural meadows near the action area as foraging habitat.

Columbian Sharp-Tailed Grouse

Columbian sharp-tailed grouse tend to utilize shrub-bunchgrass dominated grasslands during the summer and riparian and mountain shrublands and aspen forests with shrub understory during the winter (TRLT 2006). While Columbian sharp-tailed grouse have the potential to occur on either action area, neither provides suitable breeding habitat (raised knolls for leks) nor does it contain wintering habitat for Columbian sharp-tailed grouse as mapped by the Wildlife Habitat Overlay.

Greater Sandhill Crane

The Teton Basin provides important staging areas for migrating Sandhill Cranes during the fall and spring with these areas primarily located to the west of Driggs (TRLT 2006). Sandhill Cranes may incidentally occur on the action areas, but they do not provide high quality breeding, migration, foraging, or wintering habitat for Greater Sandhill Cranes.

Wildlife - Amphibians and Reptiles

Common amphibians and reptiles known to occur around both action areas are listed below in Table 3. Those that are more likely occur in the analysis areas include the yellow-bellied racer (*Coluber constrictor mormon*), western terrestrial garter snake (*Thamnophis elegans*), common garter snake *(T. sirtalis*), gopher snake *(Pituophis melanoleucus deserticola*), sagebrush lizard (*Sceloporus graciosus*), rubber boas (*Charina bottae*), and northern leopard frogs (*Rana pipiens*) (IDFG 2020b).

Table 3. Common amphibians and reptiles known to occur near the project action areas

Common Name	Scientific Name
Western rattlesnake	*Crotalus viridus lutosus*
Yellow-bellied racer	*Coluber constrictor mormon*
Western terrestrial garter snake	*Thamnophis elegans*
Common garter snake	*T. sirtalis*
Gopher snake	*Pituophis melanoleucus deserticola*
Sagebrush lizard	*Sceloporus graciosus*
Rubber boas	*Charina bottae*
Northern leopard frogs	*Rana pipiens*
Boreal chorus frog	*Pseudacris maculata*
Columbia spotted frog	*Rana luteiventris*

Source: IDFG 2020b

Fisheries Community

The Teton River basin supports a robust fishery comprised of the native YCT and mountain whitefish, nonnative rainbow and brook trout, and hybrid cutthroat trout/rainbow trout. Since 1994, the Teton River has been managed as a wild trout fishery with no stocking. The Teton River also supports a diversity of native nongame fish species such as bluehead sucker (an Idaho SGCN), mountain sucker, longnose dace, mottled sculpin, and redside shiner.

Some of the most abundant or common fish species that can be found in the analysis area are listed in Table 4.

Table 4. Common fish species known to occur near the project action areas

Common Name	Scientific Name
Yellowstone cutthroat trout (YCT)	*Oncorhynchus clarkii bouvieri*
Rainbow trout	*Oncorhynchus mykiss*
Cutbow – cutthroat-rainbow trout hybrid	*Oncorhynchus clarkii x O. mykiss*
Brown trout	*Salmo trutta*
Brook trout	*Salvelinus fontinalis*
Mountain whitefish	*Prosopium williamsoni*
Sucker spp.	*Catostomus*

Yellowstone Cutthroat Trout

The most vulnerable and actively-managed fish species is the YCT (*Oncorhynchus clarkii bouvieri*). YCT are found in the Snake River watershed above Shoshone Falls and in the Yellowstone River watershed (Gresswell 2009). In February of 2001, the USFWS found that a petition to list the YCT under the ESA was not warranted. On February 21, 2006, the USFWS announced the

results of a review of the status of YCT for possible listing under the ESA. The USFWS determined that listing of YCT, found in Montana, Wyoming, Idaho, Utah, and Nevada, remains unwarranted (USFWS 2006). However, YCT are categorized as an SGCN by the Idaho Comprehensive Wildlife Strategy and as Sensitive by the Bureau of Land Management (BLM) and the U.S. Department of Agriculture (USDA) Forest Service. YCT declines in the Teton River basin have raised serious concerns about the persistence of this species in the Teton Valley section of the river. Continued monitoring surveys conducted by IDFG indicate increasing trends for YCT numbers in the upper valley and lower Teton River and stable numbers in the middle canyon section of the Teton River (High and Garren 2011). While the recent upward trend is encouraging, the species continues to face numerous risks to long-term persistence and remains a high conservation priority. Any river habitat improvement projects that help enhance YCT habitat and perpetuate the population are welcome for conservation groups in the Teton River basin.

3.2.2 Environmental Consequences

Alternative A – No Action

The proposed action areas would remain unchanged. Terrestrial and riparian/wetland vegetation along with mammalian, avian, amphibian and reptile, and fish communities would not be expected to have immediate adverse impacts related to the No Action alternative. The diversity, distribution, and relative abundance of species in these communities in both action areas are expected to remain the same as current conditions under the No Action alternative. In the long-term riparian and wetland habitat at the Buxton streambank action area would continue to trend downward and fish species would continue to be entrapped at the Desert Canal action area under current diversion operations.

Alternative B – Proposed Action

Under Alternative B, actions at Buxton streambank would improve riparian/wetland health in the area. Some disturbance to meadow grass may occur when driving vehicles to get to the work site. The Proposed Action at Buxton streambank would positively affect mammals, birds, and amphibians in the area, especially moose due to the improved willow component. No significant displacement of mammals, birds, or amphibians should take place since most of the work would take place during daylight hours.

The fisheries community would benefit from the project in the long term. Willow planting along the river would help address TMDL exceedances for sediment and temperature in the Teton River and prevent stream bank erosion (see Water Quality, Section 3.4). Over time, these efforts would also help create pools in the river which benefit the fish community by allowing for more useable river habitat.

Under Alternative B, some removal of riparian vegetation at the Desert Canal action area would occur in order construct the new fish screen structure, and there would be some disturbance of terrestrial vegetation while driving across the meadows to work at the site. In the long term, the riparian vegetation would reestablish and meadow grass would grow back.

During the construction period, some mammals, birds, and amphibian species may be displaced at the Desert Canal action area but would return after the construction has been completed. Some amphibians may be lost in the specific construction zone of the project construction area since equipment would be working in the riparian/wetland zones.

Under Alternative B, a corrugated fish screen would be constructed to move fish into parallel-running Leigh Creek to eliminate entrapment and mortality of YCT in Desert Canal. FTR would place a bypass pipe at the installed fish screen, connecting Desert Canal and Leigh Creek. This would provide 11 miles of connectivity for YCT to complete their life cycle in this high-priority spawning tributary and source population of native trout for the Teton River. During construction, there would be some removal of riparian vegetation in order construct the new fish screen structure. This may cause some water quality problems in the short term (see Water Quality, Section 3.4), but in the long term, the riparian zone would regrow and the fish species would move back into the area.

3.3 Threatened and Endangered Species

3.3.1 Affected Environment

A preliminary report for Teton County, Idaho was generated through the USFWS Information for Planning and Consultation (IPaC) online tool that indicated the potential presence of three listed (Threatened) species (Canada lynx – *Lynx canadensis*; grizzly bear – *Ursus arctos horribilis*; and Ute ladies'-tresses – *Spiranthes diluvialis*), one Proposed Threatened species (whitebark pine – *Pinus albicaulis*), and one Candidate species (monarch butterfly – *Danaus plexippus*). No proposed or designated critical habitats associated with any listed species overlap with the project's area of influence. Each species identified is discussed in further detail below and the full IPaC report is included as Appendix A.

Canada lynx (Lynx canadensis)

Species Life History and Distribution

The Canada lynx (Lynx Canadensis) is a forest-dwelling cat native to northern latitudes. Canada lynx are highly adapted to moist, cool, boreal spruce-fir forest habitats where their large paws with attendant low foot-load ratio give them a hunting advantage in deep, powdery snow. Canada lynx are specifically associated with areas where this habitat type is occupied by snowshoe hare, the lynx's primary prey; Canada lynx are not well suited to other additional types of habitats where snowshoe hare are also found. Lynx populations cannot be sustained in more temperate forest type transition zones, as the species requires persistent deep, powdery snow through much of the year to limit predator competition for prey. This species is therefore likely

sensitive to climate change, and the southern boundary of its range may recede toward higher latitudes with warming temperatures. It is currently listed as Threatened (USFWS 2022a).

Occurrence in Action Area

According to data made public by the IDFG, Canada lynx observations in Teton County are limited to only a single verified incidental observation of a dead specimen which occurred in 1874, one "trusted" incidental observation of lynx tracks reported in 2007, and three "possible" observations reported in 1964 (live individual), 1992 (tracks), and 1993 (tracks) (IDFG 2022). Although it is possible individuals periodically move through the areas of the proposed projects, it is unlikely given the relatively low elevations of the two proposed project sites (approximately 1,830 meters at the Buxton streambank site and 1,950 meters at the Desert Canal project area) and the lack of suitable habitat for this species in either area.

Grizzly bear (Ursus arctos horribilis)

Species Life History and Distribution

Grizzly bears (Ursus arctos horribilis) are generally solitary, long-lived omnivores that may weigh up to 300 kilograms (males), which occupy individual but often overlapping home ranges of up to 2,800 square kilometers. Home ranges encompass a mosaic of numerous habitat types, related to the species' widely varied diet and opportunistic feeding behavior. Grizzlies require protein and carbohydrate intake that exceeds daily maintenance needs, as the species spends up to 6 months of the year in winter dens. Historically abundant, grizzly populations have substantially declined due to human-caused mortality and habitat alteration, particularly the cumulative effects of road construction associated with timber harvest, mining, recreation, and other forest uses. Habitat fragmentation and the potential for genetic isolation are among the biggest threats to this species. It is currently listed as Threatened (USFWS 2022b).

Occurrence in Action Area

According to data made public by the IDGF, there are no verified grizzly bear observations in Teton County. One "trusted" grizzly bear observation (live individual) was reported in 2000, and four "unreviewed" incidental observations have been reported in Teton County in 2011, 2012, 2015, and 2016 (IDFG 2022). Individuals may be present at or near the project sites when human activity is low.

Ute ladies'-tresses (Spiranthes diluvialis)

Species Life History and Distribution

The Ute ladies'-tresses (Spiranthes diluvialis) is a perennial plant species that occurs at low elevations in the moist soils of wet or mesic riparian meadows near springs, lakes, or perennial streams. This plant is a shade intolerant orchid that primarily occurs where co-occurring vegetation is relatively open and is known to establish on seasonally-flooded gravel bars and other riparian edges. It is also known to establish in previously heavily-disturbed sites (e.g., heavily grazed riparian edges or revegetated gravel pits). The Ute ladies'-tresses is highly susceptible to impacts from grazing, and may also be negatively affected by upstream pesticide and herbicide applications for both agricultural and noxious weed control, both directly through

exposure and indirectly through adverse impacts to the bumblebee, its primary pollinator (USFWS 2022c).

Occurrence in Action Area

Given the hydrologic profile and geographic locations, Ute ladies'-tresses may be present in both action areas. Reclamation biologists performed a survey of the action area in accordance with existing USFWS protocols (USFWS 1992) on August 11, 2022. The timing of the survey was selected based on concurrent flowering of the nearest known populations of Ute ladies'-tresses (on the South Fork of the Snake River). This survey found that due to elevation from the water table/xeric conditions in the upper portion of the Desert Canal site, lack of appropriate substrate access due to deep cobbles along the waterways, and dense graminoid coverage which would preclude new establishment of *Spiranthes diluvialis,* it is highly unlikely *Spiranthes diluvialis* are present or would be likely to become established at the Desert Canal site. The site history of ongoing heavy grazing use/trampling makes the presence or successful establishment of *Spiranthes diluvialis* highly unlikely at the Buxton Streambank site. No occurrences of this species were detected. The full survey documentation is included in Appendix A.

Whitebark pine (Pinus albicaulis)

Species Life History and Distribution

Whitebark pine (Pinus albucaulis) is a hardy conifer found at alpine treeline and subalpine elevations in western North America; in Idaho, the elevational distribution of this species is identified by U.S. Forest Service data as from 2,225 to 3,200 meters in elevation (USDA Forest Service 2022). It is a slow-growing, long-lived tree that often lives for 500 up to 1,000 years. It is considered a keystone species in western North America. A non-native disease, white pine blister rust, is the primary threat to the species, as well as the interaction of this disease with other threats (e.g., predation from the native mountain pine beetle, continuing environmental effects resulting from climate change that result in direct habitat loss and more favorable conditions for future recurrences of mountain pine beetle epidemics, etc.). Other threats include the effects of past fire suppression efforts which have increased the severity of wildfires. Climate models predict that suitable habitat for the species will precipitously decline in the next 100 years. It is currently proposed for listing as Endangered (USFWS 2022d).

Occurrence in Action Area

The project areas are significantly lower in elevation than the occupied range identified for this species in Idaho and do not contain suitable habitat for this species.

