

RECLAMATION

Managing Water in the West

Teton River Canyon Resource Management Plan (RMP) Draft Environmental Assessment (EA)



U.S. Bureau of Reclamation
Pacific Northwest Region
Snake River Area Office

April 2006

Teton River Canyon
Resource Management Plan (RMP)
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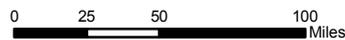


April 2006



RMP Study Area Location

-  RMP Boundary
-  Major Roads



TETON RIVER CANYON DRAFT ENVIRONMENTAL ASSESSMENT

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Contents

Section	Page
Acronyms and Abbreviations	vii
1.0 Purpose and Need for Action.....	1-1
1.1 Introduction.....	1-1
1.2 Authority	1-1
1.3 Proposed Federal Action.....	1-1
1.4 Purpose and Need for Action.....	1-1
1.4.1 Purpose of the Environmental Assessment.....	1-1
1.5 Location and Background.....	1-2
1.6 Scoping	1-2
1.7 Summary of Issues.....	1-5
2.0 Alternatives.....	2-1
2.1 Alternatives Development	2-1
2.1.1 Similarities Among Alternatives.....	2-2
2.2 Alternatives Considered in Detail.....	2-2
2.3 Alternative Elements Eliminated from Consideration.....	2-10
3.0 Affected Environment and Environmental Consequences	3-1
3.1 Introduction.....	3-1
3.2 Water Quality and Contaminants.....	3-2
3.2.1 Affected Environment.....	3-2
3.2.2 Environmental Consequences.....	3-4
3.3 Soils.....	3-6
3.3.1 Affected Environment.....	3-6
3.3.2 Environmental Consequences.....	3-6
3.4 Vegetation and Wetlands	3-8
3.4.1 Affected Environment.....	3-8
3.4.2 Environmental Consequences.....	3-12
3.5 Wildlife Resources.....	3-13
3.5.1 Affected Environment.....	3-14
3.5.2 Environmental Consequences.....	3-17
3.6 Aquatic Biology	3-19
3.6.1 Affected Environment.....	3-19
3.6.2 Environmental Consequences.....	3-20
3.7 Threatened and Endangered Species	3-22
3.7.1 Affected Environment.....	3-22
3.7.2 Environmental Consequences.....	3-27
3.8 Recreation and Public Access.....	3-30
3.8.1 Affected Environment.....	3-30
3.8.2 Environmental Consequences.....	3-35

Section	Page
3.9 Land Use and Land Status	3-37
3.9.1 Affected Environment.....	3-37
3.9.2 Environmental Consequences.....	3-40
3.10 Visual Resources.....	3-41
3.10.1 Affected Environment.....	3-41
3.10.2 Environmental Consequences.....	3-42
3.11 Environmental Justice.....	3-44
3.11.1 Affected Environment.....	3-44
3.11.2 Environmental Consequences.....	3-45
3.12 Cultural Resources	3-45
3.12.1 Affected Environment.....	3-45
3.12.2 Environmental Consequences.....	3-48
3.13 Indian Sacred Sites.....	3-51
3.13.1 Affected Environment.....	3-51
3.13.2 Environmental Consequences.....	3-51
3.14 Indian Trust Assets	3-52
3.14.1 Affected Environment.....	3-52
3.14.2 Environmental Consequences.....	3-53
3.15 Wild & Scenic River Review.....	3-53
3.16 Summary of Impacts.....	3-54
4.0 Consultation and Coordination	4-1
4.1 Public Involvement.....	4-1
4.2 Agency Consultation and Coordination.....	4-2
4.2.1 Endangered Species Act	4-2
4.2.2 National Historic Preservation Act.....	4-2
4.3 Tribal Consultation and Coordination	4-2
4.3.1 Government-to-Government Consultation with Tribes.....	4-2
4.3.2 Indian Sacred Sites (Executive Order 13007).....	4-2
4.3.3 Indian Trust Assets	4-3
4.3.4 Other Laws and Regulations.....	4-3
5.0 Environmental Commitments.....	5-1
5.1 Best Management Practices	5-1
5.1.1 Landscape Preservation and Impact Avoidance	5-1
5.1.2 Erosion and Sediment Control.....	5-1
5.1.3 Biological Resources	5-2
5.1.4 Site Restoration and Revegetation.....	5-2
5.1.5 Pollution Prevention.....	5-3
5.1.6 Noise and Air Pollution Prevention.....	5-4
5.1.7 Cultural Resource Site Protection.....	5-4
5.1.8 Miscellaneous Comments	5-5

Section	Page
5.2 Mitigation Measures	5-5
5.2.1 Threatened and Endangered Species	5-5
5.2.2 Cultural Resources	5-5
5.2.3 Indian Sacred Sites.....	5-6
6.0 Preparers	6-1
7.0 Distribution List	7-1
7.1 Overview	7-1
7.2 Tribes	7-1
7.3 Government Officials.....	7-2
7.4 Agencies.....	7-3
7.5 News Media	7-4
7.6 Libraries	7-4
7.7 Groups and Organizations.....	7-4
7.8 Individuals.....	7-5
8.0 Glossary	8-1
9.0 Bibliography	9-1
9.1 Literature Cited	9-1
9.2 Personal Communications	9-5

Tables	Page
2.2-1 Teton River Canyon Resource Management Plan – Alternatives	2-3
3.2-1 Designated Beneficial Uses within the Teton RMP Study Area	3-2
3.2-2 Water Quality Impaired Waterbodies within the Teton RMP Study Area	3-3
3.2-3 Estimated Sediment Reductions Proposed for the Listed Streams within the Teton RMP Study Area	3-4
3.2-4 Nutrient Reductions Proposed for the Listed Streams within the Teton RMP Study Area.....	3-4
3.6-1 Fishes within the Teton River Canyon.....	3-20
3.7-1 Listed and Candidate Species for Fremont, Madison, and Teton Counties (from FWS Website); Notes the Likelihood of Species Occurrence in the RMP Study Area.....	3-23
3.7-2 Nest Success and Productivity at Bald Eagle Nests within the Teton RMP Study Area	3-26
3.8-1 Idaho and National Participation in Select Recreation Activities.....	3-33
3.8-2 Projected Estimates of Changes in Recreation Participation through 2020	3-33
3.8-3 Teton River Commercial Guide Use (As Permitted by the BLM)	3-34
3.9-1 Agreements and Contracts Pertaining to the RMP Study Area	3-38
3.9-2 RMP Study Area Agricultural Leases.....	3-39
3.12-1 Cultural Resource Sites for the Teton RMP Study Area	3-48
3.16-1 Summary of Impacts	3-55

Figures

1-1 RMP Study Area.....	1-3
2-1 Teton River Canyon Access Alternatives—East Side (1 of 2).....	2-11
2-1 Teton River Canyon Access Alternatives—West Side (2 of 2).....	2-13

Appendixes

A	Scoping Report
B	Soil Types in the Teton River Canyon RMP Study Area
C	Consultation and Coordination with Tribal Governments
D	Wild & Scenic River Review
E	Draft Goals and Objectives

Acronyms and Abbreviations

ACEC	Area of Critical Environmental Concern
BLM	Bureau of Land Management
BMP	Best Management Practice
CDC	Conservation Data Center
CEQ	Council on Environmental Quality
CRMP	Cultural Resources Management Plan
EA	Environmental Assessment
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
FWS	U.S. Fish and Wildlife Service
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IDL	Idaho Department of Lands
IDPR	Idaho Department of Parks and Recreation
ITAs	Indian Trust Assets
MA,NLAA	May Affect, Not Likely to Adversely Affect
NAGPRA	Native American Graves Protection and Repatriation Act
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NPS	National Park Service
NWBSNU	Northwestern Band of the Shoshoni Nation of Utah
ORV	Off-road vehicle
Reclamation	U.S. Bureau of Reclamation
RMP	Resource Management Plan
ROW	Right-of-Way
SHPO	State Historic Preservation Act
SR	State Route
TCP	Traditional cultural property
TMDL	Total Maximum Daily Load

USBR	U.S. Bureau of Reclamation
USFS	U.S. Forest Service
WMA	Wildlife Management Area

1.0 Purpose and Need for Action

1.0 Purpose and Need for Action

1.1 Introduction

This Draft Environmental Assessment (EA) evaluates the proposed Teton River Canyon Resource Management Plan (RMP). The RMP is being developed by the U.S. Bureau of Reclamation (Reclamation) to define goals, objectives, and actions to guide and direct natural and cultural resource management and use of Reclamation lands in and around the Teton River Canyon for the next 15 years. Reclamation's lands in the Teton River Canyon RMP study area are shown in Figure 1-1, *RMP Study Area*.

1.2 Authority

Title 28 of Public Law 102-575, Section 2805 (106 Stat. 4690; Reclamation Recreation Management Act of October 30, 1992) provides Reclamation with authority to prepare RMPs.

1.3 Proposed Federal Action

The proposed Federal action is implementation of an RMP for 5,804 acres of Reclamation lands located within the Teton Basin Project. These lands are located adjacent to and upstream of the Teton Dam Site in the Teton River Canyon and along the canyon rim in Fremont, Teton, and Madison Counties in Idaho. This RMP only addresses Reclamation lands. Because the RMP study area also contains 3,496 acres of Bureau of Land Management (BLM) lands, Reclamation and BLM have been closely coordinating on this RMP. Although there are

currently no plans to rebuild the dam, lands within the Teton Basin Project will be retained by Reclamation because congressional authorization still exists for this project. The Teton Dam Site is also listed as a Protected Reservoir Site under the Idaho State Water Plan. This Draft EA evaluates alternatives for management direction consistent with the authorized purposes of the Teton Basin Project, which are irrigation, hydroelectricity, mitigation of project-caused losses of fish and wildlife, and flood control.

1.4 Purpose and Need for Action

1.4.1 Purpose of the Environmental Assessment

Reclamation lands in the Teton Basin Project area were acquired from the adjacent landowners for the construction and operation of the Teton Dam and Reservoir. The purpose of the Teton Reservoir was to provide supplemental water to 111,210 acres of land in the Fremont-Madison Irrigation District, production of hydroelectricity, provision of recreation at the reservoir, mitigation of project-caused losses of fish and wildlife, and control of floods.

On June 5, 1976, the Teton Dam structure failed, within days of filling for the first time, resulting in the loss of 11 lives and \$400,000,000 in damages. The dam failure also caused significant physical and biological changes within the Teton River Canyon. Reservoir elevation at the time of the failure was 5,302 feet with approximately 234,260 acre-feet of stored water. Full reservoir capacity would have been 5,320.0 feet with 288,250 acre-feet of stored water.

There is no comprehensive plan guiding the management of Reclamation lands within the RMP study area. Current management includes administering agricultural leases on

Reclamation lands on the canyon rim, permitting commercial guided fishing trips on the river in cooperation with the BLM, participating in noxious weed control efforts with the Idaho Department of Fish and Game (IDFG) and BLM, and supporting a number of scientific studies within the canyon.

This Draft EA is being prepared to assist Reclamation in finalizing a decision on a preferred RMP alternative and to determine whether to issue a Finding of No Significant Impact or a Notice of Intent to prepare an Environmental Impact Statement. An environmental analysis is required by the National Environmental Policy Act of 1969 (NEPA) for any Federal action that may have a significant impact on the environment.

NEPA requires Reclamation to explore a reasonable range of possible alternative management approaches and analyze the environmental effects of these actions. Three alternatives are evaluated and compared in this document, including a No Action Alternative and two action alternatives. The impacts of each alternative were evaluated for the affected resource areas, including: soils; water quality and contaminants; vegetation and wetlands; wildlife; aquatic biology; threatened, endangered, proposed, and candidate species; recreation and access; visual quality; land use; environmental justice; cultural resources; Indian sacred sites; and Indian Trust Assets (ITAs). Geology, socioeconomics, climate and air quality, transportation, water resources and hydrology, and topography are not discussed because early in scoping and during the impact analysis process, no issues were identified regarding potential effects to these resources as a result of RMP actions.

1.5 Location and Background

The Teton Dam Site is located on the Teton River, a tributary of the Henrys Fork of the

Snake River in Fremont and Madison Counties of eastern Idaho, 3 miles northeast of Newdale, Idaho. Reclamation has management responsibility for approximately 5,804 acres of lands in the Teton Basin Project in the vicinity of the Teton Dam Site in the Teton River Canyon and along the canyon rim in Fremont, Teton, and Madison counties, Idaho.

Construction of the Lower Teton Division of the Teton Basin Project was authorized by the Act of September 7, 1964 (78 Stat. 925, Public Law 88-583). Lands within the Teton River Canyon RMP study area are currently being used for agriculture, fish and wildlife habitat, hydroelectric power generation, and recreation.

1.6 Scoping

Public scoping activities were held prior to the development of the Draft EA. Three public meetings were held in Rexburg, Driggs, and Fort Hall, Idaho, on April 6, 7, and 25, 2005, respectively. The complete Scoping Report is provided in Appendix A. The first newsbrief, which was mailed to approximately 200 people encouraged the public to complete and send in a comment form so that Reclamation could better understand the issues. Introductory presentations were given to the Shoshone-Bannock Tribes, the Teton and Madison County Commissions, Rexburg City Council, Henrys Fork Watershed Council, and the IDFG. Introductory letters were sent to the Fremont County Commissioners, Rexburg City Council, and eight other agencies or groups providing information about upcoming meetings and the planning effort. Reclamation consulted with the Shoshone-Bannock Tribes and provided Tribal members a tour of the area in June 2005.

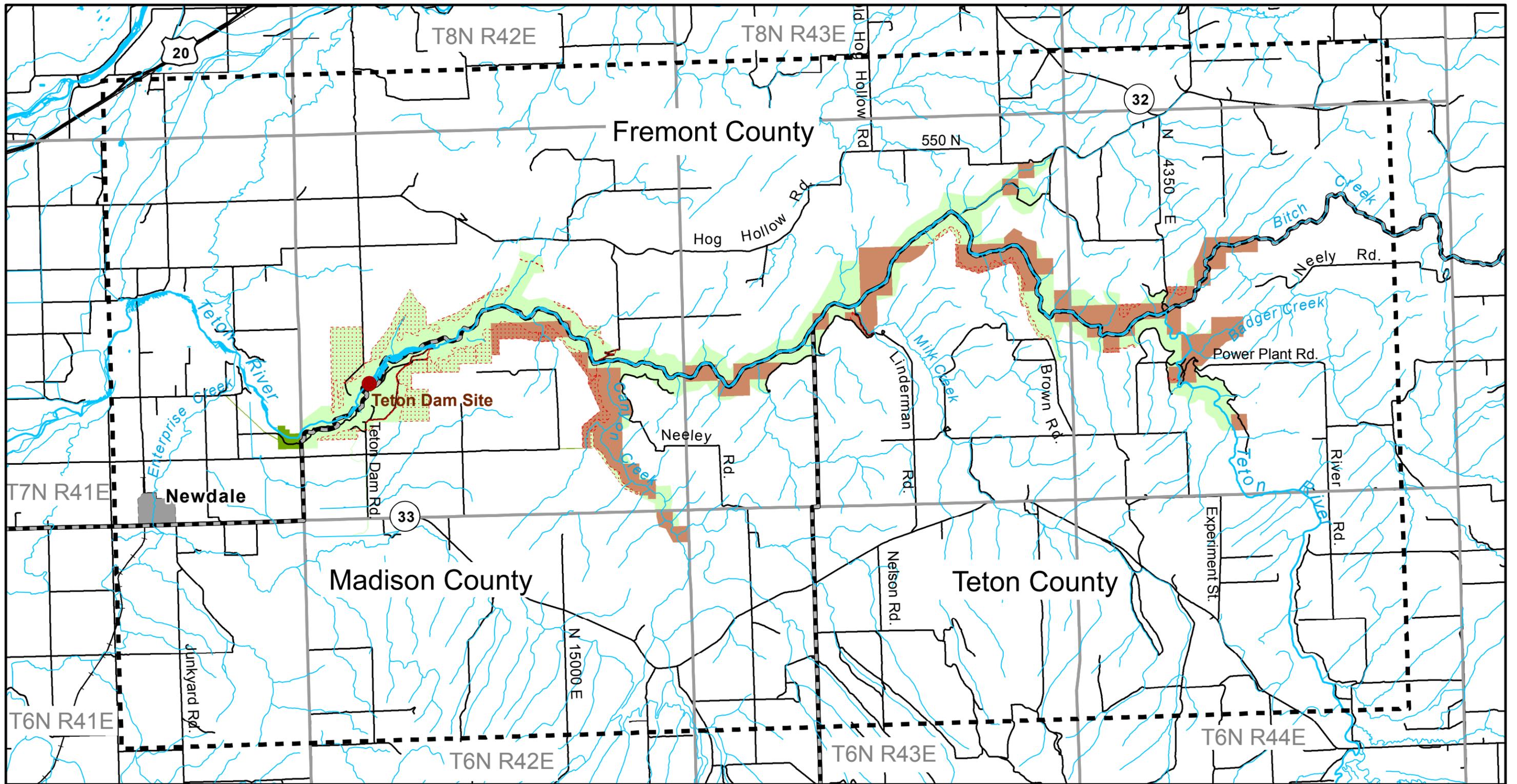
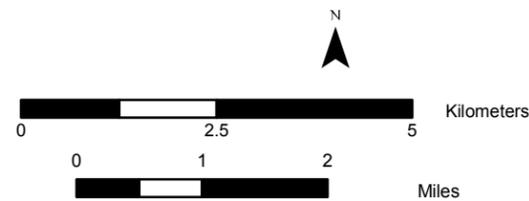


Figure 1-1. RMP Study Area

- RMP Boundary
- Streams
- USBR Land
- County
- Railroad
- USBR Easement
- City
- Roads
- BLM Land
- Leases and Easements



**TETON RIVER CANYON
DRAFT ENVIRONMENTAL ASSESSMENT**

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Based on the input received, Reclamation prepared a Scoping Report that reflects Reclamation's practice of reporting all input received on issues and opportunities pertinent to its RMP efforts, and considering this input in the process of making decisions on short- and long-term management of lands under Reclamation's jurisdiction. Within the comments submitted, situations often arise where opposing points of view exist regarding how issues or opportunities should be addressed, and a decision must ultimately be made on which direction the RMP will follow. All issues will be comprehensively analyzed and evaluated with many considerations in mind. Additionally, Federal laws and Reclamation regulations, policies, and/or authorities (or those of other involved agencies) can limit the range of feasible responses. The public involvement process is described fully in Chapter 4, *Consultation and Coordination*.

1.7 Summary of Issues

Management issues in the RMP study area are unique due to the failure of Teton Dam. The rapid draining of the reservoir caused numerous landslides and habitat loss. The canyon still provides critical mule deer winter range and habitat for the Yellowstone cutthroat trout. Access is limited, but recreation demands are increasing as growth soars in nearby communities. Land use direction is needed for almost 1,400 acres of Reclamation lands under agricultural leases along the canyon rim. Coordination is needed for recreation management and interpretation of the area. Reclamation has a Federal trust responsibility to manage and protect ITAs, including the natural and cultural resources of the canyon.

The RMP will address the following issues and opportunities:

- Land use
 - Agricultural and grazing leases
 - Easement and right-of-way (ROW) agreements
- Recreation and visual quality
 - Commercial use permits
 - Boat access site management
 - Visual quality management
 - Wild and Scenic Rivers eligibility and suitability
 - Coordination with other agencies
 - Recreation access site management (at overlooks and non-boating access sites)
- Habitat management
 - Fish habitat
 - Wildlife habitat
 - Noxious weed management
 - Coordination with IDFG and BLM
- Interpretation, education, and information
 - Interpretive development and signage
 - Vandalism control
 - Historic site potential

Topics that are not considered in the RMP and Draft EA include the following:

- Rebuilding the dam
- De-authorizing the project
- Selling Teton Basin Project Land, or withdrawing or purchasing additional lands

2.0 Alternatives

2.0 Alternatives

This chapter presents the alternatives being considered for implementation of the Teton River Canyon RMP. It describes the No Action Alternative and two action alternatives in detail and provides a summary comparison.

A managing partner would be required for any major recreational improvements described in the alternatives. The managing partner would need to be a non-Federal public entity with the ability to jointly cost share construction costs and fully fund operations and maintenance costs. Actions would also be dependent upon the availability of Reclamation funding. Minor recreational developments, considered “minimum basic facilities,” include improvements such as toilets and signage and can be pursued and funded entirely by Reclamation.

For comparison of the alternatives, it is assumed that all of the facilities would be built and actions would be implemented. Other actions, such as increased noxious weed control, do not require managing partners or cost-sharing agreements. Such actions may require Memorandums of Understanding with other agency partners, and are assumed to be implemented for the purpose of comparing and analyzing the alternatives.

2.1 Alternatives Development

NEPA requires agencies to evaluate a range of reasonable alternatives to a proposed Federal action. For the Teton River Canyon RMP EA, the proposed Federal action is implementation of an RMP for 5,804 acres of Reclamation lands located within the Teton Basin Project. Alternative management scenarios should meet the purpose and need of the proposal, while minimizing or avoiding environmental impacts. The RMP

will serve as Reclamation’s blueprint for the future use, management, and site development on Reclamation lands within the RMP Study Area over the next 15 years.

The Preliminary Draft Alternatives were developed from input provided from the public meetings, Tribal consultation, newsbrief responses, and Planning Team discussions. This process is described in Chapter 4, *Consultation and Coordination*.

This process resulted in the development of two action alternatives that prescribe a reasonable range of natural, cultural, and recreation resource management actions. These differences are described in this section under each alternative. The No Action Alternative, as required by NEPA, is also analyzed. Each alternative would result in different future conditions within the RMP Study Area. The three alternatives are summarized as follows:

- **Alternative A (No Action Alternative)—Continuation of Existing Management Practices.** If implemented, this alternative would involve continuing to manage Reclamation lands according to existing agreements and under current laws and regulations. Alternative A is not a “status quo” situation. Management of the area would be on an as-needed basis, without benefit of a management plan.
- **Alternative B.** If implemented, this alternative would improve management of the canyon and fulfill Reclamation’s stewardship responsibilities within the existing project purposes. Alternative actions provide direction to limit degradation of natural and cultural resource values while still allowing for future unforeseen opportunities.
- **Alternative C.** This alternative contains exactly the same measures as described

for Alternative B, with the following exceptions:

- Alternative C calls for evaluating the continuation, elimination, and/or alteration of agricultural leases, consistent with RMP goals and objectives. See Appendix E for Goals and Objectives. By contrast, Alternative B calls for continuing to renew agricultural leases subject to new terms and conditions consistent with RMP goals and objectives.
- Alternative C provides a greater level of public access to the rim at Rocky Gulch and Brown Road. It also allows for potential summer walk-in access at Linderman Road.

2.1.1 Similarities Among Alternatives

Although the alternatives differ in many ways, several features are common to all alternatives:

- Continue to operate and maintain Reclamation lands and facilities in accordance with the existing project purposes and security requirements.
- Continue to adhere to existing and future Federal, state, and county laws and regulations.
- Prior to any major ground-disturbing activities, conduct the appropriate level of site-specific NEPA analysis and public involvement. Complete cultural resource surveys, archaeological site evaluations, and necessary inventories for Traditional Cultural Properties (TCPs). Coordinate with Tribes and appropriate agencies regarding cultural resources.
- For recreation development and management aspects, follow the principles in Public Law 89-72, Federal

Water Projects Recreation Act of 1965, as amended by Title 28 of Public Law 102-575. In the presence of a qualifying managing partner, Reclamation may contribute up to 50 percent of the total cost of recreation developments on Reclamation lands.

- For fish and wildlife enhancements, follow the principles in Public Law 89-72, Federal Water Projects Recreation Act of 1965, as amended by Title 28 or Public Law 102-575. In the presence of a qualifying managing partner, Reclamation may contribute up to 75 percent of the total cost of fish and wildlife enhancements on Reclamation lands.
- Coordinate with law enforcement entities regarding 43 CFR Part 423 and 43 CFR Part 429, which authorize Reclamation to enter agreements with state, Tribal, and local law enforcement agencies to enforce Federal laws and regulations on Reclamation land.
- Comply with current accessibility regulations and standards required at all new facilities and on retrofits of existing facilities.
- Reclamation has, and always had, the right to cancel agricultural and other leases.

All actions depend on the availability of funding and must be within the authority of the applicable agency.

2.2 Alternatives Considered in Detail

The three alternatives previously described were selected for detailed analysis. Table 2.2-1 summarizes each alternative. Following the table, Section 2.3 lists the

alternative elements eliminated from consideration. At the end of the chapter, Figure 2-1 displays differences between the alternatives in terms of access. The impacts of each alternative are described in Chapter 3, *Affected Environment and Environmental Consequences*. These

alternatives are an important part of the planning process because they allow for a thorough exploration of a range of options and an analysis of the potential environmental impacts that may result from implementation.

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
LAND USE MANAGEMENT			
Agricultural and Grazing Leases	1) Continue to renew existing agricultural leases on Reclamation lands with consideration for consistency with project purposes, environmental compliance, and public concerns. 2) Issue no grazing leases or new agricultural leases.	1) Continue to renew existing agricultural leases on Reclamation lands subject to new terms and conditions consistent with RMP goals and objectives ³ . 2) Issue no grazing leases or new agricultural leases.	1) Evaluate the continuation, elimination, and/or alteration of agricultural leases, consistent with RMP goals and objectives ³ . 2) Issue no grazing leases or new agricultural leases.
Easements and Rights-of-Use	Continue to consider easements and rights-of-use on Reclamation lands on a case-by-case basis.	Evaluate requests for easement and rights-of-use using RMP goals and objectives.	Same as Alternative B.
Unauthorized Uses, Vandalism and Public Safety	1) Continue cooperative efforts with BLM and local law enforcement entities. 2) Continue to prohibit open fires during periods of extreme fire danger consistent with BLM. 3) Continue to publicize fire restrictions.	Same as Alternative A, plus: 1) Investigate physical modifications to reduce unauthorized public access and associated vandalism, such as at the spillway and outlet works building. 2) Design recreation, interpretive features, and signs using the most vandal resistant techniques and technologies available. 3) Display fire prevention messages at concentrated public use areas. 4) Prohibit open fires during periods of extreme fire danger. 5) Commensurate with level of new attractions and facilities provided, contract for additional law enforcement with local providers. 6) Resolve unauthorized agricultural use and/or trespass on Reclamation lands.	Same as Alternative B.
Interagency Coordination	1) Develop updated management agreement with BLM. 2) Continue cooperative efforts with all agencies.	Same as Alternative A plus: Actively participate in the BLM's Resource Management Planning effort.	Same as Alternative B.

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
NATURAL RESOURCES			
Native Vegetation Protection and Enhancement	Native vegetation management actions are currently focused on aggressive noxious weed management.	1) Protect, enhance, and restore native vegetation where and when consistent with RMP goals and objectives. 2) Increase native woody vegetation. 3) As a lower priority, if funding and staffing allow, investigate and attempt to restore selected reed canarygrass monocultures to a more typical mix of riparian species.	Same as Alternative B.
Noxious Weeds	1) Continue to work with IDFG, BLM, and local weed management entities on cooperative management controls of noxious weeds. 2) Continue to provide information to the public through a variety of mediums on how to reduce the spread of noxious weeds.	Same as Alternative A, plus: Improve information to the public on how to reduce the spread of noxious weeds through a variety of mediums with a focus on signage at access points.	Same as Alternative B.
Rare, Threatened, and Endangered Species and Critical Habitat	Comply with Federal Endangered Species Act (ESA) for all activities.	Same as Alternative A, plus: 1) Support BLM proposals for special designations such as an Area of Critical Environmental Concern (ACEC). Manage consistently with BLM, within Reclamation authorities. 2) Prepare bald eagle nest site management plans in cooperation with BLM and IDFG. 3) Monitor bald eagle nest success and adjust commercial and private boat launches to avoid impacts and promote species recovery.	Same as Alternative B.
Erosion Control	No special erosion control management actions are currently in place.	1) Manage all actions to minimize the potential for erosion into the river canyon. 2) Establish permanent native vegetative cover along the canyon rim to provide filtering for agricultural runoff. 3) Define and limit roadways to prevent off-road vehicle use and reduce exposed soils near the river. 4) Establish permanent vegetative cover on any agricultural leases converted to wildlife habitat.	Same as Alternative B.
Water Quality	No special water quality management actions are currently in place.	1) Provide sanitation facilities where visitor use is concentrated and access allows. 2) Work with adjacent landowners and partners to protect water quality.	Same as Alternative B.

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
Wildlife Management	No specific direction for wildlife management is in place.	Enhance wildlife habitat by: <ol style="list-style-type: none"> 1) Restoring some shrub communities by planting and/or seeding, especially bitterbrush and sagebrush in areas where recovery is not occurring. (e.g., between Canyon Creek and Linderman Dam, and from Spring Hollow to Bitch Creek). 2) Use demonstration projects to test the effectiveness of restoration techniques on habitat and wildlife before implementing large-scale restoration and improvement projects. 3) Monitor sites where habitat and wildlife recovery efforts have been implemented and adapt measures as necessary. 4) As opportunities arise, convert selected agricultural leases, or portions of leases, within 1/2 mile from the canyon rim, to permanent wildlife cover. 	Same as Alternative B.
Fisheries Management	<ol style="list-style-type: none"> 1) No specific fisheries-related management actions are currently in place. 2) Continue to support activities to sustain Yellowstone cutthroat trout. 	Evaluate and implement fisheries habitat improvements where feasible in cooperation with IDFG. This includes: <ol style="list-style-type: none"> 1) Use demonstration projects to test the effectiveness of restoration techniques on habitat and fisheries before implementing large-scale restoration and improvement projects. 2) Implement a demonstration project to restore the structural diversity of the channel. 3) Increase bank cover, especially woody vegetation such as willows. 4) Monitor sites where habitat and fishery recovery efforts have been implemented and adapt appropriate measures as necessary. 	Same as Alternative B.
CULTURAL RESOURCES			
General	Comply with Sections 106 and 110 of the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act, and Native American Graves Protection and Repatriation Act (NAGPRA).	Same as Alternative A.	Same as Alternative A.

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
Identification & Evaluation	<p>1) Complete archaeological surveys when ground-disturbing actions are proposed in unsurveyed locations.</p> <p>2) Complete site evaluation actions to determine National Register of Historic Places (National Register) eligibility for sites threatened by new actions, land use, or project operations, and address impacts to eligible sites.</p> <p>3) Complete tribal consultations, as necessary, to determine if TCPs are present in areas of new ground-disturbing actions, or are in, or near focused use areas. If present, assess and address impacts from new actions or existing use.</p> <p>4) If Indian tribes identify culturally important resources within new development areas, avoid adverse impacts to those resource locations when possible.</p>	Same as Alternative A.	Same as Alternative A.
Protection	<p>1) Unless justified, develop no new features within the boundaries of a National Register-eligible site or TCP.</p> <p>2) Monitor National Register-eligible or unevaluated sites or TCPs in or near focused use areas to allow early detection of damage.</p> <p>3) Implement actions to mitigate identified adverse effects to National Register-eligible sites or TCPs, or to pro-actively manage significant cultural sites.</p> <p>4) In the event of discovery of human remains of Indian origin; complete protective actions, tribal notification, and consultation as required by 43 CFR 10.</p> <p>5) In the event that future actions generate archaeological collections, curate those collections at the Archaeological Survey of Idaho, Eastern Repository, using processes consistent with 36 CFR 79 and 411 DM, which define Federal requirements.</p>	<p>Same as Alternative A, plus:</p> <p>1) Develop guidelines/procedures and provide training for partners, if any, to increase awareness of the NHPA and other cultural resource statutory requirements.</p> <p>2) Prepare and provide educational information about resource values and area history at the site of the Teton Dam failure and other appropriate locations.</p> <p>3) Work with Tribes to appropriately incorporate Tribal history and perspectives into educational and interpretive materials.</p> <p>4) Protect the Teton dam site for future nomination to the National Register. Lay the groundwork for nomination through further documentation, mapping, recordation, and recording oral histories and interviews.</p> <p>5) Monitor the RMP study area periodically to determine if erosion or land use is damaging cultural resources. If significant sites are being damaged, management actions will be implemented. If the site cannot be protected, mitigation may be considered.</p>	Same as Alternative B.

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
Native American Sacred Sites	1) Comply with EO 13007 for any new undertakings. Consult for new actions that have the potential to affect sacred sites. 2) Seek to avoid adversely affecting sacred sites, and to accommodate tribal access and use, when consistent with agency mission and law.	Same as Alternative A.	Same as Alternative A.
INDIAN TRUST ASSETS			
Indian Trust Assets	1) Meet with Tribal governments as appropriate. 2) Protect off-reservation rights which may exist for Tribes to hunt or fish on the unoccupied lands of the United States.	Same as Alternative A.	Same as Alternative A.
RECREATION, ACCESS & VISUAL QUALITY			
Teton Dam Overlook	Maintain as is.	1) Sign as public access. 2) Improve for day use, within authorities. 3) Provide interpretive information.	Same as Alternative B.
Teton Dam Take-Out Site	Maintain Teton Dam Site as is.	1) Sign as public access. 2) Formalize and improve designated boat ramp and turnaround to the degree possible, within Reclamation authorities. 3) Define parking areas if, and where needed, to prevent expansion and resource damage. 4) Provide minimal facilities, signs, and vault toilet, if possible.	Same as Alternative B.
Upper Teton Dam Take-Out Site (1-mile above dam site)	Manage as is.	1) Sign as public access. 2) Post caution warning users of a steep, narrow road at top of the hill. 3) Manage for day-use only.	Same as Alternative B.
Spring Hollow Put-In Site	Maintain Spring Hollow Site as is.	1) Improve boat ramp and turnaround to the degree possible within Reclamation authorities. 2) Define parking areas if, and where needed, to prevent expansion and resource damage. 3) Provide minimal facilities, signs, and vault toilet, if possible.	Same as Alternative B.

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
<p>Access (see Figure 2-1 at the end of Chapter 2)</p>	<p>No change to current access:</p> <p>1) Rocky Gulch: No current access.</p> <p>2) Linderman Road: Closed to administrative and public access.</p> <p>3) Brown Road: Open to public access to the canyon rim, but not signed.</p> <p>4) Teton Dam Overlook: Open to public access.</p> <p>5) Teton Dam Site: Open to public access.</p> <p>6) Upper Teton Dam Site: Open to public access.</p> <p>7) Dam West Road: Currently closed.</p> <p>8) Spillway Road: Open to public access.</p> <p>9) Parkinson’s Road: No public access except as approved by land owner.</p> <p>10) Spring Hollow Put-In Site: Public float boat access to upper canyon.</p>	<p>Implement the following measures on existing Reclamation/public access roads:</p> <p>1) Rocky Gulch: Restore administrative access (vehicular) to the rim. Restore public access, (walk-in, summer only), from Reclamation boundary.</p> <p>2) Linderman Road: Land at rim is private leading to BLM land above river. Acquire administrative access for Reclamation.</p> <p>3) Brown Road: No changes.</p> <p>4) Teton Dam Overlook: Sign as public access. Maintain parking lot and overlook for public use.</p> <p>5) Teton Dam Site: Sign as public access. Improve and identify public access road. Define travel flow and improve turnarounds and parking. Close unnecessary roads causing erosion and scarring.</p> <p>6) Upper Teton Dam Site: Sign as public access. Post caution warning users of a steep, narrow road at the top of the hill. Manage for day-use only.</p> <p>7) Dam West Road: Pursue public access.</p> <p>8) Spillway Road: Close to public and retain administrative access only.</p> <p>9) Parkinson’s Road: Pursue public access (walk-in, summer only), from the rim. Provide parking for 4 vehicles. Close to use in winter.</p> <p>10) Spring Hollow Put-In Site: Sign as public access.</p>	<p>Same as Alternative B, except:</p> <p>1) Rocky Gulch Access: Restore public access (vehicular) to rim. Provide parking for 4 vehicles.</p> <p>2) Linderman: Explore public access (walk-in, summer only) at Linderman Road in cooperation with BLM and private landowner. Access would be dependent upon the availability of an appropriate parking area for 4 vehicles.</p> <p>3) Brown Road: Pursue public access to rim at Brown Road. Provide parking for 4 vehicles.</p>

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
	<p>11) Bitch Creek Access: Currently undeveloped and unimproved walk-in access point.</p> <p>12) Felt Power Plant: Open to public walk-in access.</p>	<p>11) Bitch Creek Access: Sign overlook as public land in cooperation with BLM. Allow walk-in use to continue from parking area at rim to river.</p> <p>12) Felt Power Plant: Sign as walk-in access only with small parking area (3 vehicles) located at rim near substation.</p> <p>For any access points not specifically identified, sign Reclamation lands to provide for public use when consistent with RMP goals and objectives and in a manner that does not encourage trespass onto private lands.</p>	
River corridor	No specific direction given.	<p>1) Provide some minor site clearing and leveling for a limited number of sites for day and/or overnight boat-in use along the river when and where appropriate.</p> <p>2) Make minor improvement to portage trail around Parkinson’s Rapid.</p> <p>3) Monitor river use.</p>	Same as Alternative B.
Commercial Use	Manage as is: Currently limited to five commercial use permits and a defined number of launches and user days as established by the Idaho Outfitter and Guide Board. BLM issues these permits for Reclamation.	<p>Same as Alternative A plus:</p> <p>1) Develop formal agreement with BLM for managing the commercial recreation permits.</p> <p>2) Reclamation and BLM to monitor use/permits to retain primitive experience with no observable resource degradation. Adjust number of launch days allowed on permit, if necessary.</p> <p>3) Evaluate any new requests for commercial uses considering their consistency with RMP goals and objectives.</p>	Same as Alternative B.
Scenic Values	No specific aesthetic/scenic measures are currently in place in the RMP study area.	<p>1) Manage the lands within the Teton River Canyon project area to retain the existing character of the landscape. Features and activities under existing leases (such as pumping stations, pipelines, and power lines) may continue as is. Voluntary consideration for opportunities to reduce visual contrast will be encouraged. This includes techniques such as using environmentally blending colors, avoiding reflective materials, and limiting contrast with the surrounding landscape where possible.</p> <p>2) New proposed activities may be seen but should not attract the attention of the casual observer. The level of change to the characteristic landscape should be low.</p> <p>3) Explore measures to reduce graffiti and vandalism at the spillway and dam overlook site.</p>	Same as Alternative B.

Table 2.2-1: Teton River Canyon Resource Management Plan—Alternatives

Topic or Area ¹	Alternative A (No Action)— Continuation of Existing Management Practices ²	Alternative B	Alternative C
Recreation Monitoring	Continue to coordinate periodic visitor use monitoring with BLM.	Same as Alternative A, plus: 1) Compile and track visitor use figures, as possible. 2) Photo-document site changes and visitor impacts. 3) Manage to maintain a semi-primitive recreation experience. 4) Manage to prevent and reduce conflicts between recreation users.	Same as Alternative B.
INTERPRETATION, EDUCATION & INFORMATION			
Public Information	Continue providing limited signage. Continue providing limited information on Reclamation’s website.	1) Provide informational, educational, and interpretive messages through a variety of means to increase the public’s awareness of opportunities, restrictions, safety, and natural and cultural resource values. 2) Coordinate and share interpretive information with managing partners (IDFG, BLM) and other regional interpretation and education providers. 3) Provide interpretive features at the Teton Dam overlook site.	Same as Alternative B.
<p>¹ Topics applicable to the entire RMP study area unless an area is specifically noted.</p> <p>² Alternative A is the No Action Alternative as required under NEPA. In this case, if implemented, Reclamation would continue to manage lands within the RMP study area according to existing agreements and under current laws and regulations. It is important to note that Alternative A is not necessarily a “status quo” situation, as several elements would help to clarify and coordinate existing management policies.</p> <p>³ See Appendix E for Goals and Objectives.</p>			

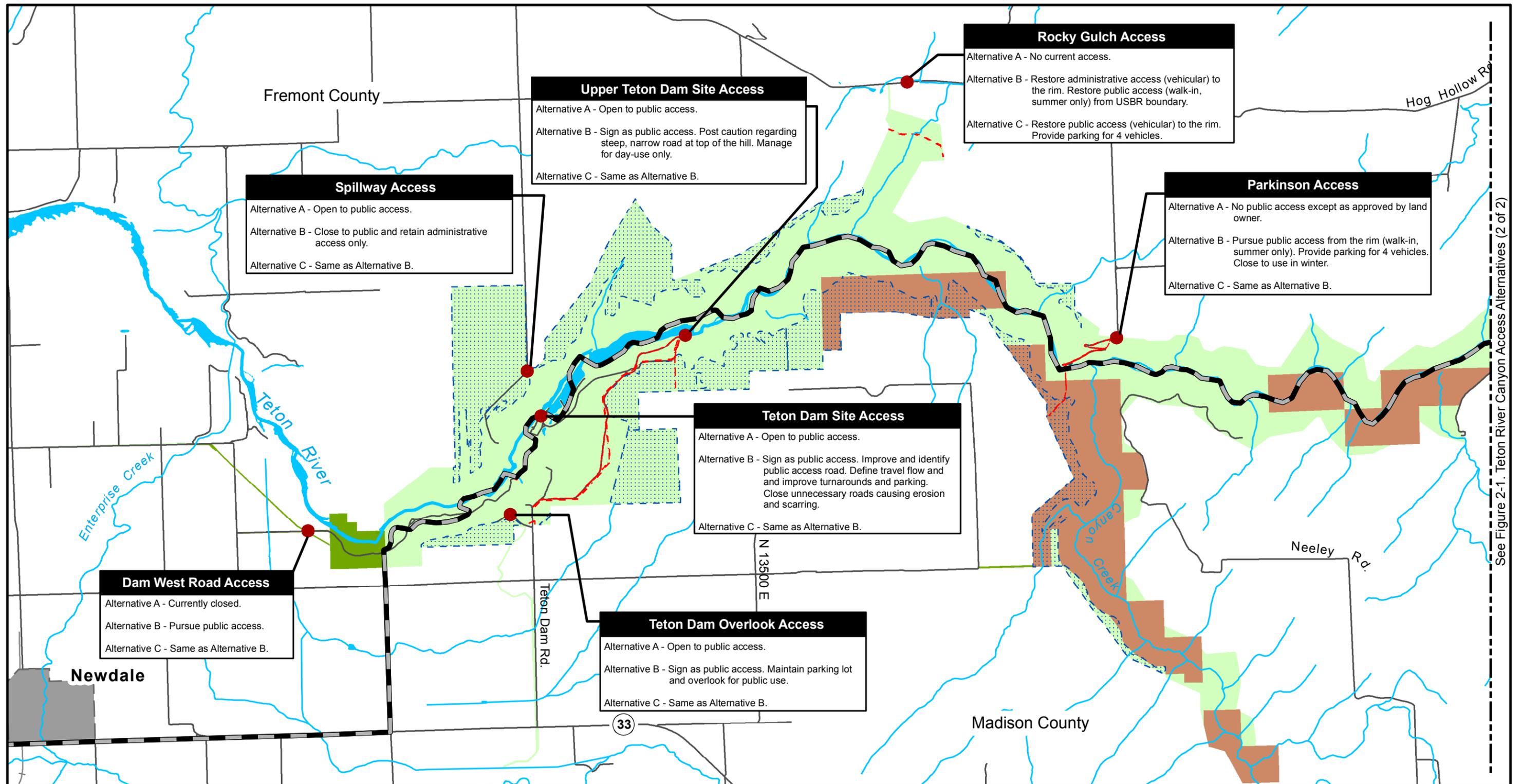
2.3 Alternative Elements Eliminated from Consideration

All potential alternative elements identified during scoping and within Reclamation’s preview were included in one or more of the alternatives.

Idaho Department of Parks and Recreation has identified the need for a new state park in Eastern Idaho. The Teton Study Area is one of several locations being considered as part of a \$34 million “Experience Idaho” initiative

Governor Dirk Kempthorne is asking lawmakers to approve. As this draft EA is being published, a committee is reviewing studies, developing plans, and making presentations to the Governor by July 1, 2006. As this potential park concept came late in the planning process for this RMP, the EA does not, and cannot, address this proposal.

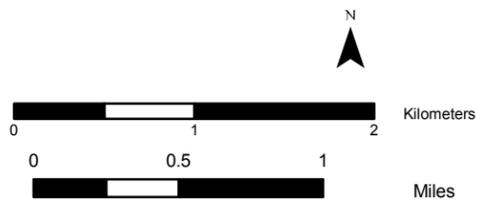
If the Teton Study Area was chosen for a new state park, a public planning process would be conducted. If a decision was made to have a state park in the Teton Study Area, proposals would be expected to tier under the general goals and objectives identified for this area in the RMP.



See Figure 2-1. Teton River Canyon Access Alternatives (2 of 2)

Figure 2-1. Teton River Canyon Access Alternatives - East Side (1 of 2)

- | | | | |
|---------------|----------|---------------|----------------------------|
| County | Streams | USBR Land | Agricultural Leases |
| City | Railroad | USBR Easement | Utility and Road Easements |
| Access Points | Roads | BLM Land | |



**TETON RIVER CANYON
DRAFT ENVIRONMENTAL ASSESSMENT**

Neither the authors, U.S. Bureau of Reclamation, nor any other party involved in preparing the material and data displayed here warrant or represent that all information is in every respect complete and accurate, and are not held responsible for errors or omissions. This map may graphically depict property boundaries for general reference only and does not necessarily represent legal descriptions.

Source: Data
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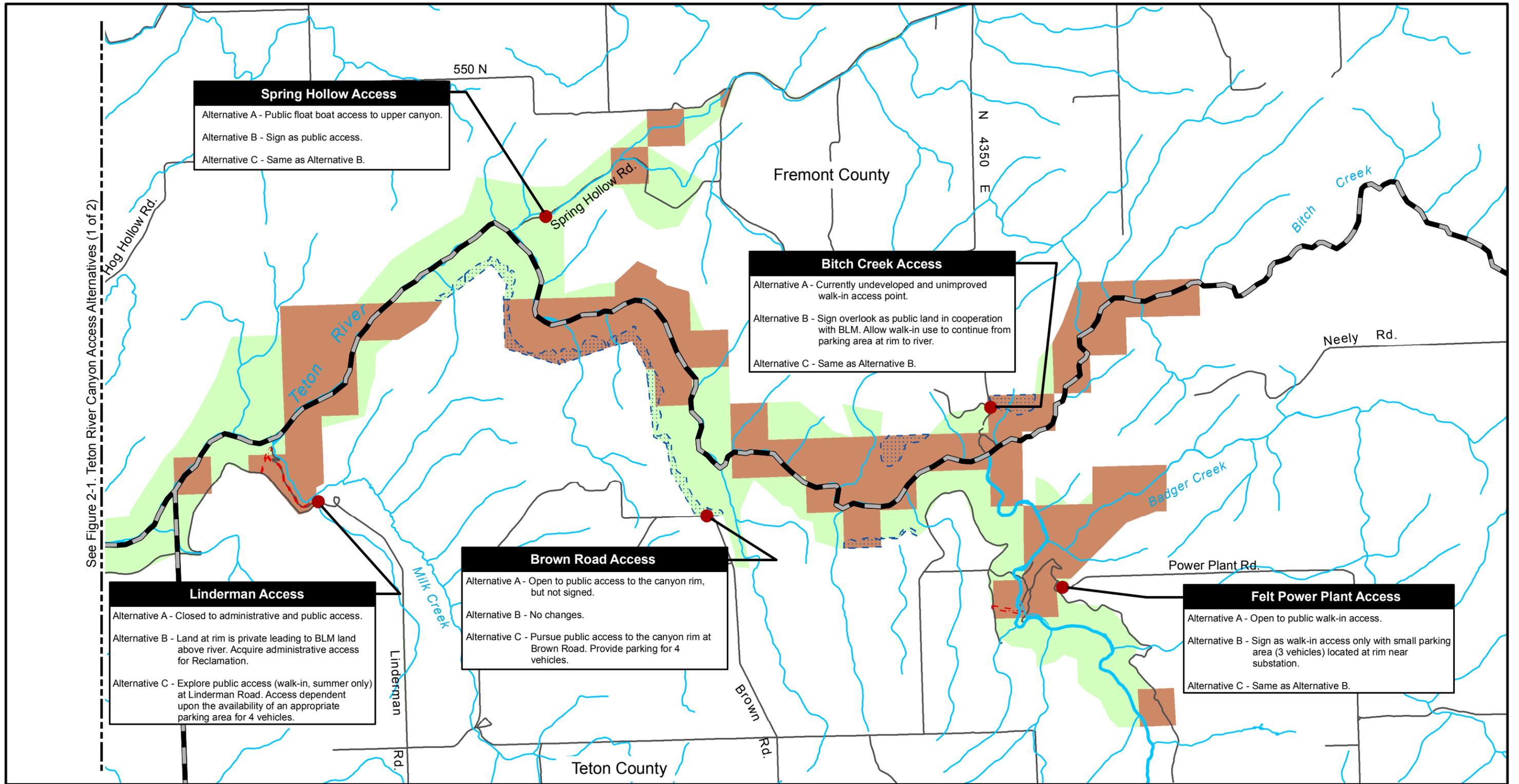
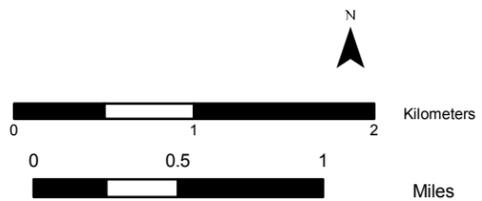


Figure 2-1. Teton River Canyon Access Alternatives - West Side (2 of 2)

- County
- Streams
- USBR Land
- Agricultural Leases
- City
- Railroad
- BLM Land
- Utility and Road Easements
- Access Points
- Roads



**TETON RIVER CANYON
DRAFT ENVIRONMENTAL ASSESSMENT**

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Source: Data
P:\EDAW\184194\GIS\MXD\Figure_2-1b.mxd

3.0 Affected Environment and Environmental Consequences

3.0 Affected Environment and Environmental Consequences

3.1 Introduction

Chapter 3 is organized by resource topic. Resource topics analyzed in detail include water quality and contaminants, soils, vegetation and wetlands, wildlife, aquatic biology, threatened and endangered species, recreation and access, land use, visual resources, environmental justice, cultural resources, Indian sacred sites, and ITAs. Geology, socioeconomics, climate and air quality, transportation, water resources and hydrology, and topography are not discussed because early in scoping and during the impact analysis process, no issues were identified regarding potential effects to these resources as a result of RMP actions.

The affected environment is addressed first and describes the current conditions for each resource within Reclamation lands in the Teton River Canyon RMP Study Area. This is not a comprehensive discussion of every resource within the RMP Study Area, but rather focuses on those aspects of the environment that were identified as issues during scoping or may be affected by the alternatives.

The potential effects of the alternatives are described in the environmental consequences section for each resource topic. Under the alternatives subheading, the specific impacts of each of the alternatives are discussed in terms of the actions that would occur and specific information about the potential impact. Only those impacts that cannot be fully avoided through the application of Best Management Practices (BMPs), listed in Chapter 5, *Environmental Commitments*, are

described. BMPs are considered to be an integral part of each of the alternatives.

In the environmental consequences section, the depth of analysis of the alternatives corresponds to the scope and magnitude of the potential environmental impact. This chapter compares the effects of the three alternatives described in Chapter 2:

- Alternative A (No Action Alternative)—Continuation of Existing Management Practices
- Alternative B—If implemented, Alternative B would improve management of the canyon and fulfill Reclamation’s stewardship responsibilities within the existing project purposes. Alternative actions provide direction to limit degradation of natural and cultural resource values while still allowing for future unforeseen opportunities.
- Alternative C—This alternative contains exactly the same measures as described for Alternative B, with the following exceptions:
 - Evaluate the continuation, elimination, and/or alteration of agricultural leases, consistent with RMP goals and objectives including adding wildlife habitat and other benefits. By contrast, Alternative B calls for renewing existing agricultural leases subject to new terms and conditions consistent with RMP goals and objectives.
 - Alternative C includes the same access improvements defined for Alternative B, and Rocky Gulch restores vehicular public access to the rim and adds a parking area for 4 vehicles. Alternative C would also explore the possibility of a summer walk-in access at Linderman Road, and pursue public access to the rim on the Brown Road.

Alternative A, the No Action Alternative, describes the future without implementation of

this RMP. Under Alternative A, lands would continue to be managed as they have been in the recent past. Some of the actions that would be formally implemented under Alternatives B and C are currently being implemented, but on an ad hoc basis. These actions would continue to be implemented on an ad hoc basis under Alternative A, but without the benefit of a formal plan (the RMP). Impacts of Alternatives B and C are compared to the No Action Alternative in this chapter. Mitigation measures and any residual impacts remaining after implementation of mitigation measures are described where appropriate. Mitigation measures required to compensate for potential impacts of the alternatives were developed following an initial assessment of impacts. These mitigation measures were incorporated into Alternatives B and C so that these action alternatives are self-mitigating and no additional mitigation measures are required. This was not possible for Alternative A because it is the No Action Alternative. Therefore, Alternative A includes some mitigation measures. A summary of impacts for each alternative is provided in Section 3.16, *Summary of Impacts*, Table 3.16-1 found at the end of this chapter on page 3-55.