Monarch butterfly (Danaus plexippus)

Species Life History and Distribution

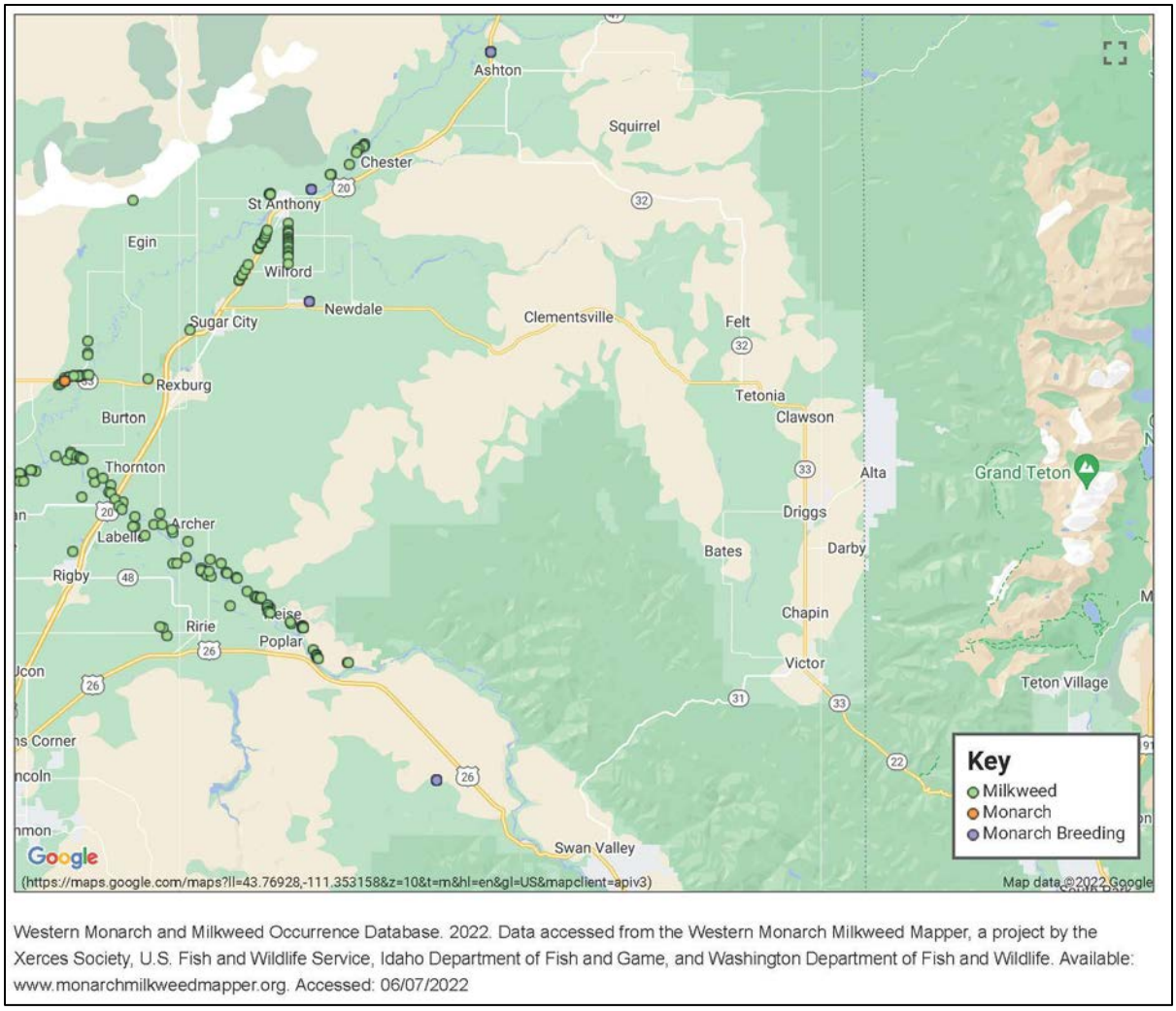
The monarch butterfly is a butterfly species that is globally distributed, with the North American populations being well-known for long-distance migration. They are obligate to their larval host plant, milkweed (primarily *Asclepias* spp., ten species of which occur in Idaho; USDA NRCS 2021), on which they lay eggs and larvae emerge in 2 to 5 days. Multiple generations of monarchs are produced in a breeding season; most individuals live approximately 2 to 5 weeks,

but overwintering adults enter reproductive diapause (suspended reproduction) and may live 6 to 9 months.

Migratory individuals in western North America generally fly shorter distances south and west to overwintering groves along the California coast into northern Baja California. In the spring in western North America, monarchs migrate north and east over multiple generations from coastal California toward the Rockies and to the Pacific Northwest. Adult monarch butterflies during breeding and migration require a diversity of blooming nectar resources, which they feed on throughout their migration routes and breeding grounds (spring through fall). Monarchs also need milkweed (for both oviposition and larval feeding) embedded within this diverse nectaring habitat. The correct phenology, or timing, of both monarch presence and nectar plants and milkweed is important for monarch survival. In western North America, nectar and milkweed resources are often associated with riparian corridors, and milkweed may function as the principal nectar source for monarchs in more arid regions (USFWS 2020).

Occurrence in Action Area

The interagency Western Monarch Milkweed Mapper (www.monarchmilkweedmapper.org) does not show documentation of milkweed in either project area (Figure 6). Currently, only positive detections are listed on the website. It is unknown if the lack of detections shown is due to a lack of surveys or to a lack of milkweed and monarchs in areas that have been surveyed. The monarch butterfly, as a candidate species, has not yet been proposed for listing. There are no requirements under Section 7 of the ESA for candidate species, but agencies are encouraged to take advantage of opportunities for conservation. No critical habitat has been designated for this species.



Western Monarch and Milkweed Occurrence Database. 2022. Data accessed from the Western Monarch Milkweed Mapper, a project by the Xerces Society, U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, and Washington Department of Fish and Wildlife. Available: www.monarchmilkweedmapper.org. Accessed: 06/07/2022

Figure 6. Map of documented monarch and milkweed occurrences nearest to the project sites, period of record 1900-present

3.3.2 Environmental Consequences

Alternative A – No Action

Under the No Action alternative, effects to Canada lynx, grizzly bear, and whitebark pine would continue to be minimal to nonexistent. Suitable habitat for these species would continue to be absent from either action area.

To the extent that milkweed and/or appropriate nectaring habitat for monarch butterflies exists in and adjacent to the project areas along the upper Teton River (Buxton) and the Desert Canal action areas, occupancy by this species would be unaffected by continued operation of the Desert Canal in its current state. If Ute ladies'-tresses, milkweed, and/or suitable nectaring habitat are present at either site, they would continue to experience the effects of ongoing grazing, including the beneficial effects of partial overstory removal, as well as detrimental

effects of grazing-related streambank degradation such as trampling, soil compaction, and habitat loss from small-scale hydrologic alteration.

Alternative B – Proposed Action

Under the Proposed Action, effects to Canada lynx, grizzly bear, and whitebark pine would continue to be minimal to nonexistent. Suitable habitat for these species would continue to be absent from either action area, and increased activity during the construction periods would not be expected to affect these species.

At the Desert Canal action area, there could be minimal, highly localized effects to vegetation during the installation of bypass piping and fish screen. This could cause short-term, small-scale disruption of monarch butterfly habitat use. Disturbed vegetation would be expected to re-seed or regenerate the following spring.

Disturbance at the Buxton action area could be more extensive due to the spatial extent of proposed planting activities. In the longer term, the stabilization activities to be performed at this site would provide an overall improvement to the quality and quantity of potential habitat for Ute ladies'-tresses. Disturbance via trampling to milkweed or monarch nectaring habitat, if present at this site, would be minimal in the context of the larger surrounding landscape, and would be temporary, as any trampled or disturbed vegetation would be expected to re-seed or re-generate in the following season. The expected seasonal timing of the proposed activities (likely very late summer to early fall) would also preclude impacts to monarch larvae, which would no longer be expected to be present at the site at that point in the year.

3.4 Water Quality

3.4.1 Affected Environment

The Teton River and South Leigh Creek are within the Teton River watershed. Their water quality is managed by the State of Idaho under the framework of the CWA. Idaho has established water quality standards for specific physical and chemical parameters to provide suitable conditions to support beneficial uses, including irrigation water supply, public water supply, recreation, and aquatic life (IDEQ 2008). The designated beneficial uses of Teton River and South Leigh Creek include cold water aquatic life, salmonid spawning, agricultural/ industrial water supply, aesthetics, primary and secondary contact recreation, and wildlife habitat (IDEQ 2020). The Teton River has an additional domestic water supply beneficial use.

Section 303(d) of the CWA requires states and Tribes to identify water bodies that do not meet water quality standards. The most recent approved 303(d) list is the 2018/2020 Integrated Report (IDEQ 2020). For lakes, rivers, and streams identified on this list, states and Tribes must develop water quality improvement plans known as total maximum daily loads (TMDLs). These TMDLs establish the amount of a pollutant a water body can carry and still meet water quality standards.

Idaho Department of Environmental Quality (IDEQ) has determined that the Teton River (15.72 miles) is not meeting the cold-water aquatic life and salmonid spawning criteria due to sediment/siltation, water temperature and physical substrate habitat alterations (IDEQ 2020). South Leigh Creek (9.7 miles) is not meeting cold water aquatic life and salmonid spawning criteria due to sediment/siltation (IDEQ 2020). The Teton River and South Leigh Creek were initially placed on the TMDL list for sediment/siltation on February 24, 2003. The Teton River was also listed for water temperature at that time.

Applicable Water Quality Standards

The water quality criteria (narrative and numeric) that protect the designated and existing beneficial uses for the Teton River and South Leigh Creek are discussed below.

Numeric water quality standards have been developed by IDEQ (2008) for temperature and turbidity, among other water quality properties:

- Water temperature standard
    - Cold water aquatic life
        - Maximum daily maximum temperature no greater than 22°C (71.6°F)
        - Maximum daily average temperature no greater than 19°C (66.2°F)
    - Salmonid spawning
        - Maximum daily maximum temperature no greater than 13°C (55.4°F)
        - Maximum daily average temperature no greater than 9°C (48.2°F)
- Turbidity standard
    - Cold water aquatic life
        - Turbidity below any applicable mixing zone shall not exceed background turbidity by more than 50 nephelometric turbidity units (NTU) instantaneously, or
        - More than 25 NTU for more than 10 consecutive days

The standards for sediment are narrative standards and state that the level of a pollutant cannot exceed quantities that impair beneficial uses (IDEQ 2008). Because these pollutants do not have numeric standards, surrogate numeric targets are often proposed in TMDLs or water quality assessments.

- Standard for excess sediment indicates that "sediment shall not exceed quantities which impair designated beneficial uses."

Teton River TMDLs

IDEQ bases the temperature TMDL on potential natural vegetation, an excess solar load from a lack of existing shade. Both temperature and sediment loads were updated in the 2016 TMDL 5-year review (IDEQ 2016).

- Temperature: The TMDL prescribes 27 percent load reductions required to meet the temperature standard. This would be accomplished by vegetation stream-shading.

- Sedimentation/Siltation: The TMDL prescribes 59 percent reduction from 934 tons/year sediment to 361 tons/year.

South Leigh Creek TMDL

Sedimentation/Siltation: The TMDL prescribes a 46 percent reduction in sediment loading rate from an estimated 15,228 tons/mile/year down to 8,269 tons/mile/year (IDEQ 2003).

3.4.2 Environmental Consequences

Alternative A – No Action

Effects to water quality would continue to follow the same patterns as those described in the Affected Environment section. Water quality in the Teton River and South Leigh Creek would continue to change based on anthropogenic and natural upstream watershed inputs, snowpack/precipitation events, and drought. Streambank erosion would continue to occur. However, through the TMDL process, water temperatures and sedimentation/siltation would slowly decrease (improve) due to implementation of BMPs to meet future TMDLs. These improvements could take decades to significantly affect the water quality.

Alternative B – Proposed Action

The water quality effects for the Teton River and South Leigh Creek are split into two categories: construction activities that are mostly short-term effects, and post-construction conditions that are mostly mid- to long-term effects.

Construction

Teton River construction effects include the increase disturbance of soil along the 1,500 feet of streambank during riparian planting. This could increase turbidity and sediment movement in the river. These effects would be short-term in nature and would be minimized by employing standard BMPs such as if/when using vehicles, keeping a distance from the river as not to create ruts or damage the streambank and ensuring any excess soil from plantings is removed to above the high-water line so that it cannot enter the river. Also, plantings would be done in drier seasons (after irrigation season), lessening the direct effects to the river. Idaho State water quality standards for turbidity (instantaneous and 10 consecutive days) and the sediment loading TMDL would not be violated during construction. No construction effects are expected on the grazing management and livestock watering BMPs within the riparian corridor.

South Leigh Creek construction effects include a minor increase in soil disturbance during pipe placement and possibly constructing/fitting the fish screen. This would be minor in disturbed area and unlikely to result in an appreciable sediment movement. This activity is unlikely to affect water quality relative to Idaho State water quality standards.

Post-Construction

Once the riparian vegetation is established and the planned grazing management has been implemented on the Teton River, it would likely not take longer than a growing season or two for riparian corridor improvement. The riparian plantings would begin to hold the soil together through their extensive root systems, increasing streambank stability at high flows and shading

the river; this would decrease overall water temperatures. The changes to grazing management would protect the riparian areas and decrease the likelihood of streambank and vegetation damage by livestock hoof impacts and herbivory.

Water quality effects would include an overall decrease in sediment/siltation load from the streambank. Water temperatures would be lowered due to shading from the riparian vegetation. These effects are in line with moving towards meeting the sediment and water temperature TMDLs.

There is a small risk of a sediment pulse if, when riparian plantings are first planted, there were a large storm event that caused a flood sufficient to wash out the new plantings. This could cause a pulse of sediment to enter the river, temporarily increasing turbidity and sedimentation in the localized area. However, the potential for this circumstance is decreased because plantings would be done in drier seasons (after irrigation season) and it is relatively rare to have those types of storm events in the mid- to late fall.

South Leigh Creek water quality effects would be the same as those described for Alternative A. No changes are proposed to South Leigh Creek that would affect water quality.

3.5 Cultural Resources

3.5.1 Affected Environment

Reclamation completed a record search with the Idaho State Historic Society (ISHS) on December 1, 2021 (File Search #22079). Only one historic site, 81-18033, a house located on Bates Road, was recorded within half a mile of either project. The house was determined not eligible for listing in the National Register of Historic Places (National Register) in 2017 and has since been demolished (Lindstedt 2021, pers. comm.). In addition, six cultural resources surveys have been completed within the same distance, but only the Attebery's Agricultural Landscapes Survey in 1986 covered the current areas of potential effect (APE). This survey does not mention any specific resources within the APE, only general categories over a large region. Plats from General Land Office (GLO) original surveys were examined for both areas. No historic features were present on the 1891 GLO for the Buxton area. However, a series of ditches and canals is marked on the 1906 GLO for T6N, R46E at the fish screen project area, including one labeled "CANAL" that likely represents the Hog Canal, which runs south of the fish screen project.

Cultural Resource Investigations

The APE was subject to an intensive pedestrian survey on December 2, 2021, by a Reclamation archaeologist. Transects were spaced less than 10 meters apart and included all areas of the APE including access and work areas at both project areas. Visibility ranged from 0 to 40 percent at the Desert Canal and 50 to 100 percent at Buxton streambank. Areas were photographed with a 16-megapixel camera and the Desert Canal was recorded on an Idaho Historic Sites Inventory Form as the Desert Ditch.

The survey covered both the Buxton and fish screen areas. Both areas have been subject to some form of agriculture and/or used as pasture for over 100 years and show disturbance related to those activities. No cultural resources were identified through either research or survey at the Buxton location. Based on aerial photographs, this area is part of the Teton River floodplain and previous routes of the river can be easily identified, reducing the likelihood for intact cultural resources. The fish screen area involves the Desert Ditch, a historic waterway dating to the late 19th century.

Desert Ditch

Water rights records exist dating back to 1889 for diversions off of South Leigh Creek via the Desert Ditch, but historic records are scarce. It is a privately-owned ditch likely dug in 1889 when the wave of European settlers came to the Teton Valley from around Salt Lake City. It is a short canal with headgates on South Leigh Creek. The portion of the Desert Ditch within the APE was dug and constructed between 2013 and 2015, when new headgates were installed further upstream from the historic diversion. The gates at the original location and first portion were then removed and filled in. A short stretch of abandoned canal between the original diversion and the junction of the old canal still exists outside of the current APE. It measured approximately 10 feet across and 3 feet deep. It is completely earthen in construction and views from aerial photographs show that it is lined with trees for the first mile or so. Modern references to the feature call it the Desert Canal; however, compared to other features of the same time period (like the Hog Canal to the south and Kilpack Canal to the north), it appears to be a minor irrigation feature. Consultation with the Idaho State Historic Preservation Office (SHPO) found the ditch to be not eligible for listing in the National Register.

3.5.2 Environmental Consequences

Alternative A – No Action and Alternative B – Proposed Action

There are no historic properties within the project area. Implementation of either alternative (Alternative A or B) would result in no historic properties affected.

3.6 Indian Sacred Sites

3.6.1 Affected Environment

Evidence of human occupation in southcentral Idaho dates as early as 14,500 years before the present (BP). The three major prehistoric cultural periods that have been identified for southeastern Idaho also apply to south central Idaho:

- Early Prehistoric Period (15,000 to 7,500 BP)
- Middle Prehistoric Period (7,400 to 1,300 BP)
- Late Prehistoric Period (1,300 to 150 BP)

These periods reflect a shift over time from a highly mobile lifestyle involving hunting and gathering (such as seeds, roots, mammals, and fish) to reduced mobility and intensified use of certain highly productive resources (such as camas and salmon). The APE is within the Snake River Basin, which was traditionally used by the Shoshone and Bannock Tribes for gathering plants for food and medicine, hunting, fishing, trading, and for ceremonial purposes.

The Shoshone and Bannock Tribes of the Fort Hall Reservation, Idaho, represent two linguistically distinct populations of people. The length of time these Tribes have occupied southern Idaho is a subject of long-standing debate among scholars. Subsistence practices and lifestyles were similar to other Great Basin cultural groups. Because the environment could not sustain large populations, people moved from one resource to the next, relying on a wide variety of resources, including roots, berries, nuts, marmots, squirrels, rabbits, insects, large game, and fish. By the time of the earliest Euroamerican contact in the early 1800s, the Shoshone and Bannock Tribes had acquired horses, making it easier to procure bison and other resources and to trade.

These two Native American groups inhabited eastern Idaho prior to immigration by Europeans in the nineteenth century. The Bannocks, a Northern Paiute speaking people, migrated from Oregon to the area of the Snake River plains. They differed from other Northern Paiutes in their acquisition of horses and organized buffalo hunts. The Bannocks co-existed peacefully in Idaho with area Northern Shoshone. The Northern Shoshone were made up of several Shoshone groups who occupied the Snake River Plain and the northeast of the Great Basin. The region's native grasses supported buffalo, hunted by both Native American groups, in the upper Snake River plains until about 1840. Fish also contributed largely to both groups' subsistence. Members of these Tribes were primarily relocated to the Fort Hall Indian Reservation in Idaho in the 1960s with some also being placed at the Wind River Reservation in Wyoming.

No known Indian Sacred Sites are within or near the project area.

3.6.2 Environmental Consequences

Alternative A – No Action and Alternative B – Proposed Action

No Indian Sacred Sites have been identified in or near the project area. Implementation of either alternative (Alternative A or B) would have no effect on Indian Sacred Sites.

3.7 Tribal Interests

3.7.1 Indian Trust Assets

Indian Trust Assets (ITA) are legal interests in property held in trust by the United States for Indian Tribes or individual Indian trust landowners. ITAs include trust lands, natural resources, trust funds, or other assets held by the federal government in trust. An Indian trust asset has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. Treaty-reserved rights, for instance, fishing, hunting, and gathering rights on and off reservation, are usufructuary rights that do not meet the Department of Interior (DOI) definition of an ITA (a usufruct is the

legal right to use and derive profit or benefit from property that belongs to another person). The United States does not own or otherwise hold these resources in trust. ITAs do not normally include usufructuary rights alone (i.e., rights to access for hunting or fishing). Rather, they require first a possessory interest; that is, the asset must be held or owned by the federal government as trustee.

The DOI requires that all impacts to trust assets, even those considered nonsignificant, must be discussed in a trust analysis in NEPA documents and appropriate compensation and/or mitigation implemented. Additionally, Reclamation's NEPA Handbook (2012) recommends a separate ITA section in all NEPA documents. These sections should be prepared in consultation with potentially affected Tribal and other trust beneficiaries.

Affected Environment

No Indian trust land assets were identified in the Proposed Action area or staging areas during the scoping process, such as those held in trust by the Bureau of Indian Affairs for the benefit of Tribes or individual Indian trust landowners. As part of the scoping process, Reclamation researched Tessel, a federal geographic information system (GIS) land database (Figure 7) that includes federal lands held in trust for Tribes and individual Indian trust landowners. This research indicated there are no Indian trust land assets in the Proposed Action area or staging areas.

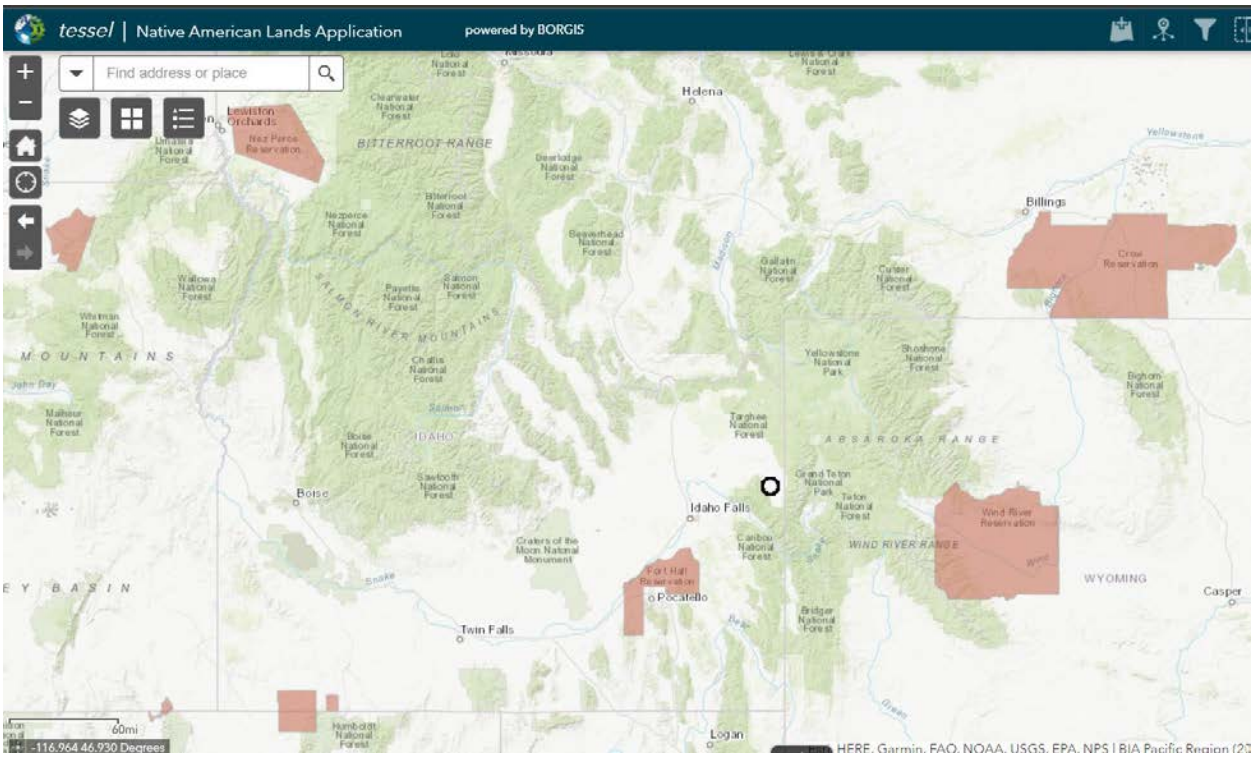


Figure 7. Tessel GIS image that includes federal lands held in trust for Tribes and individual Indian trust landowners in proximity to the project locations

ITAs in the closest proximity to the Proposed Action area are the Fort Hall Reservation occupied by the Shoshone-Bannock Tribes, which is situated approximately 53 miles southwest

of the Proposed Action area. The Shoshone-Bannock Tribes have an on-reservation water right in the portion of the Snake River basin upstream from Hells Canyon Dam, the furthest downstream of the three dams authorized as Federal Energy Regulatory Commission Project No. 1971 (Fort Hall Indian Water Rights Act of 1990; 104 Stat 3059 (1990)). Additionally, the Shoshone-Bannock Tribes have water storage rights in Palisades Reservoir and American Falls Reservoir, which are reserved under the Michaud Flats Project for irrigation in the State of Idaho (68 Stat. 741 at 1027 (1954)).

ITAs in the second-closest proximity to the Proposed Action area are the Wind River Indian Reservation occupied by the Eastern Shoshone and the Northern Arapaho Tribes, which is situated approximately 88 miles east of the Proposed Action area.

The Nez Perce Reservation, occupied by the Nez Perce Tribe, is situated approximately 283 miles northwest of the Proposed Action area. The Nez Perce Tribe has a water right in the Snake River basin as described in the Snake River Basin Adjudication, Case No. 39576, paragraph 3 of the Commencement Order issued by the Snake River Basin Adjudication Court on November 19, 1987 (118 Stat. 3433 (2004)).

Environmental Consequences

Alternative A – No Action

Under the No Action alternative, Reclamation would not fulfill the WaterSMART grant that is designed to support FTR completing two watershed management projects. Existing short-term or long-term effects, either beneficial or adverse, or effects on public health and safety in relationship to nearby ITAs would remain unchanged.