3.2 Water Quality and Contaminants

3.2.1 Affected Environment

The Lower Teton Division of the Teton Basin Project was authorized for the purpose of storing water of the Teton River (Reclamation 2005). The Teton Dam and Reservoir project required the acquisition of State, private, and Federal lands in and along the Teton River. The reservoir preparation, inundation, and Teton Dam failure resulted in changes to the physical and biological resources within the Teton River Canyon both upstream and downstream of the dam site (Randle et al. 2000). However, despite the impacts from the reservoir preparation and subsequent failure of the dam, water quality within the Teton subbasin is generally good (Idaho Department of Environmental Quality [IDEQ] 2003). IDEQ based this conclusion on the continued presence of the native Yellowstone cutthroat trout (*O. clarki bowvieri*), as discussed in the Section 3.6, *Aquatic Biology*.

Within the Teton RMP Study Area, beneficial uses for the waters are described in Table 3.2-1 and include uses for aquatic life, recreation, and others (including drinking water supply and special resource waters) (IDEQ 2003).

TABLE 3.2-1
Designated¹ Beneficial Uses within the Teton RMP Study Area

IDEQ Unit	Water	Aquatic Life ²	Recreation ³	Other ⁴
US-4	Teton River—Canyon Creek to Teton Dam	COLD SS	PCR	DWS SRW
US-17	Teton River—Milk Creek to Canyon Creek	COLD SS	PCR	DWS SRW
US-19	Teton River—Badger Creek to Milk Creek	COLD SS	PCR	DWS SRW
US-20	Teton River—Spring Creek to Badger Creek	COLD SS	PCR	DWS SRW

¹Undesignated segments are protected for all recreational use in and on water and for the protection and propagation of fish, shellfish, and wildlife, where attainable.

²COLD—Cold water aquatic life, SS-salmonid spawning.

³PCR—Primary contact recreation, SCR-Secondary contact recreation.

⁴DWS—Drinking water supply, SRW-Special Resource water.

NOTE: Other downstream segments (US-1, US-2, and US-3) from the Teton RMP Study Area have also been designated for COLD, SS, and PCR/SCR.

Source: Adopted from IDEQ 2003

Stream segments within the Teton RMP Study Area that do not meet the applicable water quality standards for the identified designated uses are listed as water quality impaired and require the development of a Total Maximum Daily Load (TMDL). The goal of a TMDL is to restore an impaired waterbody to a condition that meets State water quality standards and supports designated beneficial uses (IDEQ 2003). The State impaired waters list (also known as the §303(d) list) undergoes revisions every 2 years; the latest revision occurred in 2002 but has yet to be approved by the Environmental Protection Agency (EPA) Region 10. However, IDEQ (2003) has recommended adding a number of §303(d) list revisions for 2002, and includes these proposed revisions in the TMDL. Table 3.2-2 reflects listings from the 1998 §303(d) list (the most recent EPA-approved list), as well as the proposed 2002 additions.

Agriculture practices within the subbasin are considered to be the primary contributor for the impairments (IDEQ 2003). Sediment is generated by: 1) sheet and rill erosion from cultivated fields, and 2) streambank erosion

resulting from grazing, channel alteration, and flood irrigation. The collapse of the Teton Dam and natural mass wasting events in the upper reaches of the Teton watershed also contribute to sediment in the reach. Cattle manure, fertilizer, and hay crops have resulted in elevated levels of nutrients (particularly nitrogen) in the project area (IDEQ 2003).

Temperatures in the canyon have increased slightly since the dam failure because water moves more slowly through the enlarged pools caused by the 1976 land slides and the borrow ponds excavated for the construction of the dam (Reclamation 2000). The loss of riparian habitat, particularly in the lower reaches of the Teton RMP Study Area, would also contribute to slightly higher river temperatures.

Based on the Teton River TMDL (IDEQ 2003), sediment and nutrient TMDLs have been developed for the Teton River waterbody for sediment (Table 3.2-3) and nutrients (Table 3.2-4). No TMDL was developed for habitat alteration because IDEQ policy is to establish TMDLs for waterbodies impaired by pollution (water chemistry), but not to address pollutants such as habitat alteration (IDEQ 2003).

TABLE 3.2-2
Water Quality Impaired Waterbodies within the Teton RMP Study Area

Waterbody	WQLS ¹	Boundary	Pollutant	Stream Miles
Teton River (Valley Segment)	2116	Highway 33 to Bitch Creek	Sediment Habitat alteration Nutrients	10.10
Teton River (Canyon Segment)	unknown	Confluence of Badger Creek to Teton Dam Site	Temperature	unknown

¹Water quality limited segment, corresponding to the numbers used in the 1998 §303(d) list.
NOTE: Downstream segments (including North Fork Teton River [WQLS 2113] are also listed for sediment and nutrients.
Source: Adopted from IDEQ 2003

TABLE 3.2-3
Estimated Sediment Reductions Proposed for the Listed Streams within the Teton RMP Study Area

Waterbody ¹	Current Yield (tons/year)	Alternative 3 Yield (tons/year) ²	Reduction
Teton River (Valley Segment -WQLS 2116)	205,946	121,508	41%

¹Water quality limited segment, corresponding to the numbers used in the 1998 §303(d) list.

²Alternative 3 from the Teton River TMDL (IDEQ 2003) includes both structural and non-structural BMPs. NOTE: Downstream segment WQLS 2113 (North Fork Teton River) has also been allocated a 41 percent reduction in sediment.

Source: Adopted from IDEQ 2003

TABLE 3.2-4
Nutrient Reductions Proposed for the Listed Streams within the Teton RMP Study Area

Waterbody ¹	Nutrient	Load Capacity	Existing Load	Reduction ²
Teton River (Valley Segment - WQLS-2116)	Nitrogen (Nitrate)	305,645	494,270	38%
	Total Phosphorus	101,882	461,319	78%

¹Water quality limited segment, corresponding to the numbers used in the 1998 §303(d) list.

²A 10% margin of safety is included in calculations to adjust for uncertainty related to load calculations. NOTE: Downstream segment WQLS 2113 (North Fork Teton River) has also been allocated an 8% reduction in nitrogen (nitrate) and a 67% reduction in total phosphorus.

Source: Adopted from IDEQ 2003

Recognizing uncertainty in the assumptions used to develop TMDLs, IDEQ is following EPA’s recommendation to rely on an adaptive management strategy. This strategy will be incorporated into the TMDL Implementation Plan, which is being developed by designated management agencies including local and State conservation commissions and districts, Idaho Department of Lands (IDL), U.S. Forest Service (USFS), BLM, and Reclamation.

Water quality monitoring within the Teton River is currently being conducted as a collaborative effort among private, State, and Federal organizations as a mechanism for conducting remediation actions to improve water quality conditions (Friends of the Teton River 2005).

3.2.2 Environmental Consequences

Beneficial impacts from land management actions under both of the action alternatives include the potential to reduce erosion and slightly improve water quality through better control of over-spray onto Reclamation lands and establishment of permanent cover along the canyon rim. Water quality would not change significantly in the future.

3.2.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Under the No Action Alternative, no grazing leases or new agricultural leases would be implemented. Existing agricultural leases would likely be renewed and no changes to existing water quality are anticipated.

There would be no changes with respect to unauthorized uses under the No Action Alternative and Reclamation would continue cooperative efforts with BLM and IDFG.

Mitigation and Residual Impacts (Alternative A)

No mitigation measures are proposed for Alternative A because actions that would continue under this alternative are not anticipated to result in significant adverse water quality impacts in the RMP Study Area. Residual impacts are discussed above.

Cumulative Impacts (Alternative A)

The increasing population of the RMP Study Area counties and region will likely result in development pressures on private lands in the vicinity of the Study Area in the future. Significant levels of construction of new homes and other structures on private lands within the greater RMP Study Area watershed could potentially degrade water quality because of improperly functioning septic systems and increased sediment in stormwater runoff. Increased human use, regardless of whether an RMP is implemented or not, will increase the potential for fires and weed occurrences. A higher incidence of fire and weeds would degrade water quality.

3.2.2.2 Alternative B

Under Alternative B, no grazing leases or new agricultural leases would be implemented; however, agricultural leases would continue to be renewed subject to new terms and conditions consistent with RMP goals and objectives. Any establishment of permanent native vegetative cover along the canyon rim would provide filtering for agricultural runoff and improve water quality. Defining and limiting roadways to prevent illegal off-road vehicle (ORV) use and reduce exposed soils near the river would also improve water quality by reducing erosion during

large storm events. Finally, providing sanitation facilities where visitor use is concentrated and where access allows would have beneficial effects on water quality.

Under this alternative, Reclamation would continue cooperative efforts with respect to unauthorized uses with BLM and IDFG. Educational efforts regarding noxious weeds and fire danger would be implemented including displaying fire prevention messages at concentrated public use areas. These signs may reduce the potential for fire and the subsequent post-fire erosion and degradation of water quality.

Public access into the canyon would increase under Alternative B. It is reasonable to assume that increased access points combined with the growing population of eastern Idaho would result in more people using the canyon, which would increase the potential for weed infestations and fires. Soil erosion is typically higher in weed-infested areas and on burned lands than in areas with native vegetative cover so water quality would likely be degraded if weed occurrences or fire increase. An increase in fire potential could influence hydrologic processes such as infiltration, surface erosion, sediment transport, and flooding, which in turn affect water quality. Within the steep-walled Teton River Canyon, the greatest impact of fire is not necessarily on generating runoff, but its effect on the dynamics of runoff as it begins to move down the steep slopes over the soil surface where rilling may occur following thunderstorms or rapid snowmelt events (Pierson 2003).

Mitigation and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this alternative are not likely to result in substantial adverse impacts on water quality in the RMP Study Area.

Cumulative Impacts (Alternative B)

Cumulative impacts under Alternative B would be similar to those under Alternative A. Specifically, potential future development on private lands could result in water quality impacts.

3.2.2.3 Alternative C

The water quality impacts of Alternative C would be similar to those expected under Alternative B.

Mitigation and Residual Impacts (Alternative C)

No mitigation measures are proposed for Alternative C, for the same reasons as stated for Alternative B.

Cumulative Impacts (Alternative C)

Cumulative impacts under Alternative C would be similar to those under Alternatives A and B.

3.3 Soils

3.3.1 Affected Environment

Soils in the RMP Study Area are dominated by silt loams and sandy loams. Rock outcrops are more common within the Teton River Canyon. Runoff and erosion potential varies across the RMP Study Area. Soils within the Teton River Canyon, including river terraces and floodplains, tend to have slow runoff with slight erosion hazard. In contrast, soils on the canyon walls tend to be highly erosive, with rapid runoff. Erosion in farmland on the canyon rim and areas upslope of the canyon ranges from slight in flat areas to very severe as slope increases over 12 percent. The soils are described for profile, location, depth, drainage, permeability, available water, and runoff and erosion hazards in Appendix B, *Soil Types in the Teton River Canyon RMP Study Area*.

3.3.1.1 Land Slide Activity in Teton River Canyon

Land slides are a natural process in the Teton River Canyon, which historically created rapids and pools in the river. However, the process was accelerated by the filling of the reservoir and subsequent dam failure. According to Reclamation's geomorphology report (2000), more than 200 land slides were activated by the dam failure. Further, "approximately 1,460 acres of canyon slopes were submerged by the reservoir, and 34 percent (500 acres) failed." In total, approximately 3.6 million cubic feet of debris moved to the canyon floor (Reclamation 2000). Because so much material was moved in such a short period of time, the authors of the geomorphology report believe that the volume of source material for land slides has been reduced, which in turn lowers the likelihood of future land slides during the next several centuries. The lack of evidence of large land slides since 1976 supports this theory.

The largest land slides occurred in the 2-mile stretch between Bitch Creek and Spring Hollow, and in the 2-mile reach upstream from Canyon Creek (Reclamation 2000). In the Bitch Creek to Spring Hollow reach, land slides created a 30.5-foot drop. In the Spring Hollow to Canyon Creek reach, land slides created a total drop of 26 feet over 2.1 miles.

3.3.2 Environmental Consequences

Erosion, compaction and changes to soil productivity are the predominant potential soil effects from implement of any of the RMP alternatives. The risk of land slides is not likely to change with any of the alternatives and so will not be discussed further in this section.

3.3.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Current erosion and existing losses of soil productivity from compaction and weed populations would continue. Erosion is limited to a few areas along the canyon rim on agricultural leases where pivot over-spray or irrigation runoff occurs and to some high-use areas along the Teton River. Erosion of unregulated roads is also a minor problem in recreation-oriented areas. However, erosion has not been identified as a major problem in the RMP Study Area. Reed canarygrass would continue to inhabit the banks of the Teton River at current densities and provide erosion protection for the river banks.

Compaction from boat launching and take-outs contributes to losses of soil productivity in a few areas. Native plant communities have difficulty establishing on compacted soils, and weeds typically dominate compacted soil locations. These conditions exist primarily at the Teton Dam Take-Out Site and the Spring Hollow Put-in Site. Compaction and erosion from impromptu roads is a problem at the Teton Dam Site. This condition would not change at these areas with the No Action Alternative and soil would continue to erode during large storm events.

Mitigation and Residual Impacts (Alternative A)

No mitigation measures are proposed for Alternative A because none of the actions associated with this alternative would result in significant adverse soil impacts in the RMP Study Area. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives. Residual impacts are discussed above.

Cumulative Impacts (Alternative A)

The increasing population of the RMP Study Area counties and region will likely result in an increase in recreational use that could continue to compact soils in boat launch areas, or could also result in the creation of more impromptu roads at the Teton Dam Site. Without a plan for management of these areas, soil could continue to erode as discussed above. Increased visitation could also increase fire hazards and the potential for weed infestation, which generally results in higher rates of soil erosion compared to areas supporting native vegetation.

3.3.2.2 Alternative B

Enhancing and restoring native plant communities, particularly woody vegetation, in a few areas would reduce erosion and improve soil productivity at those sites through greater canopy coverage, better root distribution, and increasing organic matter production and decomposition. The exception is removing reed canarygrass monocultures along the banks of the Teton River and replacing it with native vegetation. The reed canarygrass monocultures are highly effective at preventing bank erosion. Establishing less dense native communities may potentially increase bank erosion, both short and long term. However, replacing reed canarygrass with native riparian species is a low priority for Reclamation. If this action occurs it would only be implemented at a few locations.

Loss of soil productivity from weed populations may improve slightly, as a result of the public education outreach associated with Alternative B. However, in the absence or increased weed control efforts, the education efforts are not likely to improve soil productivity to any great degree.

Erosion control through establishing permanent native plant cover along the canyon rim and through controlling use of unimproved roads would reduce soil loss from the RMP Study Area. Erosion has not been reported to be a major problem in these areas, so benefits would be expected to be relatively minor.

Formalizing and improving boat ramps and turnarounds, and defining parking areas would reduce erosion and compaction of soils, and result in improved soil productivity at the Teton Dam Take-Out Site and the Spring Hollow Put-in Site. Defining access routes and discouraging public access on impromptu roads at other locations would further reduce erosion and compaction.

Mitigation and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this alternative are not likely to result in substantial adverse impacts on soils in the RMP Study Area. The actions may, in fact, reduce erosion by formalizing access points.

Cumulative Impacts (Alternative B)

Cumulative impacts would be the same as those described for Alternative A.

3.3.2.3 Alternative C

Potential adverse and beneficial effects described for Alternative B would also occur with Alternative C. Additional public access into the canyon would be pursued at two locations under Alternative C in addition to the increased access points under Alternative B. It is reasonable to assume that increased access points, combined with the growing population of eastern Idaho, would result in more people using the canyon, which would increase the potential for weed infestations and fires. The erosion of soils is typically higher in weed-infested areas than in areas with native vegetative cover so

water quality would likely be degraded if weed occurrences increase. Erosion is also higher following fires so if the incidence or size of fires increases as a result of more access and increased human use, erosion would be expected to increase as well.

Mitigation and Residual Impacts (Alternative C)

No mitigation measures are proposed for Alternative C, for the same reasons as stated for Alternative B.

Cumulative Impacts (Alternative C)

Cumulative impacts under Alternative C would be similar to those under Alternative A.

3.4 Vegetation and Wetlands

The Teton River Canyon RMP Study Area has been heavily influenced by farming and livestock grazing for more than 100 years. Livestock grazing has not occurred on Reclamation lands within the RMP study area since about 1975 when the lands were acquired for the Teton Dam and Reservoir project. Prior to 1975, accessible lands were likely grazed. Lands on the canyon rim are virtually all farmed and are discussed in Section 3.9, *Land Use*.

3.4.1 Affected Environment

3.4.1.1 Upland Plant Communities

The distribution of major plant communities within the Teton River Canyon is determined by aspect, proximity to water, whether or not lands were inundated by the water behind Teton Dam when it was filling, soil development, and early revegetation efforts along the river. The Teton River Canyon generally runs from west to east within the RMP Study Area. Therefore, south slopes of the canyon generally face north and north slopes generally face south. The aspect at each specific location has a strong bearing on soil development and the

plants that occur there. However, within this general west-east orientation, the canyon includes long sections that trend southeast to northwest and others that are oriented from northeast to southwest. This creates a good deal of variability in the vegetation, especially along the canyon walls to the south of the river. South-facing slopes support a different plant community because of the drier conditions and poorly developed soils compared to north-facing slopes.

Within the canyon, lands above the inundation zone support a mix of native plant communities determined largely by aspect. North-facing slopes above the inundation zone are vegetated with a mix of Douglas-fir (*Pseudotsuga menziesii*), scattered aspen (*Populus tremuloides*) stands, and a variety of shrubs including choke cherry (*Prunus virginiana*), service berry (*Amelanchier alnifolia*), golden currant (*Ribes aureum*), snowberry (*Symphoricarpos albus*), and, in more moist areas, willows (*Salix* spp.). A wide variety of native grasses and forbs form the ground cover. The south side of the canyon also includes slopes with more easterly or westerly aspects, which tend to be drier than the north-facing slopes. These east- and west-facing slopes above the inundation zone support more xeric plant communities that tend to include some of the above species as well as many of those that occur on the south-facing slopes. Common species on these drier slopes include big sagebrush (*Artemisia tridentata*), antelope bitterbrush (*Purshia tridentata*), rubber rabbitbrush (*Chrysothamnus nauseosus*), currant, and Wood's rose (*Rosa woodsii*). Native grasses and forbs form the ground cover, although the exotic annual cheatgrass (*Bromus tectorum*) is relatively abundant in some areas, especially in higher slopes near the canyon rim.

Slopes along the south side of the canyon, which were within the inundation zone but did not slide as the reservoir emptied,

support similar species at lower densities and with less mature trees and shrubs. Slopes along the south side of the canyon that did slide as the reservoir emptied are either barren or support a sparse cover of grasses and a few shrubs.

Reclamation (2003a) conducted a study that compared the vegetation on historically inundated and non-inundated south-facing slopes within the RMP Study Area. Historically, inundated slopes were further divided into those that slid (land slide slopes) as the reservoir emptied and those that did not (inundated slopes). Portions of the study results are presented as follows:

Total shrub density was significantly higher on inundated non-sliding slopes, and species richness was significantly reduced on land slide slopes. Big sagebrush was the most abundant shrub sampled. Bitterbrush, an important winter food for mule deer, was positively correlated with deer use based on pellet group counts, significantly less abundant on inundated slopes, and absent from land slide slopes. Shrub species richness was highest in the non-inundated plots, and significantly reduced in the inundated-land slide plots.

Transects where bitterbrush was absent had site conditions that were often very dry, steep, and rocky. On such slopes, bitterbrush appeared to be replaced by oceanspray (*Holodiscus discolor*). Rubber rabbitbrush was relatively common in all inundation categories, but had a higher mean density in the inundated-land slide plots. Some land slide plots were dominated by rubber rabbitbrush, a shrub that is often associated with disturbance. Rocky Mountain juniper was

detected in low numbers on transects in all inundation categories.

Perennial grass and forb cover was significantly less in the inundated-nonslide plots. The lower mean values of herbaceous cover on the inundated-nonslide plot are possibly a function of the higher densities of shrubs on those plots.

The Reclamation (2003a) study reached the following conclusions.

Several plant species have become established in the inundation zone of south-facing slopes since the failure of Teton Dam in 1976. Total shrub density was significantly higher on inundated-nonslide plots compared to non-inundated plots. Shrub species richness, as well as big sagebrush density, was significantly lower on only the inundated-land slide plots. The lower percent cover of grass and forbs on inundated-nonslide plots is probably a function of increased shrub cover.

No significant differences were measured between big sagebrush density, height, and volume between non-inundated and inundated-nonslide plots. Big sagebrush was the most abundant woody species on all transects and had similar densities on non-inundated and inundated-nonslide plots. Its occurrence on certain land slide plots in moderate densities with significantly more young-aged plants indicates that it can successfully colonize on some slide areas. However, some deeper land slides where vegetation was almost entirely absent will probably not support substantial vegetation for an extremely long time, if ever.

3.4.1.2 Wetland and Riparian Communities

Riparian communities were eliminated during the filling and subsequent emptying of Teton Reservoir. Early attempts to stabilize land slides near the river included extensive seeding of reed canarygrass (*Phalaris arundinaceae*). This species now dominates the riparian zone along much of the length of the Teton River in the RMP Study Area. Native narrowleaf cottonwood (*Populus angustifolia*) and willow (*Salix exigua*) are beginning to become re-established at a few locations, primarily along the river in the lower third of the RMP Study Area. Cottonwood, willow, red-osier dogwood (*Cornus stolonifera*), and a few other riparian species also occur in the uppermost ends of the drainages within the RMP Study Area that were not affected by the filling of Teton Reservoir.

3.4.1.3 Noxious Weeds and Invasive Plants

Existing populations of noxious weeds within the RMP Study Area include leafy spurge (*Euphorbia esula*) and several species of thistle, particularly Canada thistle (*Cirsium arvense*) and musk thistle (*Cirsium nutans*). Leafy spurge and Canada thistle are currently of significant concern within Teton River Canyon. In addition to these species, spotted knapweed (*Centaurea maculosa*) is now present in Teton County and either may be present or should be expected to occur within Teton River Canyon in the near future (Personal Communication, Ben Eborn, August 30, 2005). It is widespread across Idaho and other parts of the West. This native of Europe is a biennial or short-lived perennial that grows 3 to 5 feet in height. It is named for the dark fringe on the flower-head that resembles dark spots. Spotted knapweed is aggressive, and reduces biodiversity by out-competing native vegetation. It reduces wildlife forage and is detrimental to water

and soil resources. Sites with this knapweed have much higher than normal water runoff (56 percent higher) and stream sediment loads (192 percent) than non-infested lands (Lacey et al. 1989). Seeds from this species can germinate on sites with a wide range of conditions, and multiple rosettes on a single spotted knapweed root crown are common (Watson and Renney 1974).

Other exotic species present in the RMP Study Area and on adjacent BLM lands include salt cedar (*Tamarix ramosissima*), reed canarygrass (*Phalaris arundinacea*), and tumble mustard (*Sisymbrium altissimum*). The Felt Dam area has patches of cocklebur (*Xanthium strumarium*). Crested wheatgrass (*Agropyron cristatum*) is another exotic species that was planted in areas near the Teton Dam Overlook. It remains as a monoculture in these areas, and provides little or no wildlife value.

Thistle control efforts appear to be successful in holding populations in check and limiting their spread. Leafy spurge is increasing and moving downstream, where it is spreading from lands upstream in the Teton Valley.

Leafy spurge is an extremely difficult plant to eradicate or control because it spreads by both seeds and by extensive roots, which can exceed 20 feet in depth. Also, it tolerates a wide range of habitats from rich, moist sites, such as stream banks, to nutrient-poor, dry soils typical of many western rangelands. It is most aggressive in semi-arid situations where competition from associated species is less intense, so infestations generally occur and spread rapidly on dry hillsides, dry prairies, or arid rangelands. Although it occurs on all soil types, it seems best adapted and spreads the fastest on coarse-textured soils (Selleck et al. 1962). Vegetative reproduction is the primary means of patch expansion once a plant is established at a site.

Reclamation is actively involved in the large-scale control of leafy spurge, Canada thistle, and musk thistle in the RMP area.

Reclamation is actively involved in biological control of Canada thistle, provides funding to other agencies for control efforts, and also conducts spraying operations and administers spraying contracts with IDFG and the counties. Reclamation's current budget for biological control of Canada thistle in Teton County of \$10,000 is spent to purchase and distribute thistle stem weevil (*Ceutorhynchus litura*), thistle defoliating beetle (*Cassida rubiginosa*) and thistle stem gall fly (*Urophora cardui*). Reclamation, along with IDFG, also is actively controlling salt cedar along the river. Teton County is using biological controls at inaccessible areas with leafy spurge infestations, and Fremont County is using both biological and chemical control methods on all species of weeds in the RMP area. IDFG has, and continues to use biological, mechanical, and chemical methods. IDFG has used biological control as the main control technology for leafy spurge to date (Personal Communication, Kim Ragotskie, June 9, 2005). Currently, Teton County weed agents are gaining better control of leafy spurge outbreaks by using herbicides rather than biological controls. Herbicide application is typically limited to less steep areas of the county that are accessible to manual spraying with backpack sprayers. In such areas, controlling leafy spurge by spraying in the fall with the herbicide Plateau™ has been successful (Personal Communication, Ben Eborn, August 30, 2005). Biological control is still used in steep areas where access is limited.

3.4.1.4 Rare and Sensitive Species

No rare plants are known to occur within the RMP Study Area (Idaho Conservation Data Center [CDC] 2005). However, a thorough inventory has not been conducted.

3.4.2 Environmental Consequences

Continuation of current weed control programs would slow or prevent the spread of weeds into areas that currently support native vegetation and may enhance native plant communities in areas that are currently infested with weeds. Enhancement of native vegetation in a few areas is also an important difference between the No Action and the two action alternatives. Either action alternative is likely to result in positive gains for native vegetation, in at least a few areas, when compared to the No Action Alternative.

No known populations or designated critical habitats for rare and sensitive plant species occur within the Study Area.

3.4.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Although no new agricultural leases would be implemented, the renewal of agricultural leases with their current lease terms and conditions under Alternative A is likely to continue to impact native vegetation. Without changes to these agricultural lease terms and conditions, addressing trespass and the use of pivots, this alternative is least likely to improve the current situation. This is especially true for negative impacts to native vegetation from excess pivot spray-out, irrigation runoff, and agricultural trespass.

Noxious weed control efforts would continue at current levels under the No Action Alternative. Based on apparent current trends, leafy spurge, which has shown slow response to biological controls, may continue to spread within the RMP area. The current level of effort for leafy spurge is not likely to be able to maintain the status quo in terms of avoiding degradation of native plant communities. The presence of spotted knapweed in Teton County means this species is likely to reach the canyon in the very near future as well. Either of the action alternatives is expected to result in more

benefits to native plant communities as a result of weed control and the protection, enhancement, and restoration of native vegetation when compared to this alternative.

The No Action Alternative would provide no formalized opportunity to convert historic big game winter range areas to native vegetation through restoration, conversion, and protection. No provisions are in place to restore and convert any acreage to native vegetation for big game species. This alternative does not have provisions to either increase native woody vegetation or to restore reed canarygrass-dominated riparian areas to native riparian species.