Alternative B – Proposed Action

Under Alternative B, the Proposed Action, Reclamation proposes to provide funding through a WaterSMART grant for FTR to perform the two identified watershed management projects. If the Proposed Action occurs, there are no known beneficial or adverse effects to ITAs.

Reclamation requested information from the Shoshone-Paiute Tribes of the Duck Valley Reservation, the Shoshone-Bannock Tribes of the Fort Hall Reservation, the Northwestern Band of the Shoshone Indians, and the Eastern Shoshone Tribe who traditionally or currently use the area under their reserved treaty rights; however, no responses were received. The lack of specific information about the area is not indicative of a lack of importance to Tribes. With no specific responses, Reclamation assumes that there would be no adverse effects to ITAs, such as adverse impacts to water, water rights, or land held in trust for the Tribes.

3.7.2 Treaty Rights

Affected Environment

The United States has a fiduciary responsibility to protect and maintain rights reserved by Indian Tribes or Indian individuals by treaties, statues, executive orders, and allotments. These rights are sometimes further interpreted through court decisions and regulations.

The Proposed Action area is surrounded by areas historically used by many Tribes. Treaty Rights at issue here are access and impacts to off-reservation hunting, fishing, gathering rights, livestock grazing rights, and cultural or ceremonial use rights. Although the Proposed Action area may include federally-owned property, courts have ruled that members of federally-recognized Tribes with reserved treaty rights have the right to cross private or state lands in order to gain access to treaty areas (United States v. Winans, 1905).

The Shoshone-Bannock Tribes of the Fort Hall Reservation are federally recognized Tribes in southeast Idaho, situated approximately 53 miles southwest of the Proposed Action area. The Wind River Indian Reservation, occupied by the Eastern Shoshone and the Northern Arapaho Tribes, is situated approximately 88 miles east of the Proposed Action area. On July 3, 1868, the Fort Bridger Treaty was signed and agreed to by the eastern and western bands of the Northern Shoshone and the Bannock (or Northern Paiute Bands). Article IV of the treaty states that members of the Shoshone-Bannock Tribes '…shall have the right to hunt on the unoccupied lands of the United States…' Courts interpreted this to mean "unoccupied federal lands."

In the case of *State of Idaho v. Tinno*, an off-reservation fishing case in Idaho, the Idaho Supreme Court interpreted the Fort Bridger Treaty of the Shoshone-Bannock Tribes. The Court determined that the Shoshone word for 'hunt' also included to 'fish.' Under Tinno, the Court affirmed the Tribal Members' right to take fish off-reservation pursuant to the Fort Bridger Treaty. The Court also recognizes, "that treaty Indians have subsistence and cultural interests in hunting and fishing…" and "The Fort Bridger Treaty … contains a unified hunting and fishing right, which…is unequivocal." The treaty did not grant a hunting, fishing, or gathering right, it reserved a right the Shoshone-Bannock Tribes have always exercised.

The Shoshone-Paiute Tribes of the Duck Valley Reservation are federally recognized Tribes in southern Idaho and northern Nevada, situated approximately 257 miles southwest of the Proposed Action area. The reservation was established by executive orders dated April 16, 1877; May 4, 1886; and July 1, 1910. The Shoshone-Paiute sometimes claim the interests of the Tribes that are reflected in the Bruneau, Boise, Fort Bridger, Box Elder, Ruby Valley, and other treaties and executive orders that the Tribes' ancestors agreed to with the United States. The Tribes continue to observe these treaties and executive orders in good faith; however, the Federal Government did not ratify treaties that reserved off-reservation hunting and fishing rights. The Tribes assert they have aboriginal title and rights to those areas. All such treaties and executive orders recognize the need for the Tribes to continue to have access to off-reservation resources because most of the reservations established were and continue to be incapable of sustaining tribal populations. This need continues and has not diminished from the time of the first treaties and executive orders that established the Duck Valley Reservation (Cherokee Nation of Oklahoma and Shoshone-Paiute Tribes of the Duck Valley Reservation v. Leavitt, 2005).

The Northwestern Band of the Shoshone Indians, a federally recognized Tribe located near Washakie, Utah, is situated approximately 135 miles southwest of the Proposed Action area. The Tribe maintains reserved treaty-protected hunting, fishing, and gathering rights, also pursuant to the 1868 Treaty of Fort Bridger. As noted above, these reserved rights may be exercised on unoccupied lands within the area acquired by the United States.

The Nez Perce Tribe of the Nez Perce Reservation are a federally recognized Tribe in northern Idaho, situated approximately 283 miles northwest of the Proposed Action area. The United States and the Tribe entered into three treaties (Treaty of 1855, Treaty of 1863, and Treaty of 1868) and one agreement (Agreement of 1893). The rights of the Nez Perce Tribe include the right to hunt, gather, and graze livestock on open and unclaimed lands, and to fish in all usual and accustomed places.

The Northern Arapaho of the Wind River Reservation are a federally recognized Tribe located in central Wyoming, situated approximately 88 miles east of the Proposed Action area. The United States and the Northern Arapaho entered into the Fort Laramie Treaty of 1851 (Horse Creek Treaty), which reserved the right of the Northern Arapaho "to roam and hunt while game shall be found in sufficient quantities to justify the chase."

Environmental Consequences

The United States Supreme Court has ruled that treaties with Indian Tribes are to be construed liberally in favor of Tribes, as the Tribes would have understood the language of the treaty at the time the treaty was signed. It is likely that the ratified or unratified treaties listed above include areas surrounding 6 miles west of Driggs and 5 miles east of Tetonia, Idaho, the Proposed Action area.

Alternative A – No Action

Under the No Action alternative, Reclamation would not fulfill the WaterSMART grant that is designed to support FTR completing two watershed management projects. There would be no short-term or long-term effects, either beneficial or adverse to existing reserved treaty rights for Tribal hunting, fishing, or gathering in traditional or customary places or for livestock grazing in the area.

Alternative B – Proposed Action

Under Alternative B, there are anticipated beneficial long-term effects to reserved treaty rights, such as access to or impacts to traditional or customary places for hunting, fishing, or gathering, or for livestock grazing in the area. The anticipated benefit of the stabilizing a riparian buffer along 1,500 linear feet of streambank habitat is to help address TMDL exceedances for sediment and temperature in the Teton River, while constructing a corrugated fish screen to move fish into parallel-running Leigh Creek eliminates entrapment and mortality of YCT in the canal.

The proposed project construction ingress and egress routes may cause a temporary, short-term adverse effect on access to traditional or customary hunting, fishing, or gathering sites, or for livestock grazing areas during the construction periods.

Reclamation requested information from the Shoshone-Paiute Tribes of the Duck Valley Reservation, the Shoshone-Bannock Tribes of the Fort Hall Reservation, the Northwestern Band of the Shoshone Indians, and the Eastern Shoshone Tribe, who traditionally and currently use the area for hunting, fishing, and gathering of plants; however, no responses were received. The lack of specific information about the area is not indicative of a lack of importance to Tribes. With no specific response, Reclamation assumes that there would be no adverse effects

to reserved treaty rights, such as access or impacts to areas for hunting, fishing, or gathering, or for livestock grazing.

Mitigation efforts may be required to reduce the effects of construction ingress and egress on Tribal access to hunting, fishing, or gathering should construction ingress and egress activity take place in the same location and at the same time of year as traditional or customary hunting, fishing, and gathering of plants, or for livestock grazing. If this were to occur, Reclamation would meet with Tribes to formulate an appropriate mitigation measure before construction occurs.

3.8 Environmental Justice

Executive Order 12898 (59 FR 7629) requires each federal agency to achieve environmental justice by addressing disproportionately high and adverse human health and environmental effects on minority and low-income populations. The demographics of the action area are examined to determine whether minority populations, low-income populations, and/or Native American Tribes are present in the area impacted by a proposed action. If present, the agency must determine if implementation of the proposed action would cause disproportionately high and adverse human health or environmental effects on the populations.

3.8.1 Affected Environment

Racial Minorities

The project construction areas are located in Teton County. The general proportions of race and ethnicity in Teton County are similar to Idaho as a whole, with a white population of more than 96 percent according to the Census Bureau's 2016-2020 American Community Survey (Table 5).

Table 5. 2021 Summary of racial and ethnic minority distribution in Idaho and Teton County (U.S. Census Bureau 2021)

Race or Ethnicity	Idaho	Teton County
White	93.0%	96.6%
Black or African American	0.9%	0.5%
Asian	1.6%	0.6%
Native Hawaiian and Other Pacific Islander	0.2%	0.2%
American Indian and Alaska Native	1.7%	0.9%
Two or More Races	2.6%	1.4%
Hispanic or Latino (any race)[1]	12.8%	16.7%

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

Low-Income Populations

Low-income populations are identified by several socioeconomic characteristics. As categorized by the 2020 Census, specific characteristics include income (median family and per capita), percentage of population below poverty (individuals), and unemployment rates. The Census Bureau's 2016- 2020 American Community Survey shows a slightly higher median household income of $73,274 for Teton County than the $58,915 value for Idaho (U.S. Census Bureau 2022). The Census Bureau reported that about 7.4 percent of the population of Teton County and 10.1 percent of the state of Idaho's population were living in poverty in 2021 (U.S. Census Bureau 2022). Relevant information is shown in Table 6.

Table 6. 2021 Income and poverty status and 2021 unemployment status for Teton County and the State of Idaho

Description	Idaho	Teton County
Median household income (in 2020 dollars), 2016-2020	$58,915	$73,274
Per capita income in past 12 months (in 2020 dollars), 2016-2020	$29,494	$34,905
Persons in poverty, percent	10.1%	7.4%
Persons unemployed (2021), percent	2.8%	2.7%

Other measures of low income, such as unemployment, characterize demographic data in relation to environmental justice. The 1.2 percent unemployed value for Teton County is slightly lower than the State of Idaho's 2.6 percent unemployed (Idaho Dept. of Labor 2022).

3.8.2 Environmental Consequences

Alternative A – No Action

The No Action alternative would not alter the current regional environmental justice status based on the lack of action occurring and the information presented above, and therefore would have no environmental justice effects.

Alternative B – Proposed Action

No minority or low-income groups, as identified for further analysis by EO 12898, were identified that would be disproportionately affected by health or environmental effects as the result of the implementation of the Proposed Action. Because the activities associated with the Proposed Action are small, localized actions with relatively unpopulated areas of effect, there would be no significant effect to the greater area's low-income or minority populations.

3.9 Recreation

3.9.1 Affected Environment

The Buxton project reach is located just downstream of the Bates Bridge and on the west side of the Teton River from the newly formed Buxton River Park. The 80-acre Buxton River Park property on the east side of the river is owned by Teton County, Idaho with 42-acres placed in a conservation easement. This has become one of the most popular access points for the public. The river here offers excellent fishing opportunities and is often floated by recreational fishers. With the recent surge in outdoor recreation, this stretch of river has seen a dramatic increase in recreational leisure floaters utilizing kayaks, tubes, and standup paddle boards to enjoy the slow-flowing waters in this area. The west side of the river is grazed ranchland and is experiencing overutilized pasture and range land in the form of unsustainable cattle grazing which is causing damage and destabilization along the streambanks. Historical agricultural and grazing practices have also led to impaired water quality and degraded fish and wildlife habitat that are affecting the recreational quality of the river.

The Desert Canal project area is located on South Leigh Creek, a tributary to the Teton River. The South Leigh Creek headwaters are on the western slope of the Teton Mountains in Wyoming. South Leigh Creek is used as spawning habitat by YCT and is parallel to the Desert Canal, yet no connectivity currently exists between the creek and the canal. The Desert Canal has been observed to entrap multiple fish species including YCT. The lack of fish screen and by-pass piping in the Desert Canal means YCT can make it past the canal diversion but then cannot access spawning habitats in South Leigh Creek from the Desert Canal. The Desert Canal action area falls within private property boundaries and offers very little, if any, public recreation access.

3.9.2 Environmental Consequences

Alternative A – No Action

Under the No Action alternative, recreators of all types accessing the Teton River from the Buxton River Park would experience further bank degradation and continued poor water quality due to existing conditions in this stretch of river (see Water Quality, Section 3.4). Bank degradation detracts from the visual appeal of the area, both on the bank and with sediment-filled water. Muddy water is not only less visually appealing than the clear water of the stream but can affect fishing conditions in a negative way.

With no work done at the Desert Canal area, YCT spawning grounds on South Leigh Creek would continue to be inaccessible to a population of fish in need. With fewer returns of YCT to the Teton River, recreational fishers can expect to experience diminishing fish populations and fewer recreation opportunities in the Teton River.

Alternative B – Proposed Action

With the Proposed Action, recreators utilizing the Teton River from the Buxton River Park may experience minimal visual resources disruption for a small window of time while the restoration work was being performed. The time frames and the physical size of the project would result in

very small disruptions and minimal impacts. As bank restoration progressed, the visual resource of the area would improve along that section of the streambank and water quality increases would benefit recreation on the river. Informational signage for the public would be used to explain the project, its partners, the process, and the planned benefits. No significant impacts to overall recreation are projected.