The No Action Alternative does not include public messages at concentrated use areas regarding fire prevention. Recreational use will likely increase under the No Action Alternative, so the lack of public messages regarding fire prevention may result in a slightly increased potential for fires under this alternative.

Mitigation Measures and Residual Impacts (Alternative A)

BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives.

Cumulative Impacts (Alternative A)

The increasing population of the RMP Study Area counties and region will likely result in increased use of the area, which could increase the spread of noxious weeds.

3.4.2.2 Alternative B

Under Alternative B, the current level of on-the-ground weed control activities would continue. The expected future success of weed control efforts would be similar to what was described for the No Action Alternative. Efforts to inform and educate the public regarding problems associated with noxious weeds would increase, possibly reducing the rate of future weed introductions. Methods and attempts to restore a few selected areas

that currently support only a reed canarygrass monoculture and develop these riparian sites into a more typical mix of native riparian plant species would be investigated and may be implemented. If this action is implemented, it would improve plant diversity and wildlife habitat values in a few small areas. Additionally, under this alternative, some historic big game winter range areas could be converted from wheat fields into native vegetation. If this is successful, it would increase native vegetation and enhance wildlife habitat along some areas of the upper slopes and adjacent areas of Teton River Canyon. However, any land converted from wheat fields to big game habitat would not be protected from big game depredation while the new plants are being established, which will slow the rate and success of any conversions.

Formalized parking areas at several recreation sites would reduce vehicle damage where ad hoc parking may currently impact established vegetation.

Mitigation Measures and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this alternative are not anticipated to have substantial adverse impacts on vegetation resources within the RMP Study Area. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives.

Cumulative Impacts (Alternative B)

The increasing population of the RMP Study Area counties and region will likely result in increased use of the area, which could increase the spread of noxious weeds.

3.4.2.3 Alternative C

Weed control actions and public education regarding weeds, as well as the expected success of future weed control efforts, would be the same as described for

Alternative B. Efforts to improve riparian and big game habitat and the expected benefits of these actions would also be the same as Alternative B.

Under this alternative, additional public access is planned for three additional locations compared to Alternative B. Increased public access would likely result in a small increase in weed infestations, fire potential near these access points. Interpretive signage displaying noxious weed and fire prevention messages at concentrated public use areas may offset the increased risk of weed infestations and fire to a degree, but is not likely to remove the greater risk entirely. More weed infestations and fires would degrade habitat values.

Mitigation Measures and Residual Impacts (Alternative C)

No formal mitigation measures are proposed for Alternative C because the actions are not going to have adverse impacts on vegetation resources within the RMP Study Area. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives.

Cumulative Impacts (Alternative C)

Cumulative impacts under Alternative C would be similar to those under Alternatives A and B. However, additional public access points would allow for increased human use of the RMP Study Area, increasing the potential for weed infestation and fire.

3.5 Wildlife Resources

A reconnaissance-level assessment of wildlife use of the area was conducted by the U.S. Fish and Wildlife Service (FWS) in 1961 in anticipation of the construction of the Teton Dam (FWS 1961). This report provides limited information regarding wildlife use of the Teton River Canyon at that time. No comprehensive field surveys to

document the species of wildlife that occur in the RMP Study Area have been conducted.

3.5.1 Affected Environment

3.5.1.1 Wildlife Habitat

Wildlife habitats within the canyon include mixed conifer stands with scattered aspen, deciduous mountain shrub communities, shrub-steppe communities dominated by sagebrush and bitterbrush, weedy upland sites, barren rocky slopes, open water, and riparian areas; most of which are dominated by reed canarygrass and a few that support native cottonwoods and willows. The rocky slopes include both naturally barren areas, especially on the north side of the river, and barren areas caused by land slides related to failure of the dam, located mostly on the south side of the river where soils were deeper. Tributaries of the Teton River within the RMP study area, including Bitch and Badger Creeks, drain upland forested lands of Grand Teton National Park located approximately 20 miles to the east. The combination of the variety of habitat types present and the relative proximity to forested lands results in a fairly diverse range of wildlife species within the canyon on a seasonal basis. However, the fact that virtually all of the lands outside of the canyon and within the RMP Study Area are farmed eliminates potential use of the area by other wildlife species.

3.5.1.2 Mammals

FWS (1961) noted the following species of mammals within the canyon: beaver, muskrat, river otter, mink, bobcat, short-tailed weasel, cottontail rabbit, coyote, red fox, raccoon, mule deer, elk, and moose. All of these species continue to occur in suitable habitats. Other species not listed by FWS (1961) but that undoubtedly also occur in the canyon include the yellow-bellied marmot, least chipmunk, red squirrel,

porcupine, and several species of mice and voles. The upland vegetation and water in the canyon portion of the RMP Study Area provides habitat for eight species of bats, including the little brown myotis, Yuma myotis, long-eared myotis, long-legged myotis, silver-haired bat, big brown bat, hoary bat, and Townsend's big-eared bat (Groves et al. 1997).

A few mule deer are year-round residents. However, many more deer as well as a smaller number of elk and moose winter in the area. A large percentage of the deer that winter in Teton River Canyon migrate from Wyoming. Large numbers of mule deer winter in Teton River Canyon and along the major tributaries within the RMP Study Area. Deer use is concentrated on the south- and west-facing slopes located on the north side of the canyon. During winters when there is more snow, deer concentrate in the lower portions of the RMP Study Area within the canyon. IDFG (2003a) conducted aerial surveys to count wintering deer along the Teton River and its major tributaries including lower Canyon, Bitch, and Badger Creeks. The survey results were presented as raw numbers (number of deer actually counted) and as sightability estimates. Sightability estimates provide a more accurate estimate of true population size. They are based on controlled studies where a deer or elk population's known size is systematically counted from aircraft to determine the portion of the actual population that is counted. Factors including deer or elk group size, activity, terrain, percent vegetation cover, and snow conditions all affect the percent of the actual numbers of animals that are counted from the air. This information is used to develop sightability models that are applied to raw numbers, given the conditions present during the survey. The raw numbers and sightability estimates, respectively, of the number of mule deer wintering in the

canyon portion of the RMP Study Area were 945/1,626 in January 2000; 402/no sightability estimate in December 2000; 559/614 in March 2001; and 933/1,257 in March 2002.

Reclamation (2003a) conducted a study that compared vegetation on historically inundated and non-inundated south-facing slopes in Teton River Canyon with implications for mule deer winter habitat. Information from that study as it relates to plant species and abundance was summarized in Section 3.4, *Vegetation and Wetlands*. Study findings related to mule deer habitat follow:

Total shrub density was significantly higher on inundated, non-sliding slopes, and species richness was significantly reduced on landslide slopes. Big sagebrush was the most abundant shrub sampled. Bitterbrush, an important winter food for mule deer, was positively correlated with deer use based on pellet group counts, was significantly less abundant on inundated slopes, and was absent from landslide slopes.

IDFG (2003b) indicated that during the 1980s approximately 100 elk wintered along the Teton River and its tributaries north of Highway 33, an area that roughly coincides with the RMP Study Area. Elk populations throughout Idaho and in this area increased dramatically during the 1990s.

3.5.1.3 Birds

The variety of habitats present in the RMP Study Area, especially within the canyon, provide habitat for a wide range of species including several species of raptors and many species of neotropical migrant songbirds. Relatively common raptors include the red-tailed hawk, American kestrel, prairie falcon, the sensitive species discussed in the following text, and bald

eagles, discussed in Section 3.7, *Threatened and Endangered Species*. Many of the same species of birds found in the Tex Creek Wildlife Management Area (WMA) would likely use habitats within the Teton River Canyon. The Tex Creek WMA is located approximately 25 miles to the southwest of the Teton RMP Study Area. It includes many of the same habitat types found in the RMP Study Area, although the Tex Creek WMA is much larger. The Tex Creek Management plans (IDFG 1998a, 1998b) list 92 species of birds that use the Tex Creek area. Many of the same species would likely use habitats within the Teton River Canyon.

In 1961 ruffed grouse and mourning doves were found in the canyon, and ring-necked pheasants, Hungarian partridge, and sharp-tailed grouse were present near the canyon rim (FWS 1961). The presence of ruffed grouse in the canyon and large numbers of sharp-tailed grouse near the canyon rim has been noted recently (Personal Communication, Kim Ragotzkie, June 2005). Columbian sharp-tailed grouse currently occupy less than 10 percent of their original range (IDFG 1990). Columbian sharp-tailed grouse are considered to be a species of concern by the FWS, and a sensitive species by both the USFS and BLM. Low numbers of waterfowl use the river and adjacent wetlands during the late spring, summer, and early fall. Mallards and common mergansers are probably the most common species. Winter waterfowl use is restricted to a few small areas below rapids where the water does not freeze.

3.5.1.4 Amphibians and Reptiles

Some of the more common amphibians and reptiles that likely occur in the RMP Study Area include the western rattlesnake (*Crotalus viridis lutosus*), yellow-bellied racer (*Coluber constrictor mormon*), western terrestrial garter snake (*Thamnophis*

elegans), common garter snake (*Thamnophis sirtalis*), gopher snake (*Pituophis melanoleucus deserticola*), and sagebrush lizard (*Sceloporus graciosus*). Rubber boas (*Charina bottae*) and northern leopard frogs (*Rana pipiens*) probably also occur. Populations of many frog species have apparently suffered declines on a global scale in recent years, making all suitable habitat especially important.

3.5.1.5 Rare and Sensitive Wildlife Species

Information regarding the possible occurrence of rare and sensitive species in the RMP Study Area was obtained from the available literature, the Idaho CDC, and discussion with an IDFG biologist. Four rare species that have been observed in the RMP Study Area include trumpeter swan (*Cygnus buccinator*) each winter, a northern goshawk (*Accipiter gentillis*) nest in 1994, a wolverine (*Gulo gulo*) sighting in 1981, and observation of several great gray owls (*Strix nebulosa*) in 1982 and 1983.

Trumpeter Swan. The Idaho CDC database indicates that trumpeter swans are present in varying numbers along the Teton River within the RMP Study Area each winter. Mid-winter surveys are typically conducted in January or February. Survey results for the period from 1987 through 2000 indicate as few as nine and as many as 114 swans were present in the RMP Study Area at the time of the survey. Two different counts in 1995 indicated 15 and 114 swans in the area, reflecting substantial differences from day to day, within a given winter. Swans are also present on the Teton River during the winter below the dam site. Mid-winter counts below the dam site during the same years indicated as many as an additional 232 swans using this reach of the river immediately below the RMP Study Area.

Northern Goshawk. A northern goshawk nest was located on Milk Creek, a tributary to the Teton River within the RMP Study Area, in 1994. The nest site is within RMP Study Area and approximately 2 miles south of the Teton River. The nest was successful and two young goshawks fledged. At the mapping scale of the CDC data available for analysis, lands surrounding the nest site appear to be privately owned. The CDC information did not indicate if the site was searched for nesting activity in subsequent years. However, raptors display a relatively high degree of nest site fidelity if a nest is successful and would likely reuse the nest site if the surrounding conditions do not change. Goshawks nest in a wide variety of forest types including deciduous (cottonwood and aspen), coniferous (Douglas-fir and other species), and mixed forests. During the non-breeding period, goshawks prefer large tracts of mature forest (Widen 1989) but may also use fragmented landscapes of forests, clearcuts, wetlands, agricultural lands, and especially forested riparian areas. Goshawks could nest in forested portions of the Teton River Canyon and its tributaries and would be expected to spend some time in the area during the non-breeding period because of limited food present during the winter.

Wolverine. The Idaho CDC database also reported a wolverine occurrence in Teton River Canyon in 1981. This was certainly a transient animal as there is no long-term suitable habitat in the RMP Study Area or on adjacent lands. Wolverines have been known to move from Little Teton River Canyon, near Grand Targee ski resort, to an area near Idaho Falls. Movements of this type are not unusual. The following information about wolverine habitat and movements is summarized from Nature Serve (2004) (<http://www.natureserve.org/explorer/servlet/NatureServe>). Wolverines prefer alpine and arctic tundra and boreal

and mountain forests (primarily coniferous). They are limited to mountainous areas in the southern portion of their range, including Idaho, and are most abundant in large wilderness areas. Wolverines usually occur in areas with snow on the ground in winter. Riparian areas may be important winter habitat. Wolverines move long distances and may disperse through atypical habitat. When inactive, they occupy a den in a cave, rock crevice, under a fallen tree, in a thicket, or similar site. Lands within the RMP Study Area are not capable of supporting wolverines for an extended period.

Great Gray Owl. Four to six great gray owls were observed approximately 3 miles north of the dam site and within the RMP Study Area by an IDFG biologist in 1982 and 1983. This location is within the RMP Study Area boundary but well outside of the Teton River Canyon. The owls were seen in a narrow riparian area bordering an agricultural field. Great gray owls typically use dense coniferous and hardwood forest, especially pine, spruce, paper birch, poplar; also second growth, especially near water. They forage in wet meadows and coniferous forest and meadows in mountainous areas. This species exhibits greater mobility in years when food is scarce (Duncan 1987), sometimes moving several hundred kilometers. Food scarcity or unavailability may cause post-breeding movements, especially by immature birds. The winters of both 1982 and 1983 had heavy snow packs, which likely forced these owls out of forested lands to the north or east of the RMP Study Area. Lands within Teton River Canyon in the RMP Study Area would not be considered good great gray owl habitat.

3.5.2 Environmental Consequences

Land management actions under both of the action alternatives include the potential to improve the condition and increase the amount of wildlife habitat within the RMP Study Area,

which would benefit numerous wildlife species. Increased public access that would be pursued under both the action alternatives would increase the potential for wildlife habitat degradation and wildlife disturbance.

3.5.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Under the No Action Alternative, no new agricultural leases and no grazing leases would be granted. Current habitat conditions would likely remain unchanged. Alternative A does not include any guidance regarding regulating the number of private and commercial float boat users. Increased human use would increase disturbance and displacement of wildlife and increase the potential for fires and weed occurrences, both of which degrade wildlife habitat value.

Mitigation and Residual Impacts (Alternative A)

No mitigation measures are proposed for Alternative A because none of the actions associated with this alternative are anticipated to result in significant adverse impacts on wildlife in the RMP Study Area. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives. Residual impacts are discussed above.

Cumulative Impacts (Alternative A)

The increasing population of the RMP Study Area counties and region will likely result in more human use of the RMP Study Area. Increased human use of the corridor by private floaters is also expected. Together, these higher levels of human activity may reduce or eliminate use of the RMP Study Area by individuals or populations of sensitive wildlife species. A higher incidence of fire or weeds resulting from more human activity would degrade wildlife habitat values.

3.5.2.2 Alternative B

The establishment of permanent native vegetative cover along the canyon rim would be beneficial for a variety of wildlife species. Similarly, any increases in the amount of woody riparian vegetation along the river, however small, would benefit wildlife species associated with riparian habitats. Mule deer and elk would benefit if portions of agricultural leases are successfully converted to permanent cover functioning as big game winter range. However, any land converted from wheat fields to big game habitat would not be protected from big game depredation while the new plants are being established, which would slow the rate and success of any conversions.

Under this alternative, Reclamation would continue cooperative efforts with respect to unauthorized uses with BLM and IDFG. Educational efforts regarding noxious weeds and fire danger would be implemented. These would include displaying fire prevention messages at concentrated public use areas. These signs may reduce the potential for fire, thereby preserving current wildlife habitat values. Increased human access would increase the potential for fires and weed occurrence. A higher incidence of fire or weeds would degrade wildlife habitat values.

Recreation monitoring (Chapter 2) includes managing recreation to maintain a semi-primitive experience for recreationists. This may or may not reduce potential impacts of increased recreation use on sensitive wildlife species, depending on a number of factors including human activity levels, the spatial and temporal overlap between recreation activities and the occurrence of sensitive species and habitats, and how a “semi-primitive recreation experience” is defined and managed.

Mitigation and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this alternative are not likely to result in substantial adverse impacts on wildlife in the RMP Study Area. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives.

Cumulative Impacts (Alternative B)

Cumulative impacts under Alternative B would be similar to those under Alternative A.

3.5.2.3 Alternative C

The beneficial and adverse effects of Alternative C would be similar to those expected under Alternative B.

Under this alternative, additional foot-only access is planned for two locations in addition to those under Alternative B. It is reasonable to assume that increased access points, combined with the growing population of eastern Idaho, would result in more people using the canyon, which would increase the potential for weed infestations and fires and would degrade wildlife habitat value. Increased human use also results in a higher incidence of wildlife disturbance and displacement, which affects many species. Although these new access points are intended for summer use only, enforcement of winter closures will not be totally effective, resulting in more potential human use during the winter. Though large numbers of people would not be expected to use the area during winter, even small increases in the number of winter users could adversely affect wintering deer and elk at a critical time of the year, possibly resulting in lower over-winter survival rates, particularly during severe winters.

Mitigation and Residual Impacts (Alternative C)

No mitigation measures are proposed for Alternative C, for the same reasons as stated for Alternative B. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives.

Cumulative Impacts (Alternative C)

Cumulative impacts under Alternative C would be similar to those under Alternatives A and B. However, three additional pedestrian access points would allow for increased human use of portions of the RMP Study Area, slightly increasing the potential for habitat degradation and wildlife disturbance.

3.6 Aquatic Biology

3.6.1 Affected Environment

The most highly altered segment within the Teton Subbasin includes the Teton RMP Study Area (IDEQ 2003). The impacts from the Teton Dam failure caused extensive damage to the fisheries and riparian areas downstream of the dam to the confluence with the Henrys Fork of the Snake River. Upstream of the dam and prior to filling the Teton Reservoir, the woody and riparian areas within the canyon were cleared over 17 miles to prepare for the reservoir filling. Following the dam failure, the resulting land slides within this area further impacted the wetlands, riparian, and aquatic conditions, as well as to those species dependent on these habitats (Randle et al. 2000).

Although the impacts from the dam failure and reservoir construction were significant, the fisheries within the Teton River continue to be impacted by habitat degradation, disease, and competition hybridization with non-natives (Van Kirk and Jenkins 2005). Habitats continue to be

impacted by tributary passage barriers created by irrigation diversions as well as the altered hydrologic regime created from the withdrawal of water for irrigation in the upper Subbasin and the influx of diverted water from other drainages within the lower end of the Subbasin (Van Kirk and Jenkins 2005). Whirling disease has been known within the Teton River since the mid-1990s. Competition with introduced brook and rainbow trout and hybridization with rainbow trout are likely contributors to the decline of native Yellowstone cutthroat trout populations (Van Kirk and Jenkins 2005). Recently, the FWS initiated a status review of Yellowstone cutthroat trout to determine the need to list the species under the ESA (FWS 2005b). In February 2006, the FWS ruled that listing the Yellowstone cutthroat trout as either threatened or endangered under the ESA is not warranted at this time.

The Teton River is currently designated by IDEQ as cold-water salmonid spawning, as well as other uses, for its beneficial uses (IDEQ 2003). Recent fisheries studies within the Teton River Canyon find a variety of native and non-natives fishes (Table 3.6-1; Schrader 2000); however, the overall robustness of the fishery within the project area appears to be weaker than that within the upper portion of the Teton River watershed (IDEQ 2003). Public meetings have also identified fish poaching within this portion of the river as a significant concern and attribute the pervasiveness of poaching to the lack of access, which makes enforcement difficult.

TABLE 3.6-1
Fishes within the Teton River Canyon Area¹

Common Name	Species
Yellowstone cutthroat trout	<i>Oncorhynchus clarki</i>
Wild rainbow trout	<i>Oncorhynchus mykiss</i>
Hybrid cutthroat x rainbow trout	<i>O. mykiss</i> x <i>O. clarki</i>
Hatchery rainbow trout	<i>Oncorhynchus mykiss</i> sp.
Eastern brook trout	<i>Salvelinus fontinalis</i>
Brown trout ²	<i>Salmo trutta</i>
Mountain whitefish	<i>Prosopium williamsoni</i>
Sculpin ²	<i>Cottus</i> sp.
Longnose dace ²	<i>Rhinichthys cataractae</i>
Speckled dace ²	<i>Rhinichthys osculus</i>
Utah sucker ²	<i>Catostomus ardens</i>
Utah chub	<i>Gila atraria</i>
Redside shiner ²	<i>Richardsonius balteatus</i>

¹ Adopted from Schrader 2000

² IDEQ 2003

At present, few protective measures are implemented within the RMP Study Area to protect local fisheries and their habitats. Indirect effects stem from cooperative management programs that focus on noxious weed control and include treatments within riparian areas. Cooperative efforts are also made with BLM and IDFG to minimize unauthorized recreation and degradation of local resources. However, no specific RMP has been implemented to protect the aquatic resources.

Impassable irrigation diversions within tributaries to the Teton River upstream of the RMP Study Area have limited access to natal fish grounds that have impacted the native cutthroat trout distribution as well as abundance within and around the RMP Study Area (Personal Communication, Bill Schrader, 2005).

The condition of the aquatic habitats at the watershed level within the greater

Yellowstone ecosystem was described by Van Kirk et al. (1999). The results of this report find the Teton River watershed to contain a good general condition for native fishes, poor quality fisheries habitat, but good overall habitat integrity across the watershed. The combination of the native fish condition, habitat condition, and habitat integrity values resulted in ranking the Teton watershed as the highest priority for restoration (Van Kirk et al. 1999). Van Kirk et al. (1999) concluded that the Teton River watershed had a high potential for restoration success due to the cooperative interests of the fisheries managers, biologists, and outside interests.

Finally, in addition to the Van Kirk et al. (1999) study, a comprehensive report of enhancement program activities conducted from 1987 through 1999 is currently being published by IDFG that would provide project area-specific information and would include population surveys, fish movement, age and growth, whirling disease, black spot disease, fish stocking, creel surveys, habitat surveys, and habitat projects (Personal Communication, Bill Schrader, 2005). This report should provide additional valuable information on the existing conditions as well as provide recommendations for improving the fisheries within the project area.

3.6.2 Environmental Consequences

Both of the proposed action alternatives include measures that would investigate and may actively improve small segments of riparian habitat through native vegetation protection, plantings, and provide supported monitoring and restoration activities to improve fisheries conditions within the resource management area. Alternative A provides no new direction for water quality or riparian habitat improvements and no change in habitat conditions for Yellowstone cutthroat trout. Increased public access proposed under the action alternatives may

result in an increase in illegal poaching of Yellowstone cutthroat trout, which has been identified as a problem by local residents.

3.6.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Under the No Action Alternative, the existing agricultural leases and their conditions would continue to be implemented. The current condition of the fisheries and aquatic habitat would continue, and no changes are proposed for the following: 1) access management; 2) vegetation protection and enhancement; 3) rare, threatened, and endangered species and their critical habitat; 4) erosion control; 5) water quality; or 6) fisheries management. At present, few specific protections are afforded to fisheries or their habitats within the RMP study area and these conditions would likely continue into the future. Specific fisheries impacts expected to continue under the No Action Alternative include poaching, water quality impacts from unregulated travel and camping within riparian areas, localized runoff from adjacent agriculture lands, and upstream sources. Under the No Action Alternative, the current riparian habitat, aquatic habitat, and water quality conditions would continue largely unchanged in the future.

Mitigation and Residual Impacts (Alternative A)

No mitigation measures are proposed for Alternative A because no recommendations associated with this alternative are anticipated to result in significant adverse water quality impacts in the RMP Study Area compared to current conditions. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives. Residual impacts are discussed above.

Cumulative Impacts (Alternative A)

The increasing population of the RMP Study Area counties and region may result in development pressures on private lands in the vicinity of the Study Area in the future. Significant levels of construction of new homes and other structures on private lands within the greater RMP Study Area watershed could potentially degrade water quality (and aquatic habitat) because of improperly functioning septic systems and increased sediment in stormwater runoff. Local residents identified poaching of Yellowstone cutthroat trout as a problem in the RMP Study Area. More human use because of the increasing population of eastern Idaho would likely increase illegal poaching in this relatively remote canyon.

3.6.2.2 Alternative B

Alternative B proposes management changes that may result in improved aquatic and riparian habitat at a few locations within the RMP Study Area. Runoff from agriculture leased lands would be reduced because of the establishment of vegetative buffers to minimize agriculture-related runoff and associated erosion into local streams.

Recreation management actions would focus public access and camping areas to developed sites to reduce the potential impact of dispersed and unauthorized travel and the associated riparian degradation. These proposed actions are expected to result in minor local improvements in riparian habitats as well as water quality by reducing point and non-point sources of agriculture runoff and fine sediment inputs. However, increased public access into the canyon may result in more poaching and water quality degradation as described in Section 3.2, Water Quality and Contaminants.

Riparian vegetation protection and enhancement plans are also proposed under Alternative B in some areas impacted by the

dam failure. Isolated areas within the RMP Study Area are proposed for vegetation plans where natural regeneration has failed and opportunities for woody species supplementation would benefit the riparian and aquatic habitats. If implemented, these efforts would result in very localized improvements in riparian diversity and floodplain and stream bank structure for aquatic species.

BLM proposes the establishment of special designation areas called ACECs within Teton River Canyon. Alternative B proposes cooperative management of such areas as a means for providing long-term protection of stream and riparian areas within designated areas. If implemented, these areas would support aquatic and riparian recovery for native fishes such as cutthroat trout.

It is expected that the combination of the actions proposed under Alternative B, with the cooperation of adjacent agencies and land owners, would result in somewhat improved riparian and aquatic habitat conditions at a few sites.

Mitigation and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this alternative may result in somewhat improved aquatic habitat conditions in the RMP Study Area. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives.

Cumulative Impacts (Alternative B)

Cumulative impacts under Alternative B would be similar to those under Alternative A.

3.6.2.3 Alternative C

Alternative C proposes the same protective measures as Alternative B. Most beneficial and adverse impacts on aquatic and riparian resources would be similar to those described for Alternative B. Alternative C also includes development of two new walk-in public access points in addition to those

under Alternative B. Increased access would likely increase illegal poaching in this relatively remote canyon.

Mitigation and Residual Impacts (Alternative C)

No mitigation measures are proposed for Alternative C, for the same reasons as stated for Alternative B. BMPs listed in Chapter 5, *Environmental Commitments*, are applicable under all alternatives.

Cumulative Impacts (Alternative C)

Cumulative impacts under Alternative C would be similar to those under Alternatives A and B. More access points combined with the increasing population of eastern Idaho would likely increase illegal poaching in this relatively remote canyon.

3.7 Threatened and Endangered Species

3.7.1 Affected Environment

Information regarding the possible occurrence of proposed, candidate, and listed threatened or endangered species in the RMP Study Area was obtained from the available literature, the Idaho CDC, discussion with IDFG biologists, and the Idaho office FWS website.