The Desert Canal area has little to no recreational value as public access is extremely limited. The Proposed Action would create benefits for recreationists on the Teton River through better fish recruitment with improved access for YCT spawning. Physical construction in the action area would have little or no foreseen impacts to recreation in the area.

Chapter 4 Consultation and Coordination

On March 25, 2022, Reclamation mailed a scoping document including a letter, project information, and a map, to agencies, Indian Tribes, members of Congress, organizations, and individuals, soliciting their help in identifying any issues and concerns related to the Proposed Action. Reclamation received one comment during the scoping period. The mailing list, scoping letters, and comments received are presented in Appendix C.

4.1 Agency Consultation and Coordination

4.1.1 National Historic Preservation Act

Reclamation initiated consultation with the Idaho SHPO on March 4, 2022. SHPO concurrence with Reclamation's finding of No Effect to Historic Properties for the action area was received on March 23, 2022.

4.1.2 Endangered Species Act

Reclamation generated a preliminary endangered species report through the USFWS IPaC site (Appendix A). The report indicated that five species are expected to be present in the action area for the proposed project: three listed (Threatened) species (Canada lynx (*Lynx canadensis),* grizzly bear (*Ursus arctos horribilis),* and Ute ladies'-tresses (*Spiranthes diluvialis),* one Proposed Threatened species (whitebark pine (*Pinus albicaulis*)), and one Candidate species (monarch butterfly (*Danaus plexippus*)). Since the Proposed Action would not adversely affect any listed species, no need exists for formal Section 7 consultation under the ESA.

4.2 Tribal Consultation and Coordination

Reclamation mailed scoping letters to the Shoshone-Bannock Tribes, Shoshone-Paiute Tribes, and Eastern Shoshone Tribe on March 18, 2022, and to the Northwestern Band of the Shoshone Nation Tribe on April 14, 2022 (Appendix C). No responses or concerns from the Tribes were brought forward during the scoping period.

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U.S. Census Bureau 2022	U.S. Census Bureau (USCB). 2022. *Quickfacts, Teton County, Idaho*. Available online at: https://www.census.gov/quickfacts/fact/table/ID,tetoncountyidaho/PST045221 (last accessed April 12, 2022).
USDA Forest Service 2022	USDA Forest Service. 2022. *High Elevation White Pines: Distribution by State*. Available online at: https://www.fs.fed.us/rm/highelevationwhitepines/About/dist.htm (last accessed June 2022).
USDA NRCS 2021	USDA Natural Resources Conservation Service (NRCS). 2021. *Plants Database*. Available online at: https://plants.usda.gov/home/basicSearchResults?resultId=99aa23cb-9682-4cb1-8832-ed5e6fa78075 (last accessed June 2022).

Text Citation	Bibliographic Reference
USFWS 2006	U.S. Fish and Wildlife Service (USFWS). 2006. *Mountain-Prairie Region Endangered Species Program*. Available online at: http://mountain-prairie.fws.gov/endspp/fish/yct (retrieved May 1, 2006).
USFWS 2020	U.S. Fish and Wildlife Service. 2020. *Monarch (Danaus plexippus) Species Status Assessment Report. V2.1*. 96 pp plus appendices. Available online at https://www.fws.gov/savethemonarch/pdfs/Monarch-SSA-report.pdf (last accessed June 2022).
USFWS 2022a	U.S. Fish and Wildlife Service. 2022. *Environmental Conservation Online System Species Profile*. Available online at: http://ecos.fws.gov/ecp0/profile/speciesProfile.action?spcode=A073 (last accessed June 2022).
USFWS 2022b	U.S. Fish and Wildlife Service. 2022. *Environmental Conservation Online System Species Profile*. Available online at: http://ecos.fws.gov/ecp0/profile/speciesProfile?sId=7642 (last accessed June 2022).
USFWS 2022c	U.S. Fish and Wildlife Service. 2022. *Environmental Conservation Online System Species Profile*. Available online at: http://ecos.fws.gov/ecp0/profile/speciesProfile.action?spcode=Q2WA (last accessed June 2022).
USFWS 2022d	U.S. Fish and Wildlife Service. 2022. Environmental Conservation Online System Species Profile. Available online at: https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=1748 (last accessed June 2022).

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Appendices

Appendix A – Information for Planning and Conservation (IPaC) Report

Appendix B – Cultural Resources and Sacred Sites Consultation with State Historic Preservation Office and Shoshone-Bannock Tribes

Appendix C – Scoping Documents, Mailing List, and Scoping Comments Received

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Appendix A

Information for Planning and Conservation Report

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IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area.

However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS offce(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Teton County, Idaho

Map of project location

Local office

Idaho Fish And Wildlife Offce

- (208) 378-5243
- (208) 378-5262

1387 South Vinnell Way, Suite 368
Boise, ID 83709-1657

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local offce and a species list which fulfills this requirement can **only** be obtained by requesting an offcial species list from either the Regulatory Review section in IPaC (see directions below) or from the local field offce directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an offcial species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an offce of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME STATUS

Canada Lynx Lynx canadensis Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/3652

Grizzly Bear Ursus arctos horribilis Threatened

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/7642

Insects

NAME STATUS

Monarch Butterfly Danaus plexippus Candidate

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Flowering Plants

NAME STATUS

Ute Ladies'-tresses Spiranthes diluvialis Threatened

Wherever found

No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2159

Conifers and Cycads

NAME STATUS

Whitebark Pine Pinus albicaulis Proposed Threatened

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1748

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

The Migratory Birds Treaty Act of 1918.

The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take- migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation- measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Black Rosy-finch *Leucosticte atrata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9460	Breeds Jun 15 to Aug 31
Black Tern *Chlidonias niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31

Cassin's Finch Carpodacus cassinii — Breeds May 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9462

Evening Grosbeak Coccothraustes vespertinus — Breeds May 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Franklin's Gull Leucophaeus pipixcan — Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

Long-eared Owl asio otus — Breeds Mar 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3631

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Rufous Hummingbird selasphorus rufus — Breeds Apr 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

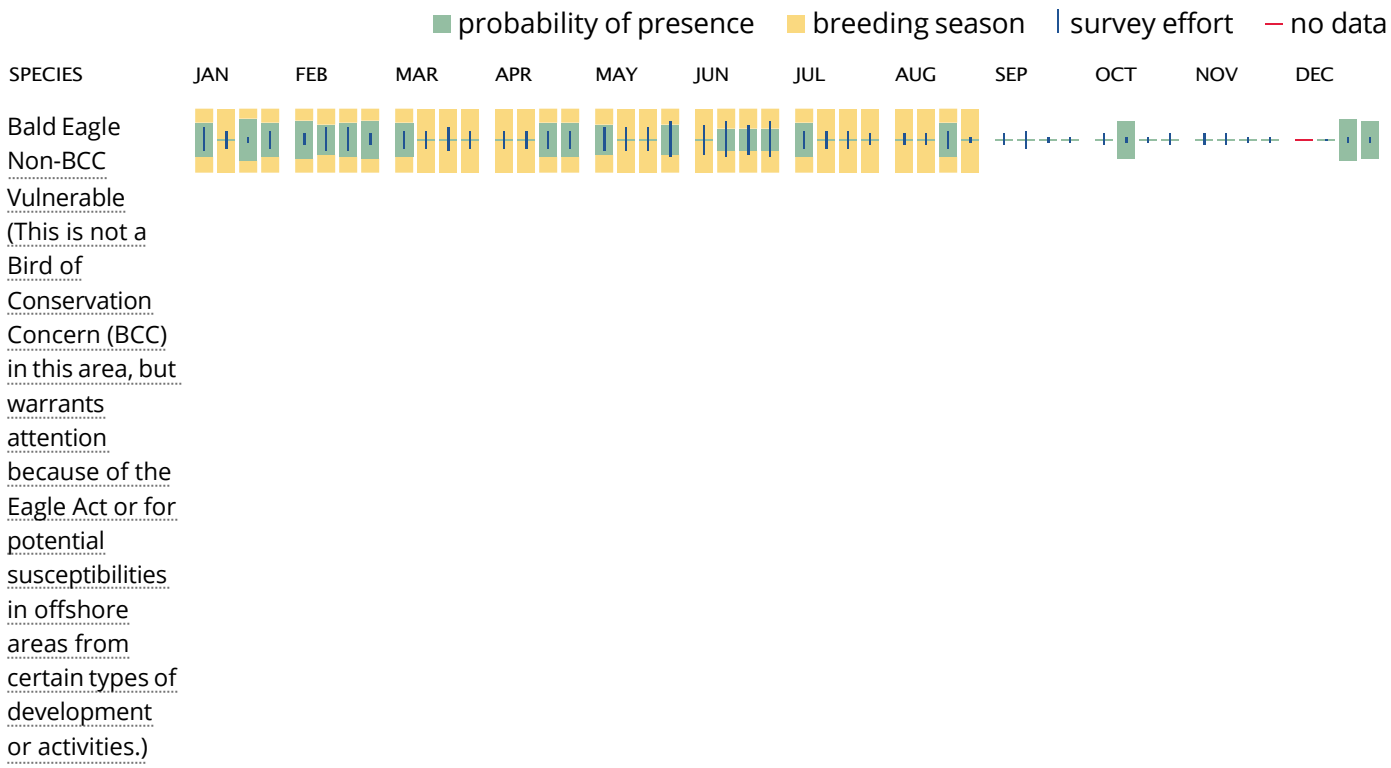
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data

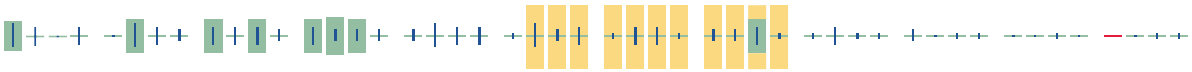
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

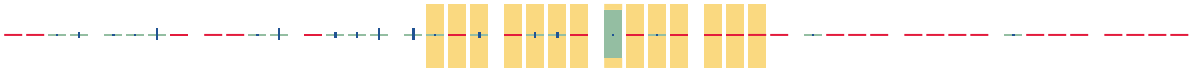
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



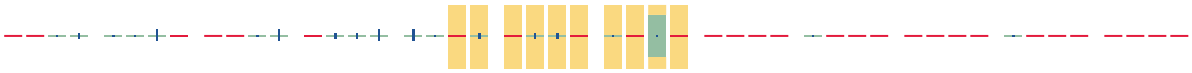
Black Rosy-finch BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



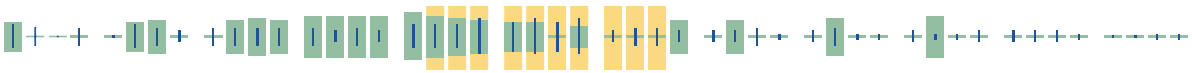
Black Tern BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



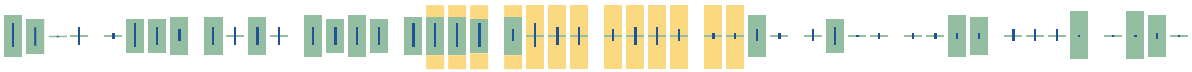
Bobolink BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



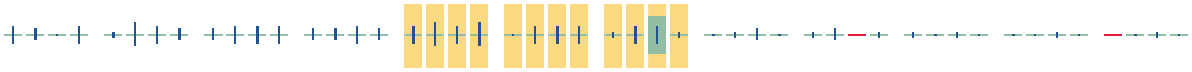
Cassin's Finch BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



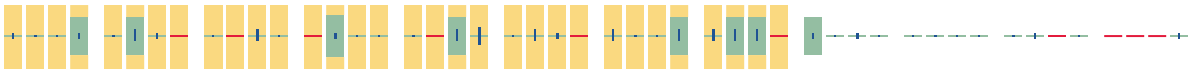
Evening Grosbeak BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Franklin's Gull BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

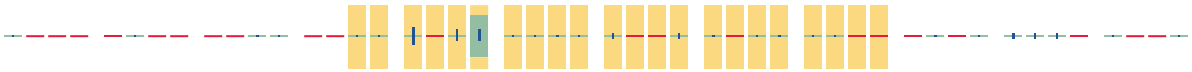


Golden Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

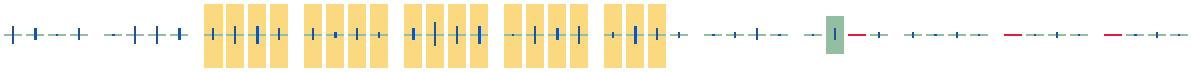


Lesser Yellowlegs BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

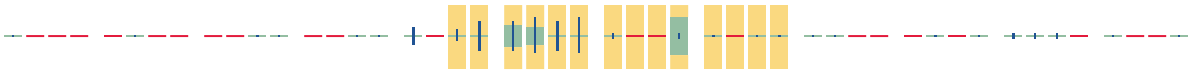
Lewis's Woodpecker BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Long-eared Owl BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