The Teton RMP Study Area is located within the Greater Yellowstone Ecosystem. The FWS website includes six listed species and one candidate for listing under the ESA as occurring in Teton, Madison, or Fremont Counties (Table 3.7-1). These species include the listed gray wolf, Canada lynx, grizzly bear, bald eagle, Ute ladies'-tresses orchid, and the Utah valvata snail. The yellow-billed cuckoo is a candidate for listing. Of these, only the bald eagle is either known or expected to occur in the RMP Study Area on a regular basis. The potential or known occurrence of each of these species listed in Table 3.7-1 within the RMP Study Area are discussed briefly.

TABLE 3.7-1

Listed and Candidate Species for Fremont, Madison, and Teton Counties (from FWS website); Notes the Likelihood of Species Occurrence in the RMP Study Area

Listed Species and Status	Likelihood of Occurrence	Fremont County	Madison County	Teton County
Gray wolf (<i>Canis lupus</i>) XN	Unlikely, but could occur during the winter when wintering deer are abundant.	X	X	X
Canada lynx (<i>Lynx canadensis</i>) LT	Very unlikely due to unsuitable habitat in the RMP Study Area and the distance to suitable habitat areas.	X	X	X
Grizzly bear (<i>Ursus arctos</i>) LT	Does not occur. Habitat within and around the RMP Study Area is not suitable.	X		X
Bald eagle (<i>Haliaeetus leucocephalus</i>) LT	Wintering/nesting area. Three nests confirmed in the area by Idaho CDC.	X	X	X
Ute ladies'-tresses orchid (<i>Spiranthes diluvialis</i>) LT	Unknown at this time. Occurrence very unlikely due to occupancy of potential habitat by reed canarygrass.	X	X	
Utah valvata snail (<i>Valvata utahensis</i>) LE	No occurrences within the RMP Study Area in the Idaho CDC database. No snails found in the Teton River during 2004 surveys.	X	X	
Proposed Species				
None				
Candidate Species				
Yellow-billed cuckoo (<i>Coccyzus americanus</i>) C	Highly unlikely since there is no preferred habitat present in the RMP Study Area.	X	X	X

LE— Listed endangered

LT—Listed threatened

XN—Experimental/non-essential population

C—Candidate

Source: FWS 2005a

The Idaho CDC database indicates that the only known occurrence of these species within the RMP Study Area includes three bald eagle nests. The potential for occurrence of the other species listed in Table 3.7-1 is discussed first, followed by a discussion of the bald eagle.

Gray wolf. The gray wolf has no particular habitat preference and is highly adaptable to a variety of habitats. The gray wolf does, however, require areas with low human population, low road density, and high prey density (ideally large, wild ungulates). Wolves live in dens or caves and are known to use the same den year after year. Wolf

packs usually live within a specific territory ranging in size from 50 to more than 1,000 square miles, depending on availability of prey and seasonal prey movements (FWS 2003). Summer home ranges are generally smaller than the winter ranges (NatureServe 2004).

The FWS proposed to reintroduce wolves into Yellowstone National Park as experimental, non-essential populations. In 1995 and 1996, 14 and 17 wolves, respectively, were released into Yellowstone National Park as part of a reintroduction effort. Wolves that might occur in the RMP Study Area during the winter are offspring

of these reintroductions and are also classified as experimental, non-essential under the ESA.

The RMP Study Area and surrounding lands do not provide year-long habitat for wolves. Because all the lands surrounding the RMP Study Area are intensively farmed, there is virtually no permanent cover outside of the canyon, and there are relatively high levels of human activity in the area throughout the year. There are no known wolf packs or rendezvous sites within, or near, the RMP Study Area. These conditions also make it unlikely, though not impossible, that wolves would occur in the area during the winter. The possibility of occasional winter occurrence in the canyon cannot be completely eliminated because of the large numbers of mule deer that winter there. Such an occurrence would likely be by a transient lone wolf rather than by an established pack.

Canada lynx. Canada lynx are solitary carnivores, generally occurring at low densities in boreal forest habitats. Within most of their range, Canada lynx densities and population dynamics are strongly tied to the distribution and abundance of snowshoe hare (*Lepus americanus*), their primary prey. The primary forest types used by lynx in the western U.S. are lodgepole pine, Engelmann spruce, and subalpine fir (Agee 1999; McKelvey et al. 1999; Squires and Laurion 1999). A variety of stand ages and structures of forest cover are needed to provide habitat suitable for lynx denning and foraging. Foraging habitat for lynx has typically been described in terms of suitability for their primary prey: snowshoe hares. Hares use young conifer stands that are densely stocked with seedlings or saplings, tall enough to provide browse for snowshoe hares above typical winter snow depth (Koehler and Brittel 1990).

It is extremely unlikely that Canada lynx would use the RMP Study Area because the habitat is not suitable and the lynx primary prey species, the snowshoe hare, does not occur in the area. The nearest suitable lynx habitat is likely at least 25 miles to the east in Grand Teton National Park.

Grizzly bear. Grizzly bears require large areas of relatively undisturbed habitat. Females tend to have smaller ranges (50 to 300 square miles) while males need larger areas (200 to 500 square miles); overlapping of ranges is not uncommon. Most existing grizzly bear habitat is characterized by contiguous, relatively undisturbed mountainous habitat with a high level of topographic and vegetative diversity. Grizzlies prefer open meadows and avalanche chutes in the spring and timberlands with berry bushes in late summer and fall. Winter hibernation requires access to high elevation areas where deep snow accumulates (Reclamation 1998; FWS 2004). Grizzly bears do not occur within or near the RMP Study Area because the habitat is not suitable and there are too many people present in the area.

Ute ladies'-tresses orchid. This species is limited to mid-elevation (4,300 to 7,000 feet) wetland and riparian habitats. It requires permanent sub-irrigation, and a water table within 18 inches of the ground surface throughout the growing season. It is typically found where floodplains are frequently or severely flooded, and is well adapted to regular disturbances caused by water. Although Ute ladies'-tresses prefer alluvial deposits containing a high percentage of gravel and sand, they have sometimes been found in clay and highly organic muck soils. Ute ladies'-tresses orchids also primarily grow in areas where the vegetation is not overly dense or overgrown and prefer full to partial sun.

While no surveys have been conducted in the RMP Study Area, the likelihood of its occurrence is very low because conditions are largely unsuitable. Past actions including clearing of the riparian zone for the reservoir, land slides that occurred as the reservoir emptied, sediment deposition, and subsequent establishment of dense stands of reed canarygrass along the river banks have likely eliminated any potential habitat that may have been present before dam construction. Within the RMP Study Area, sites that meet the suitable habitat conditions described are generally occupied by dense stands of reed canarygrass, which would shade the orchids.

Utah valvata. The Utah valvata snail has generally been associated with cold, clean, well-oxygenated flowing waters in the mainstem Snake River and perennial flowing waters in large spring complexes (FWS 1995). This species has been reported to be generally intolerant of turbid waters and pollution, although it can tolerate slower-flowing environments with silty vegetated substrate better than the other mollusks (57 Federal Register [FR] 59244, December 14, 1992). Some of the best Utah valvata populations occur in Lake Walcott and the American Falls Reservoir on the Snake River where they live on mud/sand substrate, which does not suggest sediment or warm-water temperature intolerance. Reclamation (1998) reported the Utah valvata snail appears to be a generalist and not a specialist. There are no known occurrences of Utah valvata within or near the RMP Study Area in the Idaho CDC database. Fields (2005) conducted surveys to locate Utah valvata occurrences in the upper Snake River basin, including the Teton River, in 2004. No Utah valvata were found in the Teton River. This species was found at 5 locations on the main stem of the Snake River between American Falls Reservoir and the confluence of the South and Henrys

Forks of the Snake River. The nearest known occurrence of the Utah valvata is in the Henrys Fork of the Snake River upstream from its confluence with the Snake River to Beaver Dick Park at the Highway 33 bridge. This is about 20 miles downstream from the mouth of the Teton River and 35 miles downstream of the RMP Study Area.

Yellow-billed cuckoo. This species is a candidate for listing under the ESA. Cuckoos may go unnoticed because they are slow-moving and prefer dense vegetation. In the West, cuckoos favor areas with a dense understory of willow (*Salix* spp.) combined with mature cottonwoods (*Populus* spp.) and generally within 325 feet of slow or standing water (Gaines 1974; Gaines 1977; Gaines and Laymon 1984). Microhabitat requirements are also important. A USFS report from California found that nesting groves at the South Fork Kern River are characterized by higher canopy closure, higher foliage volume, intermediate basal area, and intermediate tree height when compared to random sites (Laymon et al. 1997). Sites with less than 40 percent canopy closure are unsuitable, those with 40 to 65 percent are marginal to suitable, and those with greater than 65 percent are optimal (Laymon and Halterman 1989). Recent surveys conducted in 2003 (TREC, Inc. 2003) recorded cuckoos at 18 locations in eastern Idaho, including 13 along the lower South Fork of the Snake River and one on the main Snake River below the confluence of the South and Henrys Forks. All of these sites had a tall cottonwood overstory and dense woody understory vegetation characteristic of typical cuckoo breeding habitat. The RMP Study Area does not include any of the cottonwood/willow habitat preferred by cuckoos and this species is not expected to breed in the area. However, the proximity of the RMP Study Area to the South and Henrys Forks of the Snake River suggests that

cuckoos could pass through the RMP Study Area during migration, especially if there happens to be an outbreak of caterpillars, a favored food source, during migration.

Bald eagle. According to the *Pacific Bald Eagle Recovery Plan* (FWS 1986), most bald eagle nests in the Pacific Recovery Area, which includes the RMP Study Area, are located in uneven-aged conifer stands near water bodies that support an adequate food supply; primarily fish. In Idaho, large cottonwoods, ponderosa pines, and Douglas-fir are used. Within the Snake River basin, courtship and reproduction begins in February and the young typically fledge in July. The young may stay near the nest for several weeks after fledging.

The typical nest is constructed of large sticks and lined with soft materials such as pine needles and grasses. The nests are very large, measuring up to 6 feet across and weighing hundreds of pounds. Many nests are believed to be used by the same pair of eagles year after year.

Bald eagles are opportunistic feeders. Fish are the primary food source, but bald eagles will also take a variety of birds and mammals when fish are not readily

available. Waterfowl concentrations also attract wintering bald eagles with injured birds being an easy target. Carrion is also used when it is abundant, such as on deer winter range following a severe winter with high deer mortality. Bald eagles will also steal food from other species, including osprey. Jackrabbits can be an important food source in southern Idaho when rabbit numbers are high. Large numbers of eagles congregate where food is available.

Idaho CDC data indicate that there are three bald eagle nests along the Teton River within the RMP Study Area. Virtually all of the bald eagle activity would be focused in the immediate vicinity of the Teton River corridor and its main tributaries. Bald eagles would be in the RMP Study Area from February through the summer for breeding. Both adult and young bald eagles would likely remain in the area into the early winter until the river freezes. Eagles using the RMP Study Area in late winter would feed on carrion if a severe winter results in large numbers of dead mule deer. Occupancy and productivity at these nests based on the CDC element occurrence records are presented in Table 3.7-2.

TABLE 3.7-2
Nest Success and Productivity at Bald Eagle Nests within the Teton RMP Study Area

Year	Danford Nest	Spring Hollow Nest	Hog Hollow Nest
1995	NN/NE*	NN/NE	Nest discovered, three young possibly produced
1996	NN/NE	NN/NE	Successful, two young produced
1997	NN/NE	NN/NE	Successful, two young produced
1998	NN/NE	NN/NE	Successful, one young produced
1999	NN/NE	Two nests discovered after nesting season	Occupied, no young produced
2000	Nest discovered	Occupied, no young produced	Occupied, no eggs laid
2001	Not occupied	Successful, one young produced	Successful, two young produced
2002	Occupied, no eggs laid	Successful, one young produced	Successful, two young produced
2003	Not occupied	Successful, one young produced	Occupied, no young produced

*NN/NE = either the nest was not known to observers or the nest did not exist

3.7.2 Environmental Consequences

Information presented above indicates that the RMP Study Area does not include suitable habitat for most of the listed and candidate species that occur in Fremont, Madison, and Teton Counties and that these species are not expected to occur in the area. Therefore, there would be no effects from any of the RMP alternatives on the Canada lynx, grizzly bear, Ute ladies'-tresses orchid, Utah valvata, gray wolf, or yellow-billed cuckoo and these species are not discussed further (except for gray wolf, discussed below). Potential effects on bald eagles are discussed for each of the alternatives.

Gray Wolf

The FWS section 7 guidelines for the experimental, non-essential wolf population (FWS et al. 2002) include the following statement:

Since the translocation of wolves from Canada, the population in Idaho south of Interstate Highway 90 is considered "experimental, non-essential" under section 10(j) of the ESA. Under these circumstances, Federal action agencies are required to confer with the Service if their actions are likely to jeopardize the continued existence of gray wolves. The Service does not anticipate any actions that would result in a "likely to jeopardize the continued existence" determination for the reintroduced, experimental population of wolves.

The Final Rule, Establishment of a Nonessential Experimental Population of Gray Wolves in Yellowstone National Park in Wyoming, Idaho, and Montana (50 CFR Part 17), as provided in the Federal Register (59 FR 28746, November 22, 1994) includes the following direction:

When six or more wolf packs are documented in the experimental population area outside of the national parks and national wildlife refuges, there would be no land-use restrictions, including areas around den sites or other critical areas.... Management of wolves in the experimental population would not cause major changes to existing private or public land-use restrictions after six breeding pairs of wolves are established in this experimental area.

There are currently more than 36 breeding pairs of wolves in Idaho. Therefore, in accordance with the above Federal Register notice, "there would be no land-use restrictions, including areas around den sites or other critical areas."

The FWS section 7 guidelines for the experimental, non-essential wolf population indicate the following (FWS et al. 2002):

The Service does not anticipate any actions that would result in a "likely to jeopardize the continued existence" determination for the reintroduced, experimental population of wolves.

The situation regarding wolf occurrence is that there are no known wolf packs or rendezvous sites within or near the RMP Study Area. Lands within the RMP Study Area do not support the relatively large ungulate herds that are needed to support wolves on a year-round basis.

The effects determination for each of the RMP alternatives for the experimental, non-essential wolf population is based on the FWS guidance and the following factors:

- The overwhelming success of the wolf reintroduction program in Idaho
- FWS guidance regarding land use restrictions and effects determinations

- The lack of dens or rendezvous sites within or near the RMP Study Area
- The lack of a year-long adequate prey species within the RMP Study Area
- The nature of the RMP actions

Therefore, the effects determination for each of the alternatives for the gray wolf is No Effect.

3.7.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Current levels of human use are not having any known negative impacts on bald eagles in the RMP study area at the present time. Without resource protection measures, the number of commercial and private float trips on the Teton River in the future could increase to the point where bald eagle foraging would be disrupted, resulting in potential adverse effects on nesting success in the RMP Study Area. Whether or not adverse effects on eagles result from increased human use—and the point at which such effects may be observed—depends on a number of factors including human activity levels, types of human activity, the spatial and temporal overlap between recreation activities and bald eagle nest sites and foraging areas, and individual bald eagle’s response to human presence, which can vary considerably among birds based on past exposure to people and different types of human activities.

The number of commercial outfitter permits and number of launches per day are determined by the Idaho Outfitters and Guides Board. There is currently no specific direction regarding how many commercial permits might be issued in the future, nor is there any regulation of the number of private float trips on the Teton River. Neither Reclamation nor BLM have any requirements to regulate the number of

commercial and private float boat trips to protect resource values, including nesting and foraging bald eagles. Without such guidance and regulatory ability, commercial and private float boat trips could increase in the future to the point that bald eagle foraging, productivity, and nesting success within the RMP Study Area would be adversely affected. Therefore, the effects determination for bald eagles for Alternative A is May Affect, Likely to Adversely Affect. Population level effects on bald eagles nesting within the Greater Yellowstone Ecosystem would not occur.

Conservation Measures and Residual Impacts (Alternative A)

Reclamation, in cooperation with BLM and IDFG, would develop nest site management plans in accordance with FWS guidelines for the three current bald eagle nests and any future nests that occur within the RMP Study Area. This includes any nests on Reclamation lands or within the Teton Canyon and tributaries within the RMP Study Area, because any eagles nesting within the RMP area would forage in the Teton River. Nest site management plans would be developed in cooperation with BLM, IDFG, and FWS. These management plans would be used to assist in decision-making regarding activities conducted by Reclamation or by others on Reclamation lands and waters within the RMP Study Area. Ongoing and new Reclamation activities conducted without the guidance of an RMP will be reviewed to determine if they may result in adverse effects on bald eagles. Any future project proposals will be thoroughly reviewed for potential impacts to bald eagles. If adverse effects are expected, the activity will be modified to avoid impacts and promote recovery. Eagle nesting productivity and the river corridor will be monitored to determine and evaluate any potential impacts to nesting, foraging or wintering eagles resulting from human use.

Achieving the goal of avoiding adverse effects and promoting bald eagle recovery may require temporal or spatial changes in the nature and extent of human activities within the RMP study area (for example limitations on the number of commercial and private float trip launches per day). Implementation of these conservation measures under Alternative A will avoid significant adverse effects on bald eagles and result in an ESA determination of May Affect, Not Likely to Adversely Affect (MA, NLAA). Population level effects on bald eagles nesting within the Greater Yellowstone Ecosystem would not occur.

Cumulative Impacts (Alternative A)

Cumulative impacts would be the same as those described above. The cumulative effects determination for bald eagles for Alternative A is MA, NLAA.

3.7.2.2 Alternative B

Current levels of human use are not having any known negative impacts on bald eagles using the RMP Study Area at the present time. RMP management actions under Alternative B, combined with current levels of human use, are not expected to have any direct or indirect adverse effects on bald eagles using the RMP Study Area at this time. However, this RMP will guide Reclamation management for the next 15 years, during which the increasing population of the RMP Study Area counties and region will result in more human use of Teton Canyon within the RMP Study Area.

All of the conservation measures identified for Alternative A are included as an integral part of Alternative B. These include the following:

- development of the nest site management plans,
- monitoring of eagle nesting productivity and eagle and human use of the river corridor,

- review of all Reclamation actions to determine if adverse effects are expected, and
- modification of Reclamation actions and permitted activities to avoid significant adverse effects on bald eagles and promote species recovery.

Implementation of these actions under Alternative B would result in an effects determination of MA, NLAA.

Conservation Measures and Residual Impacts (Alternative B)

No additional conservation measures are needed to avoid significant adverse effects on bald eagles and promote recovery. Any negative effects that do occur would not be expected to rise to the level of significance.

Cumulative Impacts (Alternative B)

Implementation of the conservation measures would result in a cumulative effects determination of MA, NLAA.

3.7.2.3 Alternative C

Potential negative impacts and conservation measures would be the same as described for Alternative B. The ESA determination for Alternative C is also MA, NLAA.

Mitigation Measures and Residual Impacts (Alternative C)

No additional conservation measures are needed to avoid adverse effects on bald eagles and promote recovery. Any negative effects that do occur would not be expected to rise to the level of significance.

Cumulative Impacts (Alternative C)

Cumulative impacts and the ESA effects determination for cumulative effects under Alternative C would be similar to those described for Alternative B.

3.8 Recreation and Public Access

3.8.1 Affected Environment

Currently, access to the river canyon and its recreational opportunities is limited. Additionally, there are no developed recreation sites within the RMP Study Area, only informal sites that are minimally maintained. As such, recreation activity and use levels are generally considered low, although several commercial outfitters do operate fishing/floating trips on the Teton River. This section provides a general discussion of these recreation and public use related topics including public access, recreation sites and use areas, primary activities and use levels, and outfitter/guide use in the RMP Study Area. Potential eligibility and suitability of the river canyon for designation under the Wild and Scenic River Act is addressed separately in Section 3.16.

3.8.1.1 Public Access

Public access to the RMP Study Area vicinity is generally good. The area is ringed by major highways including U.S. Route 20 to the west, State Route (SR) 33 to the south, and SR 32 to the north and east. Public access to the canyon rim and the river is available via county and private roads off of SR 32 and 33. The Teton Scenic Byway passes to the west and north of the RMP Study Area along SR 32 (Idaho Transportation Department 2004, U.S. Department of Transportation 2005). The primary access roads to RMP Study Area recreation and public use sites include the following:

- Teton Dam Road—accessed via SR 33, this road provides access to the Teton Dam Overlook, as well as the Teton Dam River Take-Out Site.

- Spring Hollow Road—accessed via SR 32, this road provides access to the Spring Hollow River Access Site.

Both of these access roads are minimally maintained. The access roads to the Teton Dam River Take-Out and Spring Hollow River Access Sites are particularly challenging and generally require a four-wheel drive/high-clearance vehicle. In addition to these public access roads, there is also limited vehicular or pedestrian access at several other locations in the RMP Study Area, including the following:

- Felt Power Plant—Accessed via Power Plant Road, pedestrian access to the Teton River is possible, but limited by a locked road gate above the Felt Power Plant.
- Bitch Creek Access—Accessed via SR 32, a steep, user-defined pedestrian trail provides access to the river at this site.
- Linderman Road—Accessed via SR 33 and across private land at the canyon rim, this road provides limited access to the river near the remnants of the Linderman Dam.
- Parkinson's Road—Accessed via SR 20, U.S. Route 20, and Old Hog Hollow Road, this road provides limited vehicular and pedestrian access to the river canyon.

The RMP Study Area can also be accessed by boat from the Harrops Bridge access site on Bitch Creek. This site, located on SR 32, is described in more detail in the Recreation Sites and Use Areas section below.

3.8.1.2 Recreation Sites and Use Areas

Planned recreational development at the time of dam construction consisted of day use, campground, and boat launch facilities, as well as improved public access to the

RMP Study Area. All planned recreation development would have been jointly financed by Reclamation and Idaho Department of Parks and Recreation (IDPR). Boat ramps at Spring Hollow River Access and Teton Dam Take-Out Sites were the only developed recreation facilities that were completed prior to failure of the dam. These boat ramps now serve as portions of the access roads to the river.

Currently, there are no developed recreation sites in the RMP Study Area, although several sites are used as recreation and public use areas. These areas consist primarily of user-defined parking areas, boat launches/take-outs, and river bank access trails, as well as other visitor-created facilities (for example, fire pits). These recreation sites and public use areas are only minimally maintained and include the following:

- Harrops Bridge—Located on Bitch Creek, off of SR 32, this site is not within the RMP Study Area, or on Reclamation lands, but can be used to access the area by boat. The site is co-managed by IDFG and IDL and provides a gravel boat launch, a vault toilet, and a gravel parking area for approximately 8 to 10 vehicles.
- Felt Power Plant—Located on Power Plant Road, this site provides pedestrian access to the river immediately downstream of the Felt Dam. A gravel parking area for approximately 5 to 6 vehicles is located along the canyon rim with pedestrian access via a hydroelectric project-related road to the river.
- Bitch Creek Access—Located just downstream of the Teton River and Bitch Creek confluence, this site has a small undefined parking area for approximately five to six vehicles and is located near the canyon rim on BLM lands.
- Spring Hollow River Access Site—This site is located on the Teton River 4 miles downstream of the confluence with Bitch Creek. A paved boat ramp and dirt, user-defined road provides vehicular access to the river at this site. This river bank use area consists of a small parking area for approximately 3 to 4 vehicles, a vehicle turnaround area, an informal boat launch, and at least one identified fire pit.
- Linderman Dam River Access—This site is located on the southern bank of the Teton River and can be accessed via Linderman Road. While a dirt road does connect the canyon rim with the river at this location, this site is primarily accessed by foot. Permission must be granted by the land owner to access this site. Aside from river access via user-defined trails, there are no other facilities at this site.
- Parkinson River Access—Located on the northern bank of the Teton River, access to this site off of Old Hog Hollow Road is undetermined. There are no recreation or public use facilities at this site.
- Upper Teton Dam Take-Out Site—Located about 1 mile upstream of the old dam site, this site can be accessed via a steep road off of Teton Dam Road. This site consists of a small parking area and an unimproved boat take-out.
- Teton Dam Take-Out Site—This site is located immediately above the old dam and is accessed via the remnants of a paved boat ramp that was installed during dam construction. The site consists of several small parking areas, dispersed camping areas, user-defined

river access trails, and multiple unimproved boat take-outs.

- **Dam Overlook**—Located on Teton Dam Road, this site provides a public viewpoint of the remnants of the Teton Dam and consists of a paved parking area and an overlook area.

In addition to these sites, several identified dispersed day use and camping areas are scattered along the river and are used by boaters.

3.8.1.3 Primary Activities and Use Levels

Prior to construction of the Teton dam, the Teton River fishery was categorized by IDFG as one of the finest in the state. The river provided opportunities for sport fishing primarily by float trip during the summer, although access to the river canyon was limited because of the steep canyon walls and lack of public roads to the canyon rim. No developed public recreation facilities were available in the river canyon prior to dam construction. The dam, resulting reservoir, and planned developed recreation facilities would have improved access to the area and created opportunities for flatwater-related recreation activities. It was estimated by the National Park Service (NPS) and IDPR that recreation development along the Teton Reservoir would initially result in approximately 85,000 recreation days on an annual basis and rise to nearly 200,000 recreation days on an annual basis 40 years after construction of the dam. With the failure of the dam and its resulting impacts,

recreation development and opportunities have been limited in the RMP Study Area.

Because of the lack of developed recreation facilities and difficulty associated with accessing the river, the RMP Study Area offers a relatively primitive recreation setting in which to pursue several recreation activities. Currently, the primary recreation activities in the canyon are fishing, whitewater boating, wildlife observation, hunting, sightseeing, picnicking, and camping, among others. In general, residents of Idaho participate in many of these activities at a higher rate compared to national participation rates. Table 3.8-1 provides a summary of Idaho and national activity participation rates for many activities that are popular in the RMP Study Area.

Participation in many of these activities is also expected to increase over the next 15 years, especially in the Rocky Mountain Region, which includes Idaho. Table 3.8-2 provides projected participation estimates through 2020 for many of the activities listed in Table 3.8-1 through 2020. State-specific activity participation projections are not available, so the Rocky Mountain Region is used in Table 3.8-2 to represent potential participation increases for Idaho. While participation rates are influenced by weather, population growth, availability of recreation facilities, technology, and other factors, the RMP Study Area region will likely experience similar activity participation increases as those listed in Table 3.8-2.

TABLE 3.8-1
Idaho and National Participation in Select Recreation Activities

Activity	Idaho Participation ¹	National Participation ¹
Wildlife Viewing	51.8	41.9
Bird Watching	35.9	33.3
Hunting (Big Game)	34.2	8.2
Photography	33.1	55.1
Hunting (Small Game)	24.8	7.0
Camping at Primitive Sites	22.3	15.4
Rafting	16.2	9.7
Canoeing	14.9	9.5
Hunting (Waterfowl)	13.1	2.3
Fishing (River, Non-Motorized Boat)	12.4	NA
Kayaking	6.0	3.2

¹ Activity participation reported as a percentage of total population participating in each activity.
Source: IDPR 2003

TABLE 3.8-2
Projected Estimates of Changes in Recreation Participation through 2020

Activity	2010 ¹		2020 ¹	
	Rocky Mountain Region ²	National	Rocky Mountain Region ²	National
Non-Consumptive Activities ³	20%	16%	30%	29%
Hunting ⁴	5%	-7%	12%	-9%
Camping at primitive sites	12%	1%	20%	4%
Rafting	10%	NA	19%	NA
Canoeing	11%	8%	20%	15%
Fishing	16%	9%	26%	17%
Kayaking	NA	NA	NA	NA

¹ Percent increases are extrapolated from 1995 baseline data (e.g., in 2010, participation in wildlife viewing in the Rocky Mountain Region is expected to increase 20 percent from 1995 levels).

² The Rocky Mountain Region includes Idaho.

³ Non-consumptive Activities include wildlife viewing, bird watching, and photography.

⁴ Hunting includes big game, small game, and waterfowl hunting.

Source: Cordell 1999

While specific visitor monitoring has not been completed in the RMP Study Area, professional observations and outfitter/guide reports indicate that recreational use within the area is low, with the majority of use occurring during the summer months. In

general, the river canyon receives low levels of recreational use because of its remoteness and inaccessibility, while the canyon rim receives even less use because of private lands and lack of recreation facilities. As such, the physical capacity of the RMP

Study Area is likely low (that is, the area could accommodate much higher levels of use in terms of visitors per acre without these limitations). Without access and recreation site improvements, physical capacity will likely not become an issue in the near future (10 to 15 years).

While physical capacity may not be an issue in the future, increases in visitor use could eventually affect the ecological and social capacity characteristics currently found within the RMP Study Area. Existing recreation-related ecological impacts (for example, vegetation trampling, erosion, accumulated litter, and sanitation issues) tend to be minor and localized, occurring primarily in areas that are accessible by vehicle. Increased visitor use, especially along the river, could potentially lead to greater ecological impacts, in abundance and magnitude. The existing social setting within the RMP Study Area offers opportunities for solitude, with little to no reported visitor conflict. Increased use could potentially decrease the availability of solitude and increase the level of visitor conflict within the RMP Study Area. Effective recreation management within the RMP Study Area can help preserve the ecological and social characteristics that currently distinguish the area.

3.8.1.4 Outfitter/Guide Use

BLM, in cooperation with Reclamation, has issued five outfitter guide permits for commercial recreation use that occurs on the river on both BLM and Reclamation lands. These are one year permits that can be rolled into 5-year permits. The permits allow guided float fishing trips on the river from Harrops Bridge to the confluence of the Teton River and Snake River. Table 3.8-3 lists the five BLM-permitted commercial outfitter guides who operate trips along the Teton River (from Harrop Bridge to the confluence with the Snake). Use reports

provided by the outfitters indicate that use is trending higher over the past 4 years. Other than the guided fishing trips, little other guided use takes place on or along the Teton River. Guided mountain lion hunts and grouse hunting occasionally take place within the river canyon.

TABLE 3.8-3
Teton River Commercial Guide Use (As Permitted by the BLM)

Outfitter	Use Estimate ¹		
	2001	2003	2004
Three Rivers Ranch	111	4	10
Teton Valley Lodge	174	246	320
Lamoyne Hyde Outfitters	0	32	44
Piquet Guiding Services	10	0	0
World Class Anglers	0	64	82
Total	2296	2349	2460

¹ Use reports (number of visitors) include lands outside of the Teton study area and are submitted annually by the commercial guides. 2002 use reports were unavailable at this time.
Source: BLM 2005

Guided fishing and float trips are an important economic driver in the Upper Snake River region, including the RMP Study Area. According to a 2005 study, fishing and “other river recreation yields an annual economic value to anglers and other visitors of \$57.6 million annually” along the Snake River and its tributaries (Loomis 2005). The recreation and economic benefits of fishing and other recreation activities to participants also translates to local community benefits, in the form of jobs and consumer spending. The economic importance of fishing and other recreational activities along rivers in the RMP Study Area region emphasize the importance of maintaining riparian habitat, fisheries habitat, water quality, and river flows, among other factors. Additionally,

maintaining recreational use levels within an acceptable range (for example, low perceived/actual crowding, and limited ecological impacts) is also important for the long-term economic viability of tourism and recreation in the RMP Study Area and region.

3.8.2 Environmental Consequences

3.8.2.1 Alternative A (No Action Alternative): Continuation of Existing Management Practices

Implementation of Alternative A would be without the benefit of a management plan and would generally result in negligible impacts to recreation resources in the near future. However, if recreational use in the RMP Study Area increases (based on an expected population increase in the region), the impact of no management plan may likely result in some adverse impacts to natural and recreational resources.

Continued regional population growth will likely increase visitor use in the RMP Study Area. This increase in use will generate more demand for recreation opportunities and facilities. Potential impacts resulting from increased use would be evident more quickly under Alternative A since no hardening or expansion of recreation facilities and fewer programs to protect and enhance natural and social resources are proposed (although some public information about limiting the spread of noxious weeds would be provided). While the physical capacity of the RMP Study Area and its recreation sites is not currently a concern, the lack of management direction may potentially result in adverse natural and social impacts in the future as the number of visitors to the RMP Study Area increases. It is important to note that specific use areas within the RMP Study Area may have unique natural, ecological, and social capacity standards based on specific

conditions at each site and that visitor satisfaction may likely decrease at some point in the future as the natural and social conditions deteriorate from unmanaged use.

Mitigation and Residual Impacts (Alternative A)

Mitigation measures are not necessary because no substantial impacts are expected under Alternative A. Residual impacts are discussed above.

Cumulative Impacts (Alternative A)

Increased recreation use and regional population growth are likely to put pressure on the existing primitive recreation facilities in the RMP Study Area. Existing use areas would be expected to be more crowded, natural resource impacts would be more pronounced, and additional dispersed use areas would likely be created by visitors.

3.8.2.2 Alternative B

Alternative B would provide for additional recreation development beyond what currently exists in the RMP Study Area. In general, this alternative would have a positive effect on the recreation experience in the area. It is important to note that while there would be many recreation actions under this alternative, they are focused on limiting the level of development and aim to preserve the semi-primitive qualities of the RMP Study Area. Semi-primitive settings are predominantly natural environments of moderate to large size. Interaction between visitors is low but there is often evidence of other humans. The area is managed in such a way that there are minimum onsite controls and restrictions are subtle. Moderate to high probability exists for isolation from the sights and sounds of humans. Opportunities are present for independence, tranquility, closeness to nature, and self-reliance through the application of outdoor skills in a setting that offers a high degree of interaction with the natural environment.

Recreation is low key, light-on-the-land, and generally dispersed.

Alternative B would allow for improved recreation facilities, pending review and coordination with the bald eagle nest management plan, at each of the existing recreation sites in the RMP Study Area including the Teton Dam Overlook, Teton Dam Take-Out Site, Upper Teton Dam Take-Out Site, and Spring Hollow Put-In Site. Improvements at these sites would include new signs, interpretive information (including signs with information on how to reduce the spread of noxious weeds), formalized access and parking areas, enhanced boat ramps, and vault toilets, where possible. This alternative would also provide for enhancements to the primary public access roads to the RMP Study Area. The enhancements would include new signs, formalized small parking areas (approximately 4 vehicles) to access walk-in trails, potentially opening access along currently closed roads (Dam West Road), and road closures (Spillway Road) to help limit public use-related impacts. Additionally, Alternative B would also provide for the creation of several improved dispersed use areas along the river.

Under Alternative B, Reclamation would develop a formal agreement with BLM for managing commercial recreation permits, and would monitor commercial use to help retain the primitive experience currently available on the river. Reclamation and BLM would have the ability to adjust the number and timing of launch days allowed by each commercial permit if the primitive experience was threatened and/or observable resource degradation, including bald eagle disturbance, were to occur along the river as a result of outfitter use. A more robust recreation monitoring program would also be implemented under Alternative B, not only to monitor commercial use, but general visitor use as well. Components of the

proposed monitoring program would include tracking visitor use, photo-documentation of visitor impacts, and assessing potential bald eagle foraging and nesting disturbance resulting from public and recreational use. Monitoring results would be used to help maintain a semi-primitive recreation experience, to protect bald eagle foraging and nesting areas, and to prevent and/or reduce conflicts between visitors and user groups in the RMP Study Area. Additionally, Alternative B would also provide for increased law enforcement, if needed.

Under this alternative, improved and enhanced recreation and public use areas would slightly increase the availability of recreation opportunities in the RMP Study Area. This would likely benefit most visitors to the RMP Study Area, except those who may desire truly primitive sites and use areas. At the same time, this alternative would help retain the existing social characteristics of the RMP Study Area such as opportunities for solitude and low levels of crowding. It would also help limit impacts to natural resources by defining recreation sites and parking areas and adding minimally developed facilities.

Mitigation and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this alternative will not likely result in substantial adverse impacts on recreation in the RMP Study Area. All new or modified recreation facilities will need to be compliant with current Federal accessibility regulations. No residual impacts, beyond those discussed above, are anticipated under this alternative.

Cumulative Impacts (Alternative B)

Similar to Alternative A, under Alternative B increased recreation use and regional population growth are also likely to put

pressure on the existing and proposed recreation facilities in the RMP Study Area. However, measures under Alternative B would help reduce the potential for crowding, natural resource impacts would be less pronounced, and fewer dispersed use areas would likely be created by visitors compared to Alternative A.

3.8.2.3 Alternative C

In general, Alternative C includes the same measures to address and enhance recreation resources in the RMP Study Area as Alternative B. The primary difference between the two alternatives relates to access. Alternative C provides a greater level of public access to the rim at Rocky Gulch and Brown Road. It also allows for potential summer walk-in access at Linderman Road. The remaining measures under Alternative C are the same as those under Alternative B and would generally have a positive effect on the recreation experience in the RMP Study Area.

Mitigation and Residual Impacts (Alternative C)

No mitigation measures are proposed for Alternative C because the actions under this alternative will not likely result in substantial adverse impacts on recreation in the RMP Study Area. All new or modified recreation facilities will need to be compliant with current Federal accessibility regulations. No residual impacts, beyond those discussed above, are anticipated under this alternative.

Cumulative Impacts (Alternative C)

Similar to Alternative A, under Alternative C increased recreation use and regional population growth are also likely to

put pressure on the existing and proposed recreation facilities in the RMP Study Area. However, measures under Alternative C would help reduce the potential for crowding, natural resource impacts would be less pronounced, and fewer dispersed use areas would likely be created by visitors compared to Alternative A.

3.9 Land Use and Land Status

3.9.1 Affected Environment

In total, there are 9,300 acres of Federal land within the RMP Study Area. Reclamation manages 5,804 acres of these lands, while BLM manages 3,496 acres. The Teton Project also includes 9,572 acres of land acquired for mitigation, including 9,104 acres at the Tex Creek WMA and 468 acres at the Cartier Slough WMA. Neither of these areas is included in the Teton RMP Study Area, but both are included in the Ririe Reservoir RMP (Reclamation 2001). All of the lands being addressed in the RMP Study Area were purchased in fee title by Reclamation.

BLM lands within the RMP Study Area were acquired by BLM from the State of Idaho under a three-way agreement between BLM, Reclamation, and the State (Contract No. 14-06-100-8124 dated April 26, 1974) (Table 3.9-1). Per the agreement, Reclamation was to submit to BLM a request for withdrawal of the lands for Project purposes. However, as the deed to BLM from the State was not completed until 1980 (after the dam failed), the lands were never withdrawn. Instead, these lands were covered in a 1981 Interagency Agreement.

TABLE 3.9-1
Agreements and Contracts Pertaining to the RMP Study Area

Date	Contract Number	Agreement/Contract Description	Parties
6/27/1969	14-06100-6550	Lower Teton Division repayment contract	Reclamation Fremont-Madison Irrigation District
4/26/1974	14-06-1008124	Three-way Exchange Agreement – land exchange for construction of Teton Dam	State of Idaho BLM Reclamation
11/25/1974	14-06-100-8334	Agreement providing for the delivery of water operations and maintenance	Reclamation Fremont-Madison Irrigation District
1/22/1975	14-06-100-8578	Memorandum of Agreement between the State of Idaho and the United States of America (Reclamation and BLM) setting forth arrangements for handling agricultural leases on State land acquired under Contract 14-06-100-8124	State of Idaho Reclamation BLM
11/24/1976	14-06-100-8666	Interim development and management agreement for administration and development of lands and facilities for fish and wildlife use	Reclamation State of Idaho
8/25/1978	14-06-100-8666	Amendment 1 to existing Contract 14-06-100-8666	Reclamation State of Idaho
8/4/1981	1-07-10-LO482	Cooperative agreement for Tex Creek Management Area establishing land management guidelines and covering an area larger than the original Tex Creek mitigation area (Sikes Act Authority)	BLM Reclamation IDFG
9/3/1981	1-07-10-LO450	Operation and maintenance agreement between the United States of America and the State of Idaho for lease and administration of lands and facilities for wildlife use	Reclamation State of Idaho
12/4/1981	2-07-10-LO504	Interagency Agreement for the management responsibilities for the lands in and adjacent to Teton Dam	BLM Reclamation

Source: Agreements on file with Reclamation

The Interagency Agreement for the Management of Teton Reservoir Site Lands (Contract No. 2-07-10-LO504) was finalized on December 4, 1981 (Table 3.9-1). The Agreement covered both BLM lands (identified as Agreement Lands) and Reclamation lands (identified as Acquired Lands) and was made to provide for management of the RMP Study Area lands. The Agreement states the following:

1. BLM agrees to cooperate with the development of plans relating to uses of the agreement and non-agreement lands.

2. Reclamation agrees to issue and administer all leases, licenses, and permits allowing surface use of the agreement lands, and to manage un-leased agreement lands along with acquired lands for recreation, public access, wildlife, and other public purposes.

3.9.1.1 Reclamation Lands

Of Reclamation’s 5,804 acres in the RMP Study Area, approximately 1,377 acres are leased for agriculture (Table 3.9-2). About 866 acres of leased agricultural lands are

irrigated while the remaining 511 are dryland farmed. There are no grazing leases within the RMP Study Area. Currently, there are 10 agricultural leases on Reclamation managed-lands (Table 3.9-2). All leases are for 1 year, are renewable on an annual basis, and will expire on February 28, 2008. Leases will be renewed if they are in full compliance with all lease terms and conditions and with consideration of consistency with project purposes, environmental compliance, and public concerns. New terms and conditions may also be included with the renewals. The average yearly revenue generated by these 10 agricultural leases is approximately \$46,640.

3.9.1.2 Surrounding Lands

Most private lands surrounding the RMP Study Area are agricultural, including both dry and irrigated lands. Grain, alfalfa, and potatoes are the primary crops grown in the area.

Reclamation maintains several easements on private property in the RMP Study Area,

primarily for road access and for canals that were never built because the dam failed. In total, Reclamation easements on private property account for approximately 113 acres of land within the RMP Study Area.

3.9.1.3 Agreements, Leases, and Easements

Easements have been issued for powerlines on the rim and down the canyon, and for pipelines and roads. Permits have been issued on the rim to allow a pivot crossing and for the location of a Global Positioning System station.

The Felt Power Plant, a private hydroelectric plant located within the canyon, is owned and operated by the Fall River Rural Electric Cooperative (Federal Energy Regulatory Commission Project No. 5089). Reclamation owns a portion of the lands the project sits on and issued an easement in 1974 for a pipeline, water pumping station, and conveyance system and access road.

TABLE 3.9-2
RMP Study Area Agricultural Leases

Lease Holder	Contract Number	Dry Acres	Irrigated Acres	Total Acres
J. Beard	3-07-14-LA424	21.0	0.0	21.0
J. Brown	3-07-14-LA427	91.8	29.9	121.7
N. Hughes	3-07-14-LA428	168.2	50.0	218.2
Parkinson Seed Co.	3-07-14-LA426	12.0	9.0	21.0
R.B. Ricks	3-07-14-LA429	50.0	170.0	220.0
Rocky Gulch Farms	3-07-14-LA430	26.5	14.0	40.5
D. Ward	3-07-14-LA431	97.0	38.0	135.0
J. Zirker	3-07-14-LA432	45.0	235.0	280.0
D. Schwendiman	3-07-14-LA433	0.0	153.0	153.0
V. Schwendiman	3-07-14-LA434	0.0	167.0	167.0
Total		511.5	865.9	1,377.4

Source: Leases on file with Reclamation

After the dam failure, ROW agreements were issued to private individuals and corporations to pump water up the canyon wall to their private lands. These agreements include the right to construct pumping stations, pipelines (14-inch to 20-inch), overhead powerlines, and public access roads or to use existing Reclamation constructed public access roads.

3.9.2 Environmental Consequences

3.9.2.1 Alternative A (No Action Alternative): Continuation of Existing Management Practices

Under Alternative A, land resources would continue to be managed on an ad hoc basis without the benefit of a management plan. As such, minor impacts to land uses could likely be expected in the near future. However, the impact of not having a management plan would likely result in adverse impacts to land use in the future by not providing long-term comprehensive guidance and direction on appropriate land uses in the RMP Study Area.

Mitigation and Residual Impacts (Alternative A)

Mitigation measures are not necessary because no substantial adverse or residual impacts are expected under Alternative A. Because there are no identifiable adverse impacts requiring mitigation, there are no anticipated residual impacts.

Cumulative Impacts (Alternative A)

The population of southeastern Idaho, including Bonneville, Clark, Fremont, Jefferson, Madison, and Teton Counties, has experienced robust growth over the past decade and is expected to continue to increase. This increase in population may result in increased pressure to develop private property in the region. While development pressure within the RMP Study Area is not likely a concern because of land ownership status, private lands in the

vicinity of the Study Area may experience a shift in land use from rural/agricultural to rural/agricultural with discernable suburban patches. Additionally, this increase in regional population will likely lead to an increase in recreational use within the RMP Study Area.

3.9.2.2 Alternative B

In general, Alternative B would likely result in positive impacts to land use in the RMP Study Area. Specifically, measures under Alternative B would better address agricultural lease goals and objectives, improve recreation areas to help minimize potential adverse impacts from public use, and provide greater natural resource enhancements in the RMP Study Area. No new agricultural leases would be issued under Alternative B and existing leases would continue to be renewed subject to new terms and conditions consistent with RMP goals and objectives. A lessee would likely be negatively affected by non-renewal of all or part of a lease due to loss of income. However, all of the leases are relatively small in size and would not be expected to result in any significant income loss.

Pump station owners/operators could potentially see increased vandalism to their equipment and facilities as a result of increased access to sites where their facilities are located thus having a negative impact. However, these impacts would likely be less than significant because of the limited number of visitors.

Alternative B would also provide for greater management consistency between Reclamation and BLM lands in the RMP Study Area.

Mitigation and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this

alternative would not likely result in adverse impacts on land use within the RMP Study Area. Residual impacts may include increased use possibly resulting from the improvement and enhancement of recreation and public use areas within the RMP Study Area.

Cumulative Impacts (Alternative B)

Cumulative impacts under Alternative B would be similar to those under Alternative A. Regional population growth is likely to contribute to higher levels of recreational use and local development pressure on private lands in the future under each of the three alternatives.

3.9.2.3 Alternative C

Alternative C would likely provide the greatest land use benefits of the three alternatives. Similar to Alternative B, this alternative would better address agricultural lease goals and objectives, but would also evaluate each lease as it became due for potential changes to meet RMP goals and objectives for wildlife habitat and other benefits. Other benefits are the same as those described under Alternative B, including improved recreation areas to help minimize potential adverse impacts from public use, greater natural resource enhancements, and greater management consistency between Reclamation and BLM lands in the RMP Study Area.

Mitigation and Residual Impacts (Alternative C)

Similar to Alternatives A and B, no mitigation measures are proposed for Alternative C because the actions under this alternative will not likely result in adverse impacts on land use within the RMP Study Area. Residual impacts may include increased use possibly resulting from the improvement and enhancement of recreation and public use areas within the RMP Study Area.

Cumulative Impacts (Alternative C)

Cumulative impacts under Alternative C would be similar to those under Alternative A. Regional population growth is likely to contribute to greater recreational use within the RMP Study Area and local development pressure on private lands in the future under each of the three alternatives.

3.10 Visual Resources

3.10.1 Affected Environment

The Teton River is a tributary of the Henrys Fork of the Snake River located primarily in Fremont, Madison, and Teton Counties of southeastern Idaho. The Teton Dam was located approximately 3 miles northeast of Newdale, ID, and consisted of a 305-foot earthfill structure with a crest length of 3,100 feet including the spillway. Construction of the dam inundated approximately 17 miles of free-flowing river. On June 5, 1976, the dam failed and was rendered completely inoperative. The dam failure caused significant physical and biological changes within the Teton Canyon upstream and downstream of the dam. A large section of the dam, the spillway, and other physical changes to the river canyon (such as land slides and large boulders) are now visible from a public viewpoint on the southern rim of the canyon. The majority of the river canyon is not visible from the canyon rim because of the lack of public access roads and private ownership.

The Teton River upstream from the dam site consists of long, slow, sediment-laden pools that are separated by short, steep cascades and rapids. Steep canyon walls rise between 300 to 500 feet above most of the river canyon along the approximately 17-mile river reach that was inundated by Teton Reservoir. Within the RMP Study Area, the river canyon is widest downstream near the

dam and narrower further upstream. The rapid drawdown of the reservoir caused by the failure of the dam resulted in over 200 landslides within the canyon, mostly on the north bank of the river. Evidence of these slides is visible throughout most of the river canyon. In the narrower, upstream section of the river canyon (upstream of Canyon Creek), the slides partially or completely blocked the river channel, resulting in far more pools than in the downstream, wider section of river (from Canyon Creek to the dam site).

Most riparian vegetation in the river canyon within the inundation area was cleared prior to filling the reservoir. Since dam failure, cleared areas, as well as those affected by landslides, have experienced varying levels of vegetation reestablishment. Common vegetation species currently found within the river canyon include big sagebrush, rubber rabbitbrush, bitterbrush, Rocky Mountain juniper, fringed sagewort, oceanspray, chokecherry, Wood's rose, Idaho fescue, bluebunch wheatgrass, needle and thread grass, and cheatgrass (a non-native invasive species) (Reclamation 2003a). Common wildlife includes big game (deer, elk, and moose), other mammals (mountain lion, beaver, river otter, and coyote), raptors (bald eagle and red-tailed hawk), waterfowl (Canada geese and trumpeter swans), and other species. Fish species include Yellowstone cutthroat trout, rainbow trout, mountain whitefish, suckers, and Utah chub. The variety of vegetation, wildlife, and fish species in the RMP Study Area offer opportunities for wildlife/fish viewing, especially from within the river canyon.

The lands above the river canyon are characterized as relatively flat benchlands, used primarily for agriculture. These areas are generally devoid of trees and shrubs. Structures typically associated with agriculture (for example, barns and

irrigation equipment) and some private residences are visible from multiple locations along the canyon rim. Most of the lands along the canyon rim are not visible from the river. The area along and in the vicinity of the canyon rim offers panoramic views of the Grand Teton Mountains, located east of the RMP Study Area.

Public access to the river canyon is generally limited and, in general, the canyon receives very low levels of recreational use because of its remoteness and inaccessibility. The river can be floated by experienced boaters in a one-day trip, but requires paddling in several areas because of the pools caused by the slides resulting from the failure of the dam. Only two public access points along the canyon rim offer views into the canyon. The dam site and spillway can be viewed from the south rim of the canyon; however, there is no interpretation of the events that took place on the river. Aside from these viewpoints, there is very little recreational use along the rims of the canyon. These sites and other public use areas and recreation sites are described in more detail in the Recreation and Public Access Section.

3.10.2 Environmental Consequences

3.10.2.1 Alternative A (No Action Alternative): Continuation of Existing Management Practices

Under Alternative A, existing management practices would continue in the RMP Study Area and as such, no aesthetic/scenic measures would be implemented. The lack of aesthetic/visual-specific management practices, as well as the limited management enhancements proposed under Alternative A, would likely result in potentially minor impacts to the aesthetic characteristics and resources in the RMP Study Area in the future. As the natural resources in the RMP Study Area viewshed

experience pressure and potential degradation from use over time, the potential for some more substantial adverse impacts to aesthetic resources exists.

However, none of the elements associated with Alternative A would be anticipated to result in significant, large-scale adverse visual impacts in the RMP Study Area.

Mitigation and Residual Impacts (Alternative A)

No mitigation measures are proposed for Alternative A because no recommendations associated with this alternative are anticipated to result in significant adverse aesthetic impacts on visual resources in the RMP Study Area. Residual impacts are discussed above.

Cumulative Impacts (Alternative A)

The increasing population of the RMP Study Area counties (Fremont, Madison, and Teton Counties) and region (Bonneville, Clark, and Jefferson Counties) may result in development pressures on private lands in the vicinity of the Study Area in the future. Significant levels of construction of new homes and other structures on private lands within the greater RMP Study Area viewshed could potentially alter the visual character of surrounding lands from rural/agricultural to rural/agricultural with discernable suburban patches. However, this type of development would not likely affect the visual character within the river canyon.

Recreation and public use within the RMP Study Area is likely to increase in the future. This increase in use would likely be visible from some publicly accessible viewpoints in the RMP Study Area and could potentially degrade certain scenic views.

3.10.2.2 Alternative B

Alternative B includes several proactive measures to prevent visual degradation in the RMP Study Area. These measures include retaining the visual character of the

RMP Study Area, reducing the visual impacts of graffiti and vandalism at the spillway and dam overlook site, implementing erosion control measures, and enhancing native vegetation and wildlife habitat, among others. The appearance of recreation and public access sites in the RMP Study Area would slightly change because of proposed improvements and enhancements under Alternative B (for example, improved boat launches and parking, additional signage, and vault toilets), although efforts would be made to minimize the visual contrast of these improvements and enhancements. Additionally, recreation and public use improvements and enhancements would generally result only in localized changes to the visual character of the RMP Study Area and would likely not degrade the larger Study Area viewshed. By proactively addressing these important visual resource concerns, Alternative B would likely result in positive visual resource impacts, benefiting visitors to the RMP Study Area.

Mitigation and Residual Impacts (Alternative B)

No mitigation measures are proposed for Alternative B because the actions under this alternative are not likely to result in substantial adverse impacts on visual resources in the RMP Study Area. Additionally, actions under this alternative that could potentially affect visual resources (for example, new recreation development and use) can be minimized through careful planning, management, and design.

Cumulative Impacts (Alternative B)

Cumulative impacts under Alternative B would be similar to those under Alternative A. Specifically, potential future development on private lands resulting from population growth could result in changes to the visual character of the RMP Study Area vicinity and increased recreation use (and associated facility improvements and

enhancements) would likely be visible from some publicly accessible viewpoints, potentially degrading certain scenic views.