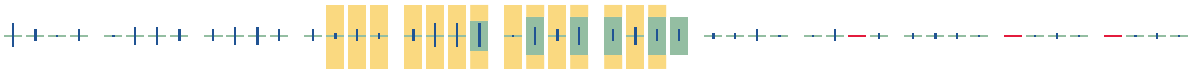


Olive-sided Flycatcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Rufous Hummingbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Willet BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.
Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.
The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.
Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .
Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.
Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Offce or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the offcial CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an offcial determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be

subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Buxton Streambank Restoration and Desert Canal Fish Screen Project: Survey Report for *Spiranthes diluvialis*

A. Surveyors:

Rochelle Ochoa-Natural Resources Specialist

- Training with known *Spiranthes diluvialis* experts (Edna Rey-Vizgerdas, Reclamation 2019)
- Herbaria visit
- Conversations with others familiar with species

Amy Goodrich-Natural Resources Specialist

- Training with known *Spiranthes diluvialis* experts (Edna Rey-Vizgerdas, Reclamation 2019)
- Degree: M.S. in Rangeland Ecosystem Science
- Conversations with others familiar with species
- Site visit with others familiar with species
- Documentation of correct identification of *Spiranthes diluvialis* in the field (USFS 2019) (Section F-Figure 2)
- Herbaria visit

B. Project Descriptions: Reclamation proposes to provide funding through a WaterSMART grant for FTR to perform two watershed management projects, both occurring within Teton County in southeastern Idaho. These management projects are part of the *Teton Watershed User Association: Watershed Restoration Plan* which aims to address a suite of watershed management issues, including water quality and water quantity issues for fish and wildlife, agricultural and recreational use, and management issues that specifically impact Yellowstone cutthroat trout.

a. Buxton Streambank: The first action is located on the streambanks of Buxton River Park and includes stabilizing a riparian buffer along 1,500 linear feet of streambank habitat on the upper Teton River approximately 6 miles west of Driggs, Idaho. Friends of the Teton River would work with a local rancher on private land to accomplish the stabilization through willow planting as well as implementation of recommended grazing management and livestock watering best management practices within the riparian corridor. This would help address Total Maximum Daily Load exceedances for sediment and temperature in the Teton River.

Each hole for willow clumps would be dug out to a volume of 1 cubic yard and spaced 5 feet apart along the bank; approximately 300 willow clumps would be placed in every hole. Additionally, brush trenches would be dug to plant willow poles every 20 feet, then backfilled. These trenches would be 6 feet deep and 6 feet long. Containerized native plantings would be placed within trenches as well. All new plants would be fenced to improve establishment in the first few years. All work would be completed above the high-water mark and out of the stream channel itself. Signage with useful information about the Buxton project, including the action description, goals, and

timelines, would be posted at public access sites above and below the project area prior to project initiation and would remain in place through project completion.

b. Desert Canal: Friends of the Teton River would work with irrigators on the Desert Canal approximately 5 miles east of Tetonia, Idaho to construct a corrugated fish screen to move fish into parallel-running Leigh Creek. This would eliminate entrapment and mortality of Yellowstone cutthroat trout in the canal. Friend of the Teton River would place a bypass pipe at the installed fish screen, connecting Desert Canal and Leigh Creek. This would provide 11 miles of connectivity for Yellowstone cutthroat trout to complete their life cycle in this high-priority spawning tributary and source population of native trout for the Teton River. This action would also provide improvements to canal infrastructure and reliable delivery of irrigation water

   A track hoe and trucking equipment would access the project site by the existing road access to the project site. The installation of the fish screen structure would consist of building the screen structure (a concrete and steel "box") on the irrigation ditch itself. A 6-foot-deep trench would be dug to lay an 8-inch pipe that is approximately 62 feet long. The pipe would return any trout to the natural creek. Once excavation was complete, disturbances would be backfilled and native grass seed would be spread.

C. Date and times surveys were conducted: Both surveys were conducted on August 11, 2022. Buxton Streambank was surveyed from approximately 11:15 am to 11:50 am; Desert Canal was surveyed from 10 am until 10:45 am.

D. Ecological and site features:

a. **Buxton Streambank**: The site is adjacent to a large, grazed field with a slow-moving tributary splitting the site in two equal halves. Both halves are vegetated with the same general plant community; dominant observed species are listed below (Table 1). The grazed field is sloped slightly, with the lower elevation portion showing evidence of having been previously/seasonally wetted, with a high incidence of animal prints (likely dogs and cattle) disturbing otherwise sparsely vegetated dried mud. Previously transplanted, heavily browsed willows are evident along the banks of the river, standing approximately 12 feet tall and spaced approximately 25 feet apart. Along the river edge, willow branch bundles are tethered together and laid horizontally with stakes every 10 feet to secure them in place (Figure 1). Newly sprouted and recently browsed new growth appears uniformly along the bundles.

Table 1. Dominant vegetation species observed at the Buxton Streambank site

Common Name	**Genus/Species**
Silver cinquefoil	*Potentilla anserina*
Aster sp.	*Aster sp.*
Iris sp.	*Iris sp.*

Common yarrow	*Achillea mllefolium*
Goldenrod sp.	*Solidago sp.*
Creeping (Canada) thistle	*Cirsium arvense*
Wild mint	*Mentha arvensis*
Common wheat	*Triticum aestivum*
Timothygrass	*Phleum sp.*
Bentgrass sp.	*Agrostis sp.*
Willow sp.	*Salix sp.*

Figure 1. Buxton Streambank site taken from the west side of the Teton River, facing downstream. Older, heavily browsed previous willow plantings and bundled willow stakes at the water's edge visible. Significant portions of the site near the water have no vegetative cover and show signs of heavy use by cattle.

b. **Desert Canal**: This site is adjacent to a large agricultural hay field and grazed area. A concrete head gate diverts Desert Canal from South Leigh Creek (Figure 2), creating a tapering divergence ranging from a few feet wide to approximately 80+ feet wide at the end of the site. The majority of the area has undergone a history of disturbance and is composed of medium sized road cobble that was transported and deposited approximately six years ago (Brightman 2022, pers. Comm.). The cobble along the bank of both the canal and South Leigh Creek comprises a steeply slanted 4 feet drop from flat ground to the water, with little to no interstitial soil (Figure 3). The tapering divergence between South Leigh Creek and Desert Canal is covered by a predominantly

riparian vegetation assembly, while the land between Desert Canal and the adjacent hay field is more predominantly covered with upland species (full site species list below in Table 2). A two-track path extends down from the main road (River Edge Ln.) between Desert Canal and the hay field to the south for approximately one mile. A few exclosures constructed of plastic fencing surround previously planted vegetation between Desert Canal and the hay field to the south.

Table 2. Dominant vegetation species observed at Desert Canal site

Common Name	**Genus/Species**
Smooth Brome	*Bromus inermis*
Orchard Grass	*Dactylis glomerata*
Cheatgrass	*Bromus tectorum*
Common wheat	*Triticum aestivum*
Common yarrow	*Achillea mllefolium*
Common flax	*Linum usitatissimum*
Dandelion	*Taraxicum oficionale*
Pennycress	*Thlaspi arvense*
Meadow salsify	*Tragopogon pratensis*
Rose sp.	*Rosaceae unk.*
Creeping (Canada) thistle	*Cirsium arvense*
Dock sp.	*Rumex sp.*
Houndstongue	*Cynoglossum officionale*
Chokecherry	*Prunus virginiana*
Cow parsnip	*Heracleum maximum*
Goldenrod sp.	*Solidago sp.*
Prickly lettuce	*Lactuca serriola*
Clover sp.	*Trifolium sp.*
Harebell	*Campanula rotundifolia*
Western coneflower	*Rudbeckia occidentalis*
Narrowleaf cottonwood	*Populus angustifolium*
Willow sp.	*Salix sp.*
Moss sp.	*Sphagnum sp.*

Figure 2. Looking upstream along South Leigh Creek from downstream of the concrete head gate (visible in upper half of photo). Dominant graminoid coverage, especially Bromus inermis, is visible along the water's edge. Desert Canal is situated to the right, outside of the photo frame.

Figure 3. Desert Canal, seen looking west from near the existing concrete head gate. Cobble slope between upland and canal bank is visible near the center of the photo; browsing exclosures are also visible in the distance.

E. Conclusion

No *Spiranthes* were observed at either site survey. Due to elevation from the water table/xeric conditions in the upper portion of the site, lack of appropriate substrate access due to deep cobbles along the waterways, and dense graminoid coverage which would preclude new establishment of *Spiranthes diluvialis,* it is highly unlikely *Spiranthes diluvialis* are present or would be likely to become established at the Desert Canal site. The site history of ongoing heavy grazing use/trampling makes the presence or successful establishment of *Spiranthes diluvialis* highly unlikely at the Buxton Streambank site.

References

Text Citation	Bibliographic Reference
Brightman 2022	Brightman, K. 2022, personal communication. In person conversation between Rochelle Ochoa, Natural Resources Specialist (Reclamation, Snake River Area Office, Boise) and Kane Brightman, private citizen (Tetonia, Idaho). Subject: recent history of South Leigh Creek and Desert Canal area. August 11, 2022.

Appendix B

Cultural Resources and Sacred Sites Consultation with State Historic Preservation Office and Shoshone-Bannock Tribes

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United States Department of the Interior
BUREAU OF RECLAMATION
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:

USF-1219
2.1.1.04

VIA ELECTRONIC MAIL ONLY

Ms. Ashley Molloy
Historical Review Officer
State Historic Preservation Office
210 Main Street
Boise, ID 83702

Subject: Invitation to Consult on the Proposed Ecosystem Restoration Projects Located near Driggs, Idaho

Dear Ms. Molloy:

The Bureau of Reclamation has received an application from the Friends of the Teton River (FTR) for a grant to complete two ecosystem projects near Driggs, Idaho. The first project would involve cutting back a portion of the bank along the Teton River and planting willows and other native plants. The second involves placement of a fish screen in a canal branching off of South Leigh Creek. At this time, Reclamation is consulting on the area of potential effects (APE) and finding of no historic properties affected.

Reclamation has identified the APE to include all work areas, and off-road access to project areas. Project activities will involve the use of heavy equipment to complete tasks. A cultural resources inventory has been completed and only one historic resource, the Desert Ditch, was identified adjacent to the APE. New headgates and canal channel of the Desert Ditch fall within the APE, however, these were constructed sometime between 2013 and 2015 and are completely modern. Details can be found in the enclosed report. Based on this information, Reclamation finds that both FTR projects would result in no historic properties affected.

In accordance with procedures specified in 36 CFR § 800, Reclamation requests your concurrence with our APE and the finding that this project will result in no historic properties affected. Please direct any questions to Ms. Nikki Polson, Upper Snake Field Office Archaeologist, at (208) 678-0461, extension 13, or by email at npolson@usbr.gov.

Sincerely,

MELANIE PAQUIN

Digitally signed by MELANIE PAQUIN
Date: 2022.03.04 18:27:47 -07'00'

Melanie Paquin
Area Manager

Enclosures

IDAHO STATE HISTORICAL SOCIETY

23 March 2022

Brad Little
Governor of Idaho

Janet Gallimore
Executive Director
State Historic
Preservation Officer

Administration:
2205 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2682
Fax: 208.334.2774

Idaho State Museum:
610 Julia Davis Dr.
Boise, Idaho 83702
208.334.2120

Idaho State Archives and State Records Center:
2205 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2620

State Historic Preservation Office:
210 Main St.
Boise, Idaho 83702
208.334.3861

Old Idaho Penitentiary and Historic Sites:
2445 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2844

HISTORY.IDAHO.GOV

Melanie Paquin
Area Manager
Bureau of Reclamation
npolson@usbr.gov

Via Email

RE: Invitation to Consult on the Proposed Ecosystem Restoration Projects Located near Driggs, Idaho / USF-1219 / 2.1.1.04 / SHPO Rev. No. 2022-415

Dear Ms. Paquin:

Thank you for consulting with our office on the above-referenced project. The State Historic Preservation Office is providing comments to the Bureau of Reclamation pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR § 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public.

It is our understanding that the scope of the undertaking will be funding a grant for the Friends of the Teton River to complete two ecosystem projects near Driggs, Idaho. The first project would involve cutting back a portion of the bank along the Teton River and planting willows and other native plants. The second involves the placement of a fish screen in the Desert Ditch, which branches from South Leigh Creek.

After review of the documentation provided, our office has determined that the Desert Ditch (DCFS-2021-01) is not eligible for listing in the National Register of Historic Places as it does not rise to the level of significance under any criteria.

Pursuant to 36 CFR § 800.5, we have applied the criteria of effect to the proposed undertaking. Based on the information received on 8 March 2022, we concur that the proposed project actions will result in a finding of **no effect to historic properties.**

If cultural material is inadvertently encountered during the implementation of this project, work shall be halted in the vicinity of the finds until they can be inspected and assessed by the appropriate consulting parties.