3.10.2.3 Alternative C

In general, Alternative C includes the same measures to address and enhance visual resources in the RMP Study Area as Alternative B. Slight differences in the types and level of recreation and public use improvements and enhancements between Alternatives C and B may reduce the potential visual contrast of some improved facilities in specific areas under Alternative C. However, similar to Alternative B, recreation and public use improvements and enhancements under Alternative C would generally result in minor, localized changes to the visual character of the RMP Study Area and would likely not degrade the larger Study Area viewshed. Overall, Alternative C would likely result in similar positive visual resource impacts, benefiting visitors to the RMP Study Area, as Alternative B.

Mitigation and Residual Impacts (Alternative C)

No mitigation measures are proposed for Alternative C because the actions under this alternative are not likely to result in substantial adverse impacts on visual resources in the RMP Study Area. Additionally, actions under this alternative that could potentially affect visual resources, such as new recreation development and use, can be minimized through careful planning, management, and design.

Cumulative Impacts (Alternative C)

Cumulative impacts under Alternative C would be similar to those under Alternatives A and B.

3.11 Environmental Justice

3.11.1 Affected Environment

Executive Order 12898 (Environmental Justice, 59 Fed. Reg. 7629 [1994]) 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 affected area are examined to determine whether minority populations, low income populations, and/or Indian Tribes are present in the area impacted by a proposed action. If so, a determination must be made as to whether the implementation/development of the proposed project may cause disproportionately high and adverse human health or environmental effects on the minority or low income populations present. Examination of minority and low income populations is warranted through the adoption of a 1994 directive designed specifically to examine impacts to such things as human health of minority populations, low income populations, and Indian Tribes and is commonly known as Environmental Justice.

The Council on Environmental Quality (CEQ) defines “minority” to consist of the following groups: Black/African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaskan Native, and Latino populations (regardless of race). Additionally, for the purposes of this analysis, “minority” also includes all other non-white racial categories within the 2000 Census such as “some other race” and “two or more races.” The Interagency Federal Working Group on Environmental Justice guidance states that a “minority population” may be present in an area if the minority population percentage in the area of interest is “meaningfully greater” than the

minority population in the general population. CEQ also defined “low income populations” based on the annual statistical thresholds from the Bureau of the Census. These “poverty thresholds” are calculated by family size and composition and are updated annually to reflect inflation. A population is considered low income if the percentage of the population that is below the poverty threshold within the area of interest is “meaningfully greater” than the low income population in the general area (state-wide) population.

The RMP and NEPA environmental review process for the Teton River Canyon RMP complies with Executive Order 12898 by identifying minority and low income populations early in the process and incorporating the perspectives of these populations into the decisionmaking process.

The majority of the populations of Fremont, Madison, and Teton Counties are white (89, 95, and 88 percent respectively). The potentially affected minority populations in each of these counties include African American, Indian/Native Alaskan, Asian, Hawaiian/Pacific Islander, and Latino. Except for Latinos, these other minority populations each account for 1 percent or less of the total population of Fremont, Madison, and Teton Counties. Latinos make up 10 percent of the population of Fremont County, 4 percent of the population of Madison County, and 11 percent of the population of Teton County. The income of approximately 14, 30, and 13 percent of Fremont, Madison, and Teton County populations respectively are less than the poverty level compared to about 12 percent for the state (U.S. Census Bureau 2000a, b, c).

3.11.2 Environmental Consequences

Statistics have not been collected on the race, ethnicity, or economic characteristics

of visitors to the RMP Study Area. Visitor’s ethnic makeup is comprised of two groups of people, one reflective of the surrounding area in southeastern Idaho and the other of individuals from around the world. Because of the failed damsite’s interest to the engineering world and its close proximity to Teton National Park, the overlook is often visited by scientists and international visitors from many different countries. Implementation of any of the three alternatives would have no environmental justice concerns. Because no substantial adverse or residual impacts to environmental justice are expected under any of the alternatives mitigation measures are not necessary.

3.12 Cultural Resources

3.12.1 Affected Environment

The prehistory of southern Idaho spans nearly 15,000 years. Three major prehistoric periods have been identified for southeastern Idaho, defined mainly from archaeological evidence of changes in weapon systems. The Early Prehistoric Period (15,000 to 7,500 Before Present) weapons employed large, stone lanceolate points presumably on throwing or thrusting spears. The Middle Prehistoric Period (7,400 to 1,300 Before Present) weapons used large notched points to tip darts propelled by atlatls or throwing sticks. Late Prehistoric Period (1,300 to 150 Before Present) weapons included use of the bow and arrow with small notched points. In terms of subsistence strategies, there is a shift over time from highly mobile groups exploiting a broad range of resources to less-mobile groups procuring and processing certain highly productive resources (such as camas or salmon).

Shoshone and Bannock Indian people lived in what is now the Teton RMP Study Area

at the time of the earliest European and American explorations of southeastern Idaho in the early 1800s. Many other groups used the area during historic times, including the Nez Perce, Flathead, Northern Paiute, and Northern Plains groups such as the Crow and Blackfeet. The Shoshone and Bannock people relied on a wide variety of resources, including roots, groundhogs, rabbits, insects, large game, and fish. (Because of their heavy reliance on camas and other roots, trapper/trader Nathaniel Wyeth referred to the Indians of this area as “Diggers.”) A number of different fishes including trout, suckers, perch, and minnows were taken by means of hooks, baskets, dams, weirs, and harpoons. Hunting was also important, with bison being probably the most significant. Bison were abundant in the area until about 1840. After about 1750, the horse was used extensively in this area of Idaho, allowing the Tribes to travel more broadly to hunt for bison. Indian relationships with Euroamericans deteriorated as the numbers of emigrants and settlers increased in the middle and late 1800s. Treaties with the U.S. Government in 1863 and the establishment of Fort Hall Reservation in 1867 confined the Shoshone-Bannock and opened the area for Euroamerican settlement. In 1934, the Indian Reorganization Act changed government policy to promote Tribal self-determination.

The first non-Indians in southeastern Idaho were fur trappers led by Andrew Henry, who came into the upper Snake River drainage in 1810. Wilson Price Hunt’s group of trappers, representing John Jacob Astor’s Pacific Fur Company, passed through the Teton RMP Study Area in 1811 on their way to the Pacific. The Teton Basin was, for most of the 19th century, known as Pierre’s Hole and the Teton River was known as Pierre’s Fork or Pierre’s River until the mid-1880s. Pierre’s Hole became an important meeting place for trappers and other

explorers. Pioneer settlement of the upper Snake River country was associated with the northward expansion of Mormon communities out of Utah. Throughout its history, agriculture has been the primary industry of settlers in the area, and irrigation systems were of singular importance to the development of agriculture. Initiated by the small scale of early settlers, private cooperative efforts were organized by canal companies. Roads, ferries, bridges, and railroads were available by the early 1900s as more settlers entered the area. Federal programs such as the Minidoka Project, begun in 1904 by Reclamation, were systems of reservoirs for water storage, flood control, and power. Dry farming of grain and pasturing stock were and are common in the Teton RMP Study Area. Perhaps the most visible and far-reaching Reclamation irrigation-related action to occur in the Teton RMP Study Area was the ill-fated construction and failure of Teton Dam in 1976.

Traditional cultural properties have not been recorded for the Teton RMP Study Area. Shoshone-Bannock Tribal elders and other Tribal members are reluctant to provide specific information about sacred sites or locations where traditional artistic, economic, or other cultural practices were conducted. Rather, they indicate that certain natural resources were, and still are, used and describe activities associated with these resources. The natural resources listed as important for the Minidoka Northside RMP (and very likely the Teton RMP Study Area) were classified under four categories: rocks and soil (e.g., round rocks for sweat baths and other ceremonies); plants (e.g., pine nuts, chokecherries, sagebrush, and roots); animals (e.g., deer, fish, and groundhogs); and water (e.g., people traveled, camped, traded, hunted, fished, and gathered along rivers and streams). While specific information has not been obtained regarding

the use of similar resources in the Teton RMP Study Area, it is reasonable to assume that the same types of resources were probably used in prehistoric times.

In total, 12 cultural resource sites within the Teton RMP Study Area have been previously recorded on forms at the Idaho State Historic Preservation Office (SHPO). The recorded cultural resources include nine archaeological sites, a bridge, the Teton Dam, and a homestead. The recorded archaeological sites are all located in the canyon, rim, or wall of Teton River Canyon. In addition to the recorded cultural resources, there are resources that have been identified but not formally recorded. These resources include the historic-period C. W. Thompson Ranch, the Teton Valley Branch Railroad, and early roads as depicted in the General Land Office maps. Those sites are not included in the above count of recorded cultural resource sites.

Diverse cultural activities and widespread use of Teton River Canyon in prehistoric times is reflected in the range of archaeological site types found in the canyon. A rockshelter (10FM46) exposed in the canyon sidewall yielded fire hearths projectile points, lithic debitage, and curious “charred bark rolls” upon excavation. Two archaeological sites (10MO1 and 10MO2) on the canyon floor contained surface depressions suggestive of prehistoric house pit features, although there were no associated artifacts. The other six archaeological sites (10FM47, 10FM48, 10FM53, 10MO3, 10MO4, and 10TN1) are “open” sites lacking natural shelter, although one (10FM48) extends into a small rock overhang. These sites contained deposits of prehistoric artifacts, usually obsidian, ignimbrite, and cryptocrystalline silicate (chert, jasper, or chalcedony) flakes, sometimes with a few stone tools and pieces of animal bone. One open site (10FM47) located above the canyon rim was excavated

in 1967 and yielded 34 stone tools including a large side-notched projectile point. Another open site (10FM53) was excavated in 1972 and 1973; mammal bone and 47 stone tools were recovered from archaeological deposits, including hunting and butchering tools indicating the site functioned as a bison processing/butchering camp.

The recorded and unrecorded historic-period cultural resources in the Teton RMP Study Area represent a wide variety of resources related to several major themes, including transportation (Teton Valley Branch Railroad, historic roads and trails, Canyon Creek Bridge), ranching (C.W. Thompson Ranch), agriculture (Niendorf Homestead), and irrigation (Teton Dam, Linderman Dam).

Approximately 2,600 acres of the estimated 71,000-acre Teton RMP Study Area have been surveyed for cultural resources. Most of these surveys were conducted on Reclamation lands in the Study Area. Surveys have been conducted in response to the construction of Teton Dam, as well as for a hydroelectric project, transmission line, sediment control basin, and land exchange. The majority of cultural resource survey coverage has occurred in the Teton river Canyon, with approximately three quarters of the canyon that is located in the Study Area having been surveyed. Of the known cultural sites in the Study Area (formally recorded and not formally recorded), none has been determined to be eligible for listing in the National Register (although the site of the Teton Dam failure will almost certainly be determined eligible for the Register once it achieves the 50-year age milestone, or possibly before). Most Study Area cultural sites are unevaluated and several are considered non-eligible for the National Register by the archaeologists who investigated these sites. Table 3.12-1 lists the known cultural resource sites for the Study Area.

TABLE 3.12-1
Cultural Resource Sites for the Teton RMP Study Area

Site Number	Site Name	Site Type	Location	National Register Status
10FM266	Niendorf Homestead	Farmstead	Snake River Plain	Not significant
10TN1		Campsite/Lithic scatter	Teton River Canyon Rim	Unevaluated
10FM46		Rock shelter	Teton River Canyon Wall	Not significant
10FM47		Rock shelter	Teton River Canyon Rim	Not significant
10FM48		Campsite/Lithic scatter	Teton River Canyon	Unevaluated
10MO2		Depressions	Teton River Canyon	Not significant
000582	Canyon Creek Bridge	Bridge	Canyon Creek Canyon	Unevaluated
10MO3		Campsite	Teton River Canyon Rim	Unevaluated
10MO4		Campsite	Teton River Canyon Rim	Unevaluated
10MO1		Depressions	Teton River Canyon	Not significant
10FM53	Borrow Source Site	Butchering site	Teton River Canyon Rim	Not significant
005060	Teton Dam Site	Dam	Teton River Canyon	Unevaluated
—	C.W. Thompson Ranch	Farmstead/ranch	Teton River Canyon	Unevaluated
—	Oregon Short Line Teton Valley Branch	Railroad grade	Snake River Plain	Unevaluated
—	Road to Teton Basin	Historic road	Snake River Plain	Unevaluated
—	Unnamed Road	Historic road	Snake River Plain	Unevaluated
—	Linderman Dam	Dam	Teton River Canyon	Unevaluated

3.12.2 Environmental Consequences

3.12.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Under the No Action Alternative, no change in current management of the Teton RMP Study Area would occur. Therefore, there would be no effect on historic properties located within the Study Area. For any of the alternatives (A, B, or C), Reclamation would continue to consult with the SHPO for Federal undertakings and would work with the SHPO and Tribes to mitigate any adverse

effects from those undertakings.

Identification, protection, and management of cultural resources would continue to occur on a project-specific basis, in response to individual Reclamation-initiated or Reclamation-sponsored undertakings that pose a threat to the resource. The management of cultural resources would be reactive, instead of initiating protection from within the cultural resources program itself (that is, a proactive approach). Significant cultural sites would be protected ex post facto because of legal requirements to do so, not through any agency initiative or preference.

Under Alternative A, exposed archaeological deposits, in general, would continue to be degraded by natural forces such as erosion, vandalism, and relic collecting, and by Reclamation-sponsored or initiated actions within the RMP Study Area. The net effect of these actions on cultural resources would be to disturb the horizontal and vertical context of artifacts and other cultural materials, thus destroying scientifically and culturally valuable depositional data about the site; the result would be loss of information about the early peoples who inhabited the area and whose activities resulted in the archaeological site. These effects tend to be cumulative, annually impinging on the integrity of the cultural property and its potential eligibility to the National Register.

Management of the area within the boundaries of the Teton RMP Study Area would be on an ad hoc basis, without benefit of a management plan. Several activities routinely conducted under a continuation of existing management (Alternative A, No Action) can adversely affect cultural resources because of informal, unstructured practices that may not consider far-reaching effects on cultural resources. These activities include minimal public information programs; lack of aggressive strategies for identifying, evaluating, and protecting cultural resources (i.e., Section 110 activities); lack of a vehicle access plan; and lack of formalized management at day use sites. Direct impacts to archaeological and other cultural sites from “benign neglect” and inaction related to these No Action Alternative activities could result in artifact compaction, dispersal, or removal, leading to destruction of horizontal and vertical context of the site, and to loss of potential scientific information about the site.

Mitigation Measures

Mitigation under the No Action Alternative (and Alternatives B and C) would occur if cultural resources are present that are

eligible for the National Register, and if they are being adversely impacted by a Reclamation-sponsored action. If an action is planned that could adversely affect an archaeological, traditional, or historic resource, Reclamation would investigate options to avoid the site (always the preferred option). Mitigation for impacted cultural resource sites would be planned and implemented in accordance with requirements defined in 36 CFR 800, using methods consistent with the Secretary of the Interior’s Standards and Guidelines, in consultation with the SHPO and Shoshone-Bannock Tribes. NAGPRA would be implemented if human remains or other cultural items that fall under the purview of that statute are located.

3.12.2.2 Alternative B

Under Alternative B, proactive management of cultural resources assumes a more prominent role than under the No Action Alternative. Alternative B cultural resource protection becomes an end in itself, and is not triggered by some other precipitating action. Guidelines and procedures would be developed and training provided for IDFG and other managing partners to increase awareness of cultural resources statutory requirements; educational information about area history would be prepared for display at the site of the Teton Dam failure and other key locations; Reclamation would work with the Tribes to incorporate Tribal history and perspectives into educational and interpretive materials; the Teton Dam site would be protected for future nomination to the National Register; and the RMP Study Area would be monitored periodically to evaluate threats to historic properties and, if necessary, implement appropriate management actions to protect such sites. None of these activities would be anticipated under the No Action Alternative.

In contrast with the No Action Alternative, Alternative B actions would indirectly benefit

cultural resources through active management in conjunction with other resources. Reducing unauthorized public access and associated vandalism at the spillway and other key dam structures, and contracting for additional law enforcement, should help to greatly diminish impacts to the historic dam site. Effective erosion control measures (including managing actions to minimize erosion potential, establishing permanent native vegetative cover on the canyon rim, and limiting roadways to prevent ORV use and reduce exposed soils near the river), would reduce a significant threat to archaeological sites by preserving artifacts and other cultural deposits in their original context, and reducing gulying resulting in artifact movement and redeposition. Defining parking areas and formalizing and improving turnarounds at Spring Hollow and the Teton Dam Take-Out Site would minimize vehicular damage to any potentially existing archaeological sites from vehicle-caused erosion and compaction of artifacts. To the extent that Alternative B utilizes more controlled, defined public access (e.g., Teton Dam Overlook, Teton Dam Site, Dam West Road, Rocky Gulch Access, Spring Hollow, Felt Power Plant, among others), ORV use would be reduced; this would help reduce potential impacts to archaeological deposits from erosion and compaction. Monitoring commercial use/permits so as not to degrade resources and managing to retain the existing character of landscape would have a beneficial effect on cultural resources.

Not all actions anticipated under Alternative B would benefit cultural resources and some actions could threaten cultural resources more than Alternative A actions. For example, public education and interpretation programs, while increasing awareness of cultural resources, can attract greater numbers of people to a specific location, thus increasing the potential for looting or vandalism. Improvements in

access, public education, sanitation facilities, and other programs, could have the effect of attracting greater numbers of visitors to the Teton River Canyon, thus compromising the very natural and cultural features that make the Teton River Canyon area unique. The Shoshone-Bannock Tribes have expressed the same concern to Reclamation from the standpoint of impacts to archaeological sites and other cultural values due to increased use of the river. It is, therefore, imperative that prior to any decision to enhance an area or improve a facility in the Teton River Canyon, Reclamation carefully consider the effect of that action on increased future visitation and possible adverse effects to resources resulting from increased numbers of visitors. Considered in their entirety, the actions proposed under Alternative B are more beneficial to cultural resources than the No Action Alternative.

Mitigation Measures and Residual Impacts

Mitigation is the same as described for Alternative A.

3.12.2.3 Alternative C

Impacts resulting from natural agents or human-caused factors would continue under Alternative C. However, because Alternative C requires higher levels of expansion to provide access for recreation, this alternative has a greater potential to impinge on cultural resources than Alternative B. Under Alternative C, new parking areas would be constructed in response to improved public access at Rocky Gulch, at Linderman Road, and at Brown Road. Each parking area would accommodate four vehicles. Development of these facilities could directly impact archaeological or traditional cultural properties by exposing and/or disturbing cultural deposits below the surface. The potential for impacts from vandalism and unauthorized artifact

collecting would be expected to increase as a result of increased visitation and public use of these areas.

Mitigation Measures and Residual Impacts

Mitigation is the same as described for Alternative A.

3.13 Indian Sacred Sites

3.13.1 Affected Environment

Sacred sites are defined in EO13007 as “any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian Tribe, or an Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion...” Under EO13007, Federal land managing agencies must accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and avoid adversely affecting the physical integrity of such sacred sites.

Specific information about sacred sites has not been provided by the Shoshone-Bannock Tribes. As with traditional cultural properties, the Shoshone-Bannock Tribes are reluctant to discuss sacred site locational information with outsiders, and it would be disrespectful to describe these sites in a report. Nevertheless, conversations with Tribal members indicate that Elders in the Tribe regard the Teton River Canyon, in general, as a special and “powerful” place, associated now or in the past with “little people.” The physical nature of the canyon, with its steep, almost inaccessible basalt cliffs, would appear to serve as a natural setting for the location of Indian graves, as well as providing spectacular vistas. Such

graves and vistas could qualify as “sacred sites.”

3.13.2 Environmental Consequences

3.13.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Under the No Action Alternative, there would be no change in management of the Teton RMP Study Area. Therefore, there would be no effect on Indian Sacred sites resulting from this alternative. Reclamation would continue to ensure that its actions do not adversely affect Indian sacred sites, if such sites are present, to the extent practicable, and that access to and ceremonial use of Indian sacred sites is accommodated.

Possible impacts on Indian sacred sites from a continuation of existing management practices can only be managed in a general fashion since the specific nature and location of sacred properties is unknown. If sacred sites are located in the area of potential impact for a Reclamation project, their integrity would be compromised by actual physical disturbances, as well as visual or auditory intrusions resulting in changes in character, feeling, and association of the site. In such cases, their “sacredness” and importance as a religious or sacred site would be diminished. As with cultural resources, sacred sites are compromised by vandalism and relic collecting, land use activities, and recreation and other development.

Mitigation Measures and Residual Impacts

Executive Order (EO) 13007 does not authorize agencies to mitigate for the impact of their actions upon Indian sacred sites. However, EO 13007 does direct agencies to avoid adverse impacts whenever possible. For future Reclamation actions in the RMP Study Area that could impact Indian sacred

sites, Reclamation would consult with Tribes in conjunction with any 36 CFR 800 consultations. Under these consultations, Reclamation would seek means to avoid adverse impacts to sacred sites.

3.13.2.2 Alternative B

Because of more controlled, proactive land use activities (especially increasing awareness and monitoring of cultural sites), along with the cultural resource protection orientation of this alternative, potential impacts to sacred sites under Alternative B would be less than for Alternative A (or Alternative C).

Mitigation Measures and Residual Impacts

Mitigation is the same as described for Alternative A.

3.13.2.3 Alternative C

Potential impacts on Indian sacred sites under this alternative would be greater than for Alternative B because of higher levels of expansion to provide access for recreation.

Mitigation Measures and Residual Impacts

Mitigation is the same as described for Alternative A.

3.14 Indian Trust Assets

3.14.1 Affected Environment

ITAs are legal interests in property held in trust by the U.S. for Indian Tribes or individuals. The Secretary of the Interior, acting as the trustee, holds many assets in trust for Indian Tribes or Indian individuals. Examples of objects that may be trust assets are lands, minerals, hunting and fishing rights, and water rights. While most ITAs are on- reservation, they may also be found off-reservation.

The U.S. has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian Tribes or Indian individuals by Treaties, Statutes, and Executive Orders. These are sometimes further interpreted through court decisions and regulations.

3.14.1.1 Shoshone-Bannock Tribes

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

The Tribes believe their right extends to the right to fish. The Fort Bridger Treaty for the Shoshone-Bannock has been interpreted in the case of State of Idaho v. Tinno, an off-reservation fishing case in Idaho. The Idaho Supreme Court determined that the Shoshone word for "hunt" also included to "fish." Under Tinno, the Court affirmed that the Tribal Members' right to take fish off-reservation pursuant to the Fort Bridger Treaty (Shoshone-Bannock Tribes 1994).

The 1990 Fort Hall Indian Water Rights Agreement involved claims the U.S. made on behalf of the Shoshone-Bannock Tribes of the Fort Hall Reservation in the Snake River Basin Adjudication for water rights in the Upper Snake River Basin and its tributaries. The agreement is between the Shoshone-Bannock Tribes, the State of Idaho, the U.S., and certain Idaho water users. The Agreement was ratified in the Fort Hall Indian Water Rights Settlement Act of 1990. The purpose of the settlement was to achieve a fair, equitable, and final settlement of all claims of the Shoshone-

Bannock Tribes, its members, and its allottees to water rights in the Upper Snake River Basin.

The lands being discussed in the RMP Study Area are ceded lands of the Shoshone-Bannock Tribes.

3.14.1.2 The Northwestern Band of the Shoshone Indians

The Northwestern Band of the Shoshoni Nation of Utah (Washakie) (NWBSNU), a federally recognized Tribe, without a reservation, does not have any water rights. The NWBSNU possess Treaty-protected hunting and fishing rights that may be exercised on unoccupied lands within the area acquired by the U.S. pursuant to the 1868 Treaty of Fort Bridger. No opinion is expressed as to which areas may be regarded as “unoccupied lands.”

3.14.1.3 Summary of Reserved Rights of Federally Recognized Tribes

Rights to Water: Neither of the Tribes have water rights that would be impacted by the No Action or any of the action alternatives.

Rights to Hunt or Rights to Fish: It is unclear if either of the Tribes have reserved rights to hunt or fish on the lands being discussed in the RMP. All of the lands being addressed in the RMP Study Area were purchased in fee title by Reclamation. In other words, the Reclamation lands were once owned by private individuals and were not withdrawn from the public domain lands for the Teton Project. Accordingly, it is unclear if any rights to hunt would apply to either of the Tribes.

3.14.2 Environmental Consequences

3.14.2.1 Alternative A (No Action Alternative)—Continuation of Existing Management Practices

Rights to Water: The Shoshone-Bannock Tribes and the NWBSNU do not have water rights that are impacted.

Rights to Hunt or Rights to Fish: It is unclear if the Shoshone-Bannock Tribes and the NWBSNU have reserved rights to hunt or fish on the RMP lands. Alternative A would not deprive either of the Tribes of any rights they may have to hunt or fish.

3.14.2.2 Alternative B

Rights to Water: the Shoshone-Bannock Tribes and the NWBSNU do not have water rights that are impacted.

Rights to Hunt or Rights to Fish: It is unclear if the Shoshone-Bannock Tribes and the NWBSNU have reserved rights to hunt or fish on the RMP lands. Alternative B would not deprive either of the Tribes of any rights they may have to hunt or fish.

3.14.2.3 Alternative C

Rights to Water: The Shoshone-Bannock Tribes and the NWBSNU do not have water rights that are impacted.

Rights to Hunt or Rights to Fish: It is unclear if the Shoshone-Bannock Tribes and the NWBSNU have reserved rights to hunt or fish on the RMP lands. Alternative C would not deprive either of the Tribes of any rights they may have to hunt or fish.

3.15 Wild & Scenic River Review

The Wild and Scenic Rivers Act states, “In all planning for the use and development of water and related lands resources, consideration shall be given by all Federal

agencies involved to potential national wild, scenic and recreational river areas...” As part of the Teton River Canyon RMP, Reclamation is conducting an inventory of the Teton River within the RMP project boundary to determine if it is eligible under the Wild and Scenic River Act. Because of intermixed ownership, Reclamation and BLM are jointly conducting this study to address all Federal lands within the RMP Study Area.

Seven river segments were reviewed and identified as meeting eligibility criteria for protection under the National Wild & Scenic Rivers Act. None were determined to be suitable for designation into the National Wild & Scenic Rivers System at this time, due to the over-riding Congressional authorization for the construction of Teton Dam and current State direction for these lands. If, and when, the project is de-authorized, consideration of the Teton River for designation under the Wild and Scenic Rivers Act can, and must be reassessed. Please see Appendix D for the Teton Wild and Scenic River Review.

3.16 Summary of Impacts

The impact analysis is presented in Chapter 3, *Affected Environment and Environmental Consequences*. A summary of these impacts is provided in Table 3.16-1.