Thank you for the opportunity to comment. Please note that our response does not affect the review timelines afforded to other consulting parties. Additionally, the information provided by other consulting parties may cause us to revise our comments. If you have any questions or the scope of work changes, please contact me via phone or email at 208.488.7463 or ashley.molloy@ishs.idaho.gov.

Sincerely,

Ashley Molloy, M.A.
Historical Review Officer
Idaho State Historic Preservation Office

United States Department of the Interior
BUREAU OF RECLAMATION
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:
USF-1219
2.1.1.04

VIA FEDERAL EXPRESS

Honorable John St. Clair
Chairman
Eastern Shoshone Tribe
#14 N. Fork Road
Fort Washakie, Wyoming 82514

Subject: Invitation to Consult on the Proposed Ecosystem Restoration Projects Located near Driggs, Idaho

Dear Chairman St. Clair:

The Bureau of Reclamation has received an application from the Friends of the Teton River for a grant to complete two ecosystem projects near Driggs, Idaho. The first project would involve cutting back a portion of the bank along the Teton River and planting willows and other native plants. The second involves placement of a fish screen in a canal branching off of South Leigh Creek. At this time, Reclamation is requesting any information concerning cultural resources known to your Tribe that may be affected by this project.

Reclamation has identified the area of potential effects (APE) to include all work areas, and off-road access to project areas. Project activities will involve the use of heavy equipment to complete tasks. A cultural resources inventory has been completed and only one historic resource, the Desert Ditch, was identified adjacent to the APE. Details can be found in the enclosed report. Based on the information currently available, Reclamation finds that the project would result in no historic properties affected.

Please advise this office as to whether the Eastern Shoshone Tribe wishes to join in this consultation by contacting me directly at (208) 383-2246 or via email at mpaquin@usbr.gov. You may also contact my staff archaeologist, Ms. Nikki Polson, by phone at (208) 678-0461, extension 13, or by email at npolson@usbr.gov with any project-related questions regarding this letter or report. Please direct any other concerns to Ms. Jessica Asbill-Case, Native American Affairs Advisor, by phone at (623) 238-8293 or by email at jasbillcase@usbr.gov.

Sincerely,

MELANIE PAQUIN

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Date: 2022.03.04 18:26:59 -07'00'

Melanie Paquin
Area Manager

Enclosure

cc: See next page.

cc: Mr. Joshua Mann
Historic Preservation
Eastern Shoshone Tribe
15 N. Fork Road
Fort Washakie, WY 82514
(w/encl)

United States Department of the Interior
BUREAU OF RECLAMATION
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:
USF-1219
2.1.1.04

VIA FEDERAL EXPRESS

Honorable Devon Boyer
Chairman
Fort Hall Business Council
Shoshone-Bannock Tribes
85 W. Agency Rd., Building #82
Fort Hall, ID 83203-0306

Subject: Invitation to Consult on the Proposed Ecosystem Restoration Projects Located near Driggs, Idaho

Dear Chairman Boyer:

The Bureau of Reclamation has received an application from the Friends of the Teton River (FTR) for a grant to complete two ecosystem projects near Driggs, Idaho. The first project would involve cutting back a portion of the bank along the Teton River and planting willows and other native plants. The second involves placement of a fish screen in a canal branching off of South Leigh Creek. At this time, Reclamation is consulting on the area of potential effects (APE) and requesting any information concerning cultural resources known to the Shoshone-Bannock Tribes that may be affected by this project.

Reclamation has identified the APE to include all work areas, and off-road access to project areas. Project activities will involve the use of heavy equipment to complete tasks. A cultural resources inventory has been completed and only one historic resource, the Desert Ditch, was identified adjacent to the APE. Details can be found in the enclosed report. Based on the information currently available, Reclamation finds that both FTR projects would result in no historic properties affected.

Please advise this office as to whether the Shoshone-Bannock Tribes wish to join in this consultation by contacting me directly at (208) 383-2246 or via email at mpaquin@usbr.gov. You may also contact my staff archaeologist, Ms. Nikki Polson, by phone at (208) 678-0461, extension 13, or by email at npolson@usbr.gov with any project-related questions regarding this letter or report. Please direct any other concerns

to Ms. Jessica Asbill-Case, Native American Affairs Advisor, by phone at (623) 238-8293 or by email at jasbillcase@usbr.gov.

Sincerely,

MELANIE PAQUIN

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Date: 2022.03.04 18:28:27 -07'00'

Melanie Paquin
Area Manager

Enclosure

cc: Ms. Carolyn Smith
Cultural Resources Coordinator
Cultural Resources/Heritage Tribal Office (HeTO)
Shoshone-Bannock Tribes
85 W. Agency Rd, Building #82
Fort Hall, ID 83203

Ms. Christina Cutler
Environmental Coordinator
Shoshone-Bannock Tribes
85 W. Agency Rd, Building #82
Fort Hall, ID 83203

Ms. Yvette Tuell
Tribal Policy Analyst
Shoshone-Bannock Tribes
85 W. Agency Rd, Building #82
Fort Hall, ID 83203
(w/encl to each above)

Appendix C

Scoping Documents, Mailing List, and Scoping Comments Received

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FTR Buxton Streambank and Desert Canal Fish Screen EA

Category	First Name	Last Name	Organization	C/O	Address	City	State	Zip	Phone	Email	Type
State Agencies	Troy	Staffle	Idaho DEQ	Local office	900 N Skyline Dr. Ste B	Idaho Falls	ID	83402		troy.saffle@deq.idaho.gov	State agency
	Brett	High	Idaho Department of Fish & Game		4279 Commerce Cir	Idaho Falls	ID	83401		brett.high@idfg.idaho.gov	State agency
	James	Cefalo	Idaho Department of Water Resources		900 N Skyline Dr.	Idaho Falls	ID	83402		james.cefalo@idwr.idaho.gov	State agency
	Casey	Attebery	Senator Crapo's Office		251 East Front Street, Suite 205	Boise	ID	83702			
	Mitch	Silvers	Senator Crapo's Office		251 East Front Street, Suite 205	Boise	ID	83702			
	Rachel	Burkett	Senator Risch's Office		350 North 9th Street Suite 302	Boise	ID	83702			
	Darren	Parker	Senator Risch's Office		350 North 9th Street Suite 302	Boise	ID	83702			
	Morgan	Brummund	Governor's Office of Energy & Mineral Resources		PO Box 83720	Boise	ID	83720-0001			
	Katrine	Franks	Office of the Governer		PO Box 83720	Boise	ID	83720-0001			
	John	Chatburn	Governor's Office of Energy & Mineral Resources		PO Box 83720	Boise	ID	83720-0199		john.chatburn@oer.idaho.gov	
	Scott	Pugrud	Office of Species Conservation		PO Box 83720	Boise	ID	83720			
Federal Agencies	Mary	D'Aversa	Bureau of Land Management		1405 Hollipark Drive	Idaho Falls	ID	83401		jcasterson@blm.gov / mzimmerman@blm.gov	Federal Agency, fire station earby
	James	Joyner	USACE - Regulatory Division		900 N Skyline Dr. Ste A	Idaho Falls	ID	83402		robert.a.brochu@usace.army.mi	Federal Agency
			U.S. Department of Fish and Wildlife		4425 Burley Dr., Suite A	Chubbuck	ID	83202			Federal
			Department of Indian Affairs (tribes below)								
City government			City of Tetonia		31 N 1st E.	Rexburg	ID	83440			City government
			City of Driggs		60 S Main St	Driggs	ID	83422			City department
Tribes			***TBD by NEPA Staff*								
County Govt.			- Commissioners								
			Teton County Commissioners		150 Courthouse Drive, Room 208	Driggs	ID	83422	208-354-8780	clerk@co.teton.id.us	local government
			- Commissioners		150 Courthouse Drive, Room 208	Driggs	ID	83422	208-354-8775	commissioners@co.teton.id.us	
	Clay	Smith	Teton County Highway District		70 North W. Buxton	Driggs	ID	83422	208-354-2932	csmith@co.teton.id.us	local government
Spaceholders	Dale	Swenson	Fremont Madison Irrigation District		P.O. Box 15	Saint Anthony	ID	83445-0015	208-624-3381	aaron.fmid@myidahomail.com	
Adjacent land owners			Three Forks LLC		1575 HAPPY VALLEY ROAD	Woodstock	VT	5091			
	Robert	Wilson			17385 KEYSTONE RD	Sugarloaf key	FL	33042			
	Karl	Kay			292 S 5000 W	Driggs	ID	83422			
	Christopher	Benner			2746 MESA DRIVE	Oceanside	CA	92054			
	Aaron	Driggs			PO BOX 1216	Driggs	ID	83422			
	David	Driggs			PO BOX 665	Driggs	ID	83422			
	Thomas	Kinney			PO BOX 896	Victor	ID	83455			
	Margaret	Strong			PO Box 976	Driggs	ID	83455			
			Redmond Howard Living Trust		PO BOX 49	Driggs	ID	83455			
	Adi	Eshet			1415 B Cannon Ra	Myrtle Beach	SC	29577			
	Lars	Moller			PO BOX 1953	Wilson	WY	83014			
	Mark	Decaria			1641 Country Hills Dr	Ogden	UT	84403			
	Bo	Moulton			PO BOX 631	Driggs	ID	83455			
	Gary	Doucette			PO BOX 646	Unionville	PA	19375			
	Harold	Caldwell			115 Pembroke Ave	Nashville	TN	37205			
	Robert	Hunter			2118 Wilshire Blvd #136	Santa Monica	CA	90403			
			Badger Capital Advisors		PO BOX 166	Tetonia	ID	83452			
			Lloyd Bernard Iden Rev Trust		14810 Springfiled Rd	Germantown	MD	20874			
	Jeffery	Youngren			5231 Lewison Ct	San Diego	CA	92120			
			Teton Partners Ltd		1201 S Orlando Ave Ste 203	Winter Park	FL	32789			
			The Frazier Family Trust		2436 N 21st St	Boise	ID	83702			
			Keys to Tetons LLC		300 Marsh Creek Rd	Venus	FL	34929			

Scoping Information Package

Buxton Streambank Restoration and Desert Canal Fish Screen Projects in Teton County, Idaho

This information package summarizes the proposal from the Friends of the Teton River (FTR) to be partially funded by a WaterSMART grant to stabilize riparian streambank along the upper Teton River approximately 6 miles outside Driggs, Idaho, and to construct a fish screen on the Desert Canal approximately 5 miles outside Tetonia, Idaho. These projects aim to address water supply needs, water quality concerns, and conservation objectives.

Federal actions must be analyzed in accordance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations to determine potential environmental consequences. Reclamation is asking for comments to better identify issues and concerns associated with this proposal.

The U.S. Department of the Interior's WaterSMART (Sustain and Manage America's Resources for Tomorrow) Program establishes a framework to provide Federal leadership and assistance on the efficient use of water; integrate water and energy policies to support the sustainable use of all natural resources; form strong diverse partnerships with states, tribes and local entities; and coordinate with other Department bureaus and offices on water conservation activities. Through the WaterSMART Grants Program, Reclamation provides a 50/50 cost share funding entities and promoting the sustainable use of water resources, improving the ecological resilience of rivers and streams, and conserving water for multiple uses through collaborative conservation efforts.

Location and Background

The proposed projects would occur in the Teton Watershed which drains 1,133 square miles in eastern Idaho and the western border of Wyoming. The Teton River spans 64 miles beginning near Victor, Idaho, to approximately Rexburg, Idaho, where it flows into the Henrys Fork of the Snake River. The project area is largely agricultural fields but also possesses ample recreational land in the form of designated wild and scenic rivers, ski areas, and national parks and forests.

FTR is a non-profit 501(c)(3) organization based in Teton County, Idaho, that is working with Teton Water Users Association (TWUA) members and the farming and ranching community to implement two priority watershed management projects. These projects are supported by the *TWUA Watershed Restoration Plan (2016),* which was developed through a WaterSMART phase 1 grant. Additionally, these projects would envelope management objectives which exist through the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service for the recovery of Yellowstone Cutthroat Trout (YCT) in the Teton Watershed like restoring connectivity, minimizing loss of juvenile fish to irrigation diversions, and obtaining adult fish passage around/through entrainment.

Existing Current Condition

The Buxton project reach is located just downstream of the Bates Bridge and on the west side of the Teton River from the newly-formed Buxton River Park. The 80-acre Buxton River Park property on the east side of the river is owned by Teton County, Idaho, with 42 acres placed in a conservation easement. The west side of the river is grazed ranchland and is experiencing overutilized pasture and range land in the form of unsustainable cattle grazing which is causing damage and destabilization along the streambanks. Historical agricultural and grazing practices have also led to impaired water quality and degraded fish and wildlife habitat as well as Total Maximum Daily Load (TMDL) exceedances for sediment and temperature.

The Desert Canal project area is located on South Leigh Creek, a tributary to the Teton River. South Leigh Creek headwaters originate on the western slope of the Teton Mountains (Caribou-Targhee National Forest) in Wyoming. South Leigh Creek is used as spawning habitat by YCT and is parallel to the Desert Canal yet no connectivity between the creek and the canal currently exists. The Desert Canal has been observed to entrain multiple fish species including YCT. The lack of fish screen and by-pass piping in Desert Canal means YCT cannot access spawning habitats in South Leigh Creek from the Desert Canal.

Decision to be made-Through the process of an environmental assessment (EA), Reclamation will determine whether the proposed project would significantly affect the quality of the human environment and thereby require the preparation of an Environmental Impact Statement, and if not, whether the project qualifies for a Finding of No Significant Impact. Reclamation will then determine whether to do one of the following:

- Proceed with the proposed action
- Deny the proposed action
- Proceed with the proposed action with minor changes

Purpose and Need of Action

The purpose and need for the Proposed Action is to fulfill the WaterSMART grant allowing FTR to perform two watershed management projects. WaterSMART grant projects would work cooperatively with local entities as they plan for and implement actions to increase water supply through investments to modernize existing infrastructure and avoid potential water conflicts. These projects would stabilize riparian areas and improve Teton River water quality by addressing TMDL exceedances for sediment and temperature in the upper Teton River, as well as help eliminate fish entrapment occurring at the Desert Canal while ensuring irrigators receive water.

Proposed Action

Reclamation proposes to provide funding through a WaterSMART grant for FTR to perform two watershed management projects, both occurring within Teton County in southeastern Idaho

(Figure 1). These management projects come from the TWUA Watershed Restoration Plan which aims to address a suite of watershed management issues including water quality and water quantity issues for fish and wildlife, agricultural and recreational use, and management issues that specifically impact YCT. The first action includes stabilizing a riparian buffer along 1,500 linear feet of streambank habitat (Figure 2) on the upper Teton River approximately 6 miles west of Driggs, Idaho. FTR would work with a local rancher on private land to accomplish the stabilization through willow planting as well as implementation of recommended grazing management and livestock watering best management practices within the riparian corridor. This would help address TMDL exceedance for sediment and temperature in the Teton River.

On the Desert Canal approximately 5 miles east of Tetonia, Idaho, FTR would work with irrigators to construct a corrugated fish screen to move fish into parallel running Leigh Creek (Figure 3), to eliminate entrapment and mortality of YCT in the canal. FTR would place a bypass pipe at the installed fish screen, connecting Desert Canal and Leigh Creek. This would provide 11 miles of connectivity for YCT to complete their life cycle in this high-priority spawning tributary and source population of native trout for the Teton River. This action would also provide improvements to canal infrastructure and reliable delivery of irrigation water.

Preliminary Alternative Development

The environmental assessment would include consideration of the Proposed Action Alternative and the No Action Alternative. Additionally, alternatives would be developed with the identified issues throughout the NEPA process.

Figure 1. Project location within southern Idaho.

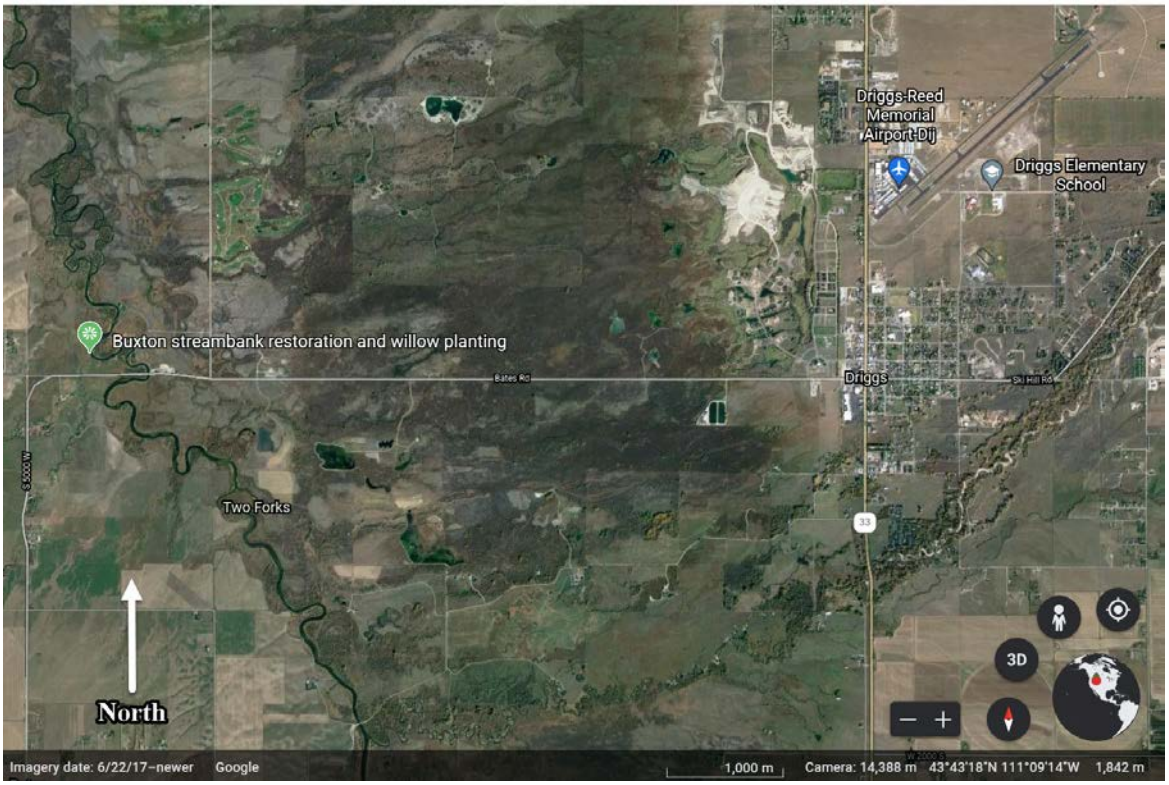

Figure 2. Streambank stabilization project location proximity to largest city of Driggs, Idaho.

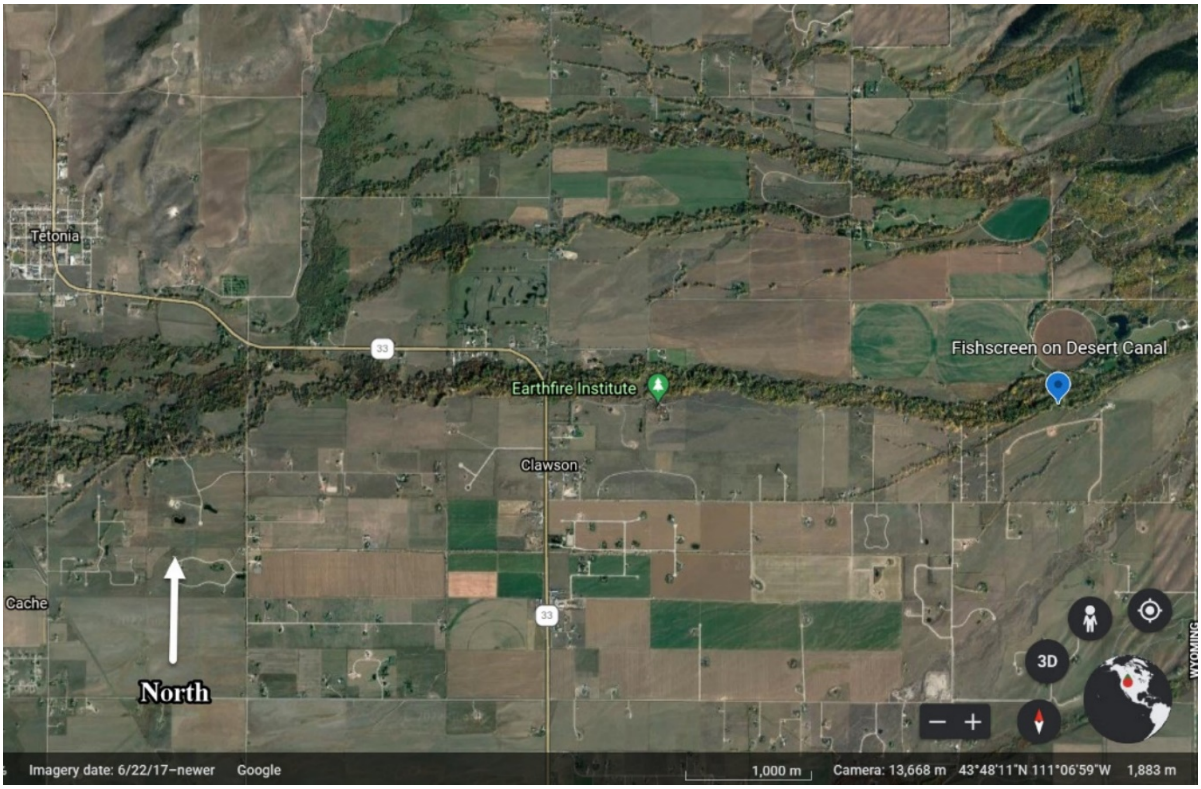

Figure 3. Fish screen project location proximity to largest city of Tetonia, Idaho.

RE: [EXTERNAL] RE: Scoping comment on EA

Anna Lindstedt <anna@tetonwater.org>

Mon 4/4/2022 3:12 PM

To: Ochoa, Rochelle D <rochoa@usbr.gov>

Thanks—I'll expect something from him as well. ~Anna

From: Ochoa, Rochelle D <rochoa@usbr.gov>
Sent: Monday, April 4, 2022 2:54 PM
To: Anna Lindstedt <anna@tetonwater.org>
Subject: Re: [EXTERNAL] RE: Scoping comment on EA

Hi Anna,
I received another inquiry from a gentleman named Joe Moody today who owns property by the Desert Canal fish screen project. We chatted a bit about the construction details regarding the project and he said he would like to get in contact with you, so I provided your contact info. He informed me that he has lived on River Edge Lane for the last year but hasn't been notified of the project until now. He said that they are in support of the project. I gave him my contact info to cc as well when he reaches out but I wanted to give you a heads up.
Thanks,

Rochelle Ochoa
Natural Resources Specialist-1214
Office- 208-383-2277
Bureau of Reclamation
Snake River Area Office
Columbia-Pacific Northwest Interior Region 9
230 Collins Road Boise, Idaho 83702

From: Anna Lindstedt <anna@tetonwater.org>
Sent: Monday, April 4, 2022 1:37 PM
To: Ochoa, Rochelle D <rochoa@usbr.gov>
Subject: RE: [EXTERNAL] RE: Scoping comment on EA

Thanks for passing along all the info. I will reach out to him personally. ~Anna

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From: Ochoa, Rochelle D <rochoa@usbr.gov>
Sent: Monday, April 4, 2022 1:08 PM
To: Anna Lindstedt <anna@tetonwater.org>
Subject: Re: [EXTERNAL] RE: Scoping comment on EA

Great, yes he seemed very familiar with Friends of the Teton and the project. I think it would be more directly helpful for him to have a conversa on with you. We've sent the scoping informa on package based off those documents men oned and he was looking addi onal details to pass on to other property owners. We cha ed a li le about the NEPA process but he was clear that Reclama on is only involved due to the grant connec on and not performing the actual project. The contact info to reach him is (*email address*) or (*phone number*). Please let me know if you think it would be helpful to join the call from a NEPA standpoint or if I can help in any other capacity.
Best,

Rochelle Ochoa
Natural Resources Specialist-1214
Office- 208-383-2277
Bureau of Reclamation
Snake River Area Office
Columbia-Pacific Northwest Interior Region 9
230 Collins Road Boise, Idaho 83702

From: Anna Lindstedt <anna@tetonwater.org>
Sent: Monday, April 4, 2022 12:43 PM
To: Ochoa, Rochelle D <rochoa@usbr.gov>
Subject: [EXTERNAL] RE: Scoping comment on EA

Yes, we know Zander Strong and he's been involved and supportive of the project from the time that the Desert Canal headgate was improved/reconstructed and was a matching donor to that phase of the project. Besides various grant applications and the summary that I worked on with you, we don't have anything more concise about the Desert Canal Fish Screen—although I'm happy to share those resources or chat with him directly to answer his questions. I know that the ditch-rider out there has already reached out to him. Let me now what works for you.
~Anna

From: Ochoa, Rochelle D <rochoa@usbr.gov>
Sent: Monday, April 4, 2022 8:46 AM
To: Anna Lindstedt <anna@tetonwater.org>
Subject: Scoping comment on EA

Hi Anna,
I received a call from Xander Strong Friday who is an adjacent land owner to the Desert Canal project area. He has requested additional information on the project to disperse to the Cutthroat Creek HOA. He also said he was involved with the project in 2014-2015. I'm not sure if this was through his HOA related capacity or individually. However, he made sure to say they are in support of the project.

Is there any sort of mailer or summary document you have that gives more info on the actions associated with the Desert Canal portion of the project specifically that I can share with him? Feel free to give me a call to discuss further if needed.
Thanks,

Rochelle Ochoa
Natural Resources Specialist-1214
Office- 208-383-2277
Bureau of Reclamation

Snake River Area Office
Columbia-Pacific Northwest Interior Region 9
230 Collins Road Boise, Idaho 83702