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
Water Quality and Contaminants	<p>Water quality would not change significantly in the future as a result of Reclamation actions. However, increased human use, regardless of whether an RMP is implemented or not, will increase the potential for fires and weed occurrences, both of which would degrade water quality.</p>	<p>The establishment of permanent native vegetative cover along the canyon rim will provide filtering for agricultural runoff and improve water quality. Defining and limiting roadways to prevent illegal ORV use and reduce exposed soils near the river will also improve water quality by reducing erosion during large storm events. Finally, providing sanitation facilities where visitor use is concentrated and where access allows will have beneficial effects on water quality.</p>	<p>Potential adverse and beneficial effects described for Alternative B would also occur with Alternative C. However, two more public access sites would be sought, potentially adding to weed infestations and fire incidence. Both would result in degraded water quality because of increased runoff and erosion.</p>
Soils	<p>Current erosion and existing losses of soil productivity from compaction and weed populations would continue. Erosion is limited to a few areas along the canyon rim on agricultural leases where pivot over-spray or irrigation runoff occurs and to some high-use areas along the Teton River. Erosion of unregulated roads is also a minor problem in recreation-oriented areas.</p> <p>Compaction from boat launching and take-outs would not change with the No Action Alternative and soil would continue to erode during large storm events.</p>	<p>Enhancing and restoring native plant communities, particularly woody vegetation, would reduce erosion and improve soil productivity through greater canopy coverage, better root distribution, and increasing organic matter production and decomposition. Replacing some small areas of reed canarygrass monocultures with native vegetation could result in increased bank erosion in both the short- and long-terms. However, only very small areas may be affected.</p>	<p>Potential adverse and beneficial effects described for Alternative B would also occur with Alternative C.</p>

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
Vegetation and Wetlands	<p>The No Action Alternative will continue to aggressively control noxious weeds through the use of biological and chemical control and through cooperative noxious weed control efforts currently in place with Fremont County Weed Management Area, BLM, and IDFG. Noxious weed control efforts are conducted in accordance with expert advice and study results, and are conducted in an effort to restore native vegetation to the river corridor and restore historic habitat. The No Action Alternative will provide no opportunity to convert historic big game winter range areas back to native vegetation through restoration, conversion, and protection. This alternative does not have provisions to either increase native woody vegetation or to restore reed canarygrass-dominated riparian areas to native vegetation.</p> <p>The No Action Alternative does not include public messages at concentrated use areas that are aimed at fire prevention.</p> <p>Increased human use, regardless of whether an RMP is implemented or not, will increase the potential for fires and weed occurrences, both of which degrade native vegetation.</p>	<p>Native woody riparian vegetation, which is lacking in most areas along the river, may be planted in a few small areas. These improvements, if they are implemented, will improve plant diversity and enhance and improve wildlife habitat values in a few small areas.</p> <p>Some historic big game winter range areas could be converted from agricultural use back into native vegetation. If this is done and is successful, it will increase native vegetation and enhance wildlife habitat along some areas of the upper slopes and adjacent areas of Teton River Canyon.</p> <p>Signage displaying fire prevention messages at concentrated public use areas may reduce fire risk.</p> <p>Increased public access into the canyon would likely increase the potential for weed infestations and fires. Any increase in the area infested with weeds or in the incidence of fire would have adverse effects on native vegetation.</p>	<p>Potential adverse and beneficial effects described for Alternative B would also occur with Alternative C.</p> <p>Development of two additional recreational access sites compared to Alternative B is likely to result in more weed infestations and increased weed spread and a higher fire potential. More weed infestations and fires would degrade habitat values.</p>

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
Wildlife	<p>Current habitat conditions would likely remain unchanged. Alternative A does not include any guidance regarding regulating the number of private and commercial float boat users. Increased human use regardless of whether an RMP is implemented or not will increase disturbance and displacement of wildlife and increase the potential for fires and weed occurrences, both of which degrade wildlife habitat value.</p>	<p>Any establishment of permanent native vegetative cover along the canyon rim will be beneficial for a variety of wildlife species. Similarly, any increases in the amount of woody riparian vegetation along the river would benefit wildlife species associated with riparian habitats. Mule deer and elk would benefit if portions of agricultural leases are successfully converted to permanent cover functioning as big game winter range.</p> <p>Increased public access into the canyon is likely to result in more weed infestations, increased weed spread, and a higher fire potential, which would degrade wildlife habitat values. Increasing the number of public access sites will likely facilitate increased levels of human use and wildlife disturbance and displacement, which affects many species. Increasing the number of locations for public access into the canyon also increases potential human use during the winter. Although these new access points are intended for summer use only, enforcement of winter closures will not be totally effective, resulting in more potential human use during the winter. Increases in the number of winter users could adversely affect wintering deer and elk at a critical time of the year, resulting in lower over-winter survival rates.</p> <p>Recreation monitoring (Chapter 2) includes managing recreation to maintain a semi-primitive experience for recreationists. This may or may not reduce potential impacts of increased recreation use on sensitive wildlife species, depending on a number of factors including human activity levels, the spatial and temporal overlap between recreation activities and sensitive habitats, and how a “semi-primitive recreation experience” is defined and managed.</p>	<p>The beneficial and adverse effects of Alternative C would be similar to those expected under Alternative B. Three additional public access points would be sought under this alternative, further increasing the potential for weed infestation, fire, and wildlife disturbance and displacement.</p>

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
Aquatic Resources	Specific fisheries impacts expected to continue include poaching, minor water quality impacts from unauthorized and unregulated travel and camping within riparian areas, localized runoff from adjacent agriculture lands, and upstream sources. Alternative A provides no new direction for water quality or riparian habitat improvements and no change in habitat conditions for Yellowstone cutthroat trout. The potential for the aquatic resources within the RMP Study Area would remain unchanged in the future.	Proposed actions may result in minor local improvements in riparian habitats as well as water quality by reducing point and non-point sources of agriculture runoff and fine sediment inputs. Localized improvements in riparian diversity and floodplain and stream bank structure would improve habitat for aquatic species at those locations. Increased access, combined with the increasing population of eastern Idaho, will likely increase illegal poaching in this relatively remote canyon. Water quality may also be degraded because of an increase in weed infestations and fires associated with more human use of the area.	Alternative C proposes the same protective measures as Alternative B but includes increased public access. Beneficial and adverse impacts on aquatic and riparian resources would be similar to those described for Alternative B.
Threatened and Endangered Species	<p>There would be no effects from any of the RMP alternatives on the Canada lynx, grizzly bear, Ute ladies'-tresses orchid, Utah valvata snail, gray wolf, or yellow-billed cuckoo.</p> <p>Without resource protection measures, the number of commercial and private float trips on the Teton River in the future could increase to the point where bald eagle foraging would be disrupted, resulting in potential adverse effects on nesting success in the RMP study area. Neither Reclamation nor BLM have any requirements to regulate the number of commercial and private float boat trips in order to protect resource values, including nesting and foraging bald eagles. Reclamation will prepare nest site management plans, monitor bald eagle and recreation use, and implement mitigation measures to avoid adverse effects on bald eagles and promote species recovery.</p>	<p>There would be no effects from any of the RMP alternatives on the Canada lynx, grizzly bear, Ute ladies'-tresses orchid, Utah valvata snail, gray wolf, or yellow-billed cuckoo.</p> <p>Current levels of human use are not having any known negative impacts on bald eagles using the RMP study area at the present time. RMP management actions under Alternative B, combined with current levels of human use, are not expected to have any direct or indirect adverse effects on bald eagles using the RMP study area at this time.</p> <p>Alternative B includes preparing bald eagle nest site management plans in cooperation with BLM and IDFG, monitoring bald eagle nest success and recreation use, and adjusting commercial and private launches, if necessary, to avoid impacts and promote species recovery.</p>	<p>There would be no effects from any of the RMP alternatives on the Canada lynx, grizzly bear, Ute ladies'-tresses orchid, Utah valvata snail, gray wolf, or yellow-billed cuckoo.</p> <p>Current levels of human use are not having any known negative impacts on bald eagles using the RMP study area at the present time. RMP management actions under Alternative C, combined with current levels of human use, are not expected to have any direct or indirect adverse effects on bald eagles using the RMP study area at this time.</p> <p>Alternative C includes the same measures as Alternative B to monitor bald eagles and recreation use and to implement actions to avoid impacts and promote species recovery.</p>

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
Recreation and Access	<p>Implementation of Alternative A would be without the benefit of a management plan and would generally result in negligible impacts to recreation resources in the near future. However, if recreational use in the RMP Study Area increases (based on an expected population increase in the region), the impact of no management plan may likely result in some adverse impacts to natural and recreational resources. It is important to note that specific use areas within the RMP Study Area may have unique natural/ecological and social capacity standards based on specific conditions at each site and that visitor satisfaction may likely decrease at some point in the future as the natural and social conditions deteriorate from unmanaged use.</p>	<p>Alternative B would provide for additional recreation development beyond what currently exists in the RMP Study Area. In general, this alternative would have a positive effect on the recreation experience in the area. While there would be many recreation actions under this alternative, they are focused on limiting the level of development and aim to preserve the more primitive qualities of the RMP Study Area. Under this alternative, improved and enhanced recreation and public use areas would slightly increase the availability of recreation opportunities in the RMP Study Area. This would likely benefit most visitors to the RMP Study Area, except those who may desire truly primitive sites and use areas. At the same time, this alternative would help retain the existing social characteristics of the RMP Study Area and would also help limit impacts to natural resources by formalizing recreation sites.</p>	<p>Alternative C includes the same measures to address and enhance recreation resources in the RMP Study Area as Alternative B. The primary difference between the two alternatives relates to access. Under this alternative, public vehicular access to the rim would be restored at Rocky Gulch, a walk-in access would be explored at Linderman Road, and public access to the rim on Brown Road would be pursued. The remaining measures under Alternative C are the same as those under Alternative B and would generally have a positive effect on the recreation experience in the RMP Study Area.</p>

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
Land Use	<p>Under Alternative A, land resources would continue to be managed on an ad hoc basis without the benefit of a management plan. The impact of not having a management plan would likely result in adverse impacts to land use in the future by not providing long-term comprehensive guidance and direction on appropriate land uses in the RMP Study Area.</p>	<p>Alternative B would likely result in positive impacts to land use in the RMP Study Area. Specifically, measures under Alternative B would better address agricultural lease goals and objectives, improve recreation areas to help minimize potential adverse impacts from public use, and provide greater natural resource enhancements in the RMP Study Area. No new agricultural leases would be issued under Alternative B and renewed leases would continue to be renewed subject to new terms and conditions consistent with RMP goals and objectives. A lessee would likely be negatively affected by non-renewal of all or part of a lease due to loss of income. However, all of the leases are relatively small in size and would not be expected to result in any significant income loss.</p> <p>Pump station owners/operators could potentially see increased vandalism to their equipment and facilities as a result of increased access to sites where their facilities are located thus having a negative impact. However, these impacts would likely be less significant due to the limited number of visitors.</p> <p>Alternative B would also provide for greater management consistency between Reclamation and BLM lands in the RMP Study Area.</p>	<p>Alternative C would likely provide the greatest land use benefits of the three alternatives. Similar to Alternative B, this alternative would better address agricultural lease goals and objectives, but would also evaluate each lease as it became due for potential changes to meet RMP goals and objectives for wildlife habitat and other benefits. Other benefits are the same as those described under Alternative B, including improved recreation areas to help minimize potential adverse impacts from public use, greater natural resource enhancements, and greater management consistency between Reclamation and BLM lands in the RMP Study Area.</p>

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
Visual Resources	<p>The lack of aesthetic/visual-specific management practices, as well as the limited management enhancements proposed under Alternative A, would likely result in potentially minor impacts to the aesthetic characteristics and resources in the RMP Study Area in the future. As the natural resources in the RMP Study Area viewshed experience pressure and potential degradation from use over time, the potential of some more substantial adverse impacts to aesthetic resources exists. However, none of the elements associated with Alternative A would be anticipated to result in significant, large-scale adverse visual impacts in the RMP Study Area.</p>	<p>Alternative B includes several proactive measures to prevent visual degradation in the RMP Study Area. These measures include managing to retain the visual character of the RMP Study Area, reducing the visual impacts of graffiti and vandalism at the spillway and dam overlook site, implementing erosion control measures, and enhancing native vegetation and wildlife habitat, among others. Recreation and public use improvements and enhancements would generally result only in localized changes to the visual character of the RMP Study Area and would likely not degrade the larger Study Area viewshed. By proactively addressing these important visual resource concerns, Alternative B would likely result in positive visual resource impacts, benefiting visitors to the RMP Study Area.</p>	<p>Alternative C includes the same measures to address and enhance visual resources in the RMP Study Area as Alternative B. Recreation and public use improvements and enhancements under Alternative C would also generally result only in minor, localized changes to the visual character of the RMP Study Area and would likely not degrade the larger Study Area viewshed. Overall, Alternative C would likely result in similar positive visual resource impacts, benefiting visitors to the RMP Study Area, similar to Alternative B.</p>
Environmental Justice	<p>Implementation of any of the three alternatives would have no environmental justice concerns.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>
Cultural Resources	<p>Under Alternative A, exposed archaeological deposits, in general, would continue to be degraded by natural forces such as erosion, vandalism, and relic collecting, and by Reclamation-sponsored or initiated actions within the RMP Study Area. These effects tend to be cumulative, annually impinging on the integrity of the cultural property and its potential eligibility to the National Register. Several activities routinely conducted under a continuation of existing management (Alternative A, No Action) can adversely affect cultural resources because of informal, unstructured practices that may not consider far-reaching effects on cultural resources. Direct impacts to archaeological and other cultural sites from “benign neglect” and inaction related to the No Action Alternative could</p>	<p>Alternative B would indirectly benefit cultural resources through active management in conjunction with other resources. Reducing unauthorized public access and associated vandalism at the spillway and other key dam structures, and contracting for additional law enforcement, should help to greatly diminish impacts to the historic dam site. Effective erosion control measures, formalized parking areas, and more controlled public access would reduce the threat to archaeological sites by preserving artifacts and other cultural deposits in their original context. Not all actions anticipated under Alternative B would benefit cultural resources and some actions could threaten cultural resources more than Alternative A actions. For example, public education and</p>	<p>Impacts resulting from natural agents or human-caused factors would continue under Alternative C. However, because Alternative C requires higher levels of expansion to provide access for recreation, this alternative has a greater potential to impinge on cultural resources than Alternative B. Development of these facilities could directly impact archaeological or TCPs by exposing and/or disturbing cultural deposits below the surface. The potential for impacts from vandalism and unauthorized artifact collecting would be expected to increase as a result of increased visitation and public use of these areas.</p>

TABLE 3.16-1
Summary of Impacts

Resource Topic	Alternative A (No Action Alternative)— Continuation of Existing Management Practices	Alternative B	Alternative C
	result in artifact compaction, dispersal, or removal, leading to destruction of horizontal and vertical context of the site, and to loss of potential scientific information about the site.	interpretation programs, while increasing awareness of cultural resources, can attract greater numbers of people to a specific location, thus increasing the potential for looting or vandalism. Considered in their entirety, the actions proposed under Alternative B are more beneficial to cultural resources than the No Action Alternative.	
Indian Sacred Sites	There would be no effect on Indian Sacred sites resulting from this alternative. Reclamation would continue to ensure that its actions do not adversely affect Indian sacred sites, if such sites are present, to the extent practicable, and that access to and ceremonial use of Indian sacred sites is accommodated.	Because of more controlled, proactive land use activities (especially increasing awareness and monitoring of cultural sites), along with the cultural resource protection orientation of this alternative, potential impacts to sacred sites under Alternative B would be less than for Alternative A (or Alternative C).	Potential impacts on Indian sacred sites under this alternative would be greater than for Alternative B because of higher levels of expansion to provide access for recreation.
Indian Trust Assets	Rights to Water: Neither the Shoshone-Bannock Tribes nor the NWBSNU have water rights that would be impacted by Alternative A. Rights to Hunt or Fish: It is unclear if the Shoshone-Bannock Tribes and the NWBSNU have reserved rights to hunt or fish on these lands. Alternative A would not deprive either of the Tribes of any rights they may have to hunt or fish.	Same as Alternative A.	Same as Alternative A.

4.0 Consultation and Coordination

4.0 Consultation and Coordination

4.1 Public Involvement

Reclamation's approach to preparing the RMP and associated Draft EA has been to involve the public, particularly by developing a dialogue with local stakeholder groups. The goal of the public involvement process was to make sure that all stakeholders, including the general public, had ample opportunity to express their interests, concerns, and viewpoints, and to comment on the plan as it was developed. By fostering two-way communication, Reclamation was also able to use the talents and perspectives of local user groups and agencies during the alternatives development process.

Reclamation's public involvement process has involved the following five key components:

- **Newsbriefs**— In March 2005, the first newsbrief was initially mailed to more than 200 user groups, nearby residents, and agencies. The mailing list is continuously expanded as additional interested parties are identified. The initial newsbrief introduced the RMP process, announced the first public meeting, and provided a mail-in form for submitting issues and initial comments on the management and facilities at the Teton River Canyon. The results of the mail-in response form and the issues raised at the first public meetings were summarized in a Scoping Report, which was posted to the website in August 2005. This report appears in Appendix A of this document. A second newsbrief will be provided to announce the release

of this Draft EA. A third newsbrief will announce the Final EA and RMP.

- **Public Meetings/Workshops**—Two series of public meetings are included in the RMP/EA planning process. One was held early on in the process to solicit public input (scoping) related to issues and opportunities. The first public meeting was held in three communities: Driggs on April 6, 2005; Rexburg on April 7, 2005; and Fort Hall on April 25, 2005. The purpose of this set of meetings was to conduct public scoping of the issues at Teton River Canyon. The second and final set of public meetings will occur with the release of this Draft EA.
- **RMP Study Web Site**—The newsbriefs, draft materials, and meeting announcements are continuously updated at a dedicated website on Reclamation's Pacific Northwest site: <http://www.usbr.gov/pn/programs/TetonRMP/TetonDefault.html>. The website was established in March 2005.
- **News Releases**—Periodically, Reclamation prepares news releases for distribution to local news media. Such news releases generally result in press coverage of the RMP process.
- **Public Outreach Video**—Reclamation prepared a public outreach video that was shown at the public meeting. The public outreach video was also presented to the Henrys Fork Watershed Council, Madison County Commissioners, Teton County Commissioners, Shoshone-Bannock Tribes, IDFG, and the Rexburg City Council at various meetings from March through June 2005.

Additionally, Reclamation discussed the project with the Fremont-Madison Irrigation District as a part of their regular meetings.

Reclamation also sent letters introducing the project to Fremont County Commissioners, IDL, Teton Land Trust, St. Anthony City Council, Idaho Department of Water Resources, Henry's Fork Foundation, Trout Unlimited, The Nature Conservancy, and Friends of the Teton River.

4.2 Agency Consultation and Coordination

Reclamation consulted with several Federal and local agencies throughout the RMP process to gather valuable input and to meet regulatory requirements. This coordination was integrated with the public involvement process. Reclamation is working closely with IDFG and BLM throughout this RMP development process as these agencies also have management responsibilities in this area.

4.2.1 Endangered Species Act

The evaluation of threatened and endangered species contained in this Draft EA serves as Reclamation's biological assessment as required under the ESA. It evaluates impacts to listed species and those proposed for listing including the gray wolf (experimental, non-essential), Canada lynx (threatened), grizzly bear (threatened), bald eagle (threatened), Ute-ladies' tresses orchid (threatened), Utah valvata snail (endangered), and yellow-billed cuckoo (candidate). Reclamation has determined that neither of the action alternatives would have any negative impacts on the gray wolf, Canada lynx, grizzly bear, Ute-ladies' tresses orchid, Utah valvata snail, or the yellow-billed cuckoo.

Reclamation has proposed mitigation measures to avoid long-term impacts on bald eagles and has concluded that neither of the action alternatives would have long-term

negative impacts on bald eagles. Therefore, Alternatives B and C have ESA determinations of May Affect, Not Likely to Adversely Affect.

4.2.2 National Historic Preservation Act

Reclamation has collected existing cultural resource information from the Teton River Canyon to prepare the Draft EA, and to facilitate subsequent compliance with the NHPA. Coordination with the SHPO will occur in conjunction with public review of the Draft EA. It is understood that specific, future undertakings in response to specific RMP prescriptions will require consultations with the SHPO and the Tribes pursuant to the 36 CFR 800 regulations.

4.3 Tribal Consultation and Coordination

4.3.1 Government-to-Government Consultation with Tribes

Reclamation has notified Tribes about the RMP early in the process. Meetings have been held on several occasions with the Shoshone-Bannock Tribes which included the governing body, the Fort Hall Business Council, and the Staff. See Appendix C for a history of coordination. Reclamation will distribute the Draft RMP EA and RMP to Tribes as appropriate. See Chapter 7, *Distribution List*.

4.3.2 Indian Sacred Sites (Executive Order 13007)

Reclamation informed the Shoshone-Bannock Tribes about the RMP through written notifications and meetings. As part of their review of the Draft EA, Tribes will have an opportunity to provide specific

comments about Indian sacred sites that might be located in the RMP study area.

4.3.3 Indian Trust Assets

ITAs for the Shoshone-Bannock Tribes and the NWBSN are discussed in Chapter 3, Section 3.15, *Indian Trust Assets*.

4.3.4 Other Laws and Regulations

The relationship between Federal agencies and sovereign Tribes is defined by several laws and regulations addressing the requirement of Federal agencies to notify or consult with Native American groups or otherwise consider their interests when planning and implementing Federal undertakings. Among these are the following:

- National Environmental Policy Act (NEPA) of 1969, as amended
- Executive Order 12875, Enhancing the Intergovernmental Partnership
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Presidential Memorandum: Government-to-Government Relations with Native American Tribal Governments, April 29, 1994
- Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

Reclamation has adhered to these laws and regulations as applicable to the development of the RMP.

5.0 Environmental Commitments

5.0 Environmental Commitments

5.1 Best Management Practices

The following BMPs will be implemented to avoid or minimize potential effects to the resources within the Teton River Canyon RMP Study Area that could occur if the Preferred Alternative were implemented. Although not listed here, the management actions identified in the Preferred Alternative as needed for proper stewardship of resources are also considered to be environmental commitments.

5.1.1 Landscape Preservation and Impact Avoidance

1. Developed facilities will complement and be subservient to the surrounding landscape wherever possible.
2. Disturbed areas resulting from any construction will be aggressively revegetated.
3. To the maximum extent practicable, all existing trees, shrubs, and other naturally occurring vegetation will be preserved and protected from construction operations and equipment except where clearing operations are required for permanent structures, approved construction roads, or excavation operations.
4. To the maximum extent possible, all maintenance yards, field offices, and staging areas will be arranged to preserve trees, shrubs, and other vegetation.
5. Clearing will be restricted to that area needed for construction. In important habitat areas including, but not limited to, wetlands and riparian areas, clearing may

be restricted to only a few feet beyond the areas required for construction.

6. In order to reduce environmental damage, stream corridors, wetlands, riparian areas, steep slopes, or other important environmental areas will not be used for equipment or materials storage or stockpiling; construction staging or maintenance; field offices; hazardous material or fuel storage, handling, or transfer; or temporary access roads.
7. Excavated or graded materials will not be stockpiled or deposited on or within 100 feet of any steep slopes (defined by industry standards), wetlands, riparian areas, or stream banks (including seasonally active ephemeral streams without woody or herbaceous vegetation growing in the channel bottom), or on native vegetation.
8. To the maximum extent possible, staging areas, access roads, and other site disturbances will be located in disturbed areas, not in native or naturally occurring vegetation.
9. The width of all new temporary and permanent roads will be kept to the absolute minimum needed for safety, avoiding wetland and riparian areas where possible. Turnouts and staging areas will not be placed in wetlands.

5.1.2 Erosion and Sediment Control

1. The design and construction of facilities will employ applicable recognized BMPs to prevent possible soil erosion and subsequent water quality impacts.
2. The planting of grasses, forbs, trees, or shrubs beneficial to wildlife, or the placement of riprap, sand bags, sod, erosion mats, bale dikes, mulch, or

excelsior blankets will be used to prevent and minimize erosion and siltation during construction and during the period needed to reestablish permanent local native vegetative cover on disturbed sites located outside of landscaped areas. Appropriate landscaping plants and materials will be used for such purposes in landscaped areas.

3. Final erosion control and site restoration measures will be initiated as soon as a particular area is no longer needed for construction, stockpiling, or access. Clearing schedules will be arranged to minimize exposure of soils.
4. Cuts and fills for relocated and new roads will be sloped to facilitate revegetation.
5. Soil or rock stockpiles, excavated materials, or excess soil materials will not be placed near sensitive habitats, including water channels, wetlands, riparian areas, and on native or naturally occurring vegetation, where they may erode into these habitats or be washed away by high water or storm runoff. Waste piles will be revegetated using suitable native species after they are shaped to provide a natural appearance.

5.1.3 Biological Resources

1. Rare and sensitive species clearances described below will be conducted after project authorization, but prior to the start of construction.
2. If native plant communities must be used for access roads or staging areas, site clearances at the appropriate time of year for the species involved will be conducted by qualified biologists to ensure sensitive species are not

impacted. Any established search protocols will be followed.

3. Construction activities that could impact fish will be undertaken during non-spawning periods.

During the 15-year period covered by this RMP, species not currently protected under the ESA may be listed and species that are not considered to be rare may become so. If any such species occur on Reclamation lands, Reclamation would develop and enforce appropriate site disturbance, time of year, and distance restrictions in areas harboring Federal and State designated species of special concern (including Federally designated endangered or threatened species and rare species).

5.1.4 Site Restoration and Revegetation

1. Construction areas, including storage yards, will limit the amount of waste material and trash accumulations at all times.
2. All unused materials and trash will be removed from construction and storage sites during the final phase of work. All removed material will be placed in approved sanitary landfills or storage sites, and work areas will be left to conform to the natural landscape.
3. Upon completion of construction, grade any land disturbed outside the limits of permanent roads and other permanent facilities to provide proper drainage and blend with the natural contour of the land. Following grading, replant with native vegetation in coordination with IDFG, with non-native species used as appropriate. All plants used will be suitable for the site conditions, and beneficial to wildlife.

4. Where applicable, consult with the following agencies to determine the recommended plant species composition, seeding rates, and planting dates.
 5. Grasses, forbs, shrubs, and trees appropriate for site conditions and surrounding vegetation will be included on a plant list developed during site design. Species chosen for a site will be matched for site drainage, climate, shading, resistance to erosion, soil type, slope, aspect, and vegetation management goals. Wetland and riparian species will be used in revegetating disturbed wetlands. Upland revegetation shall match the plant list to the site's soil type, topographic position, elevation, and surrounding communities. Local native species will be used in all areas that are not landscaped unless IDFG determines that non-native species are preferred to meet a management goal.
- sewage effluent, industrial waste, oil and other petroleum products, aggregate processing tailings, mineral salts, drilling mud, and thermal pollution.
4. Eroded materials shall be prevented from entering streams or watercourses during dewatering activities associated with structure foundations or earthwork operations adjacent to, or encroaching on, streams or watercourses.
 5. Any construction wastewater discharged into surface waters will be essentially free of settling material. Water pumped from behind cofferdams and wastewater from aggregate processing, concrete batching, or other construction operations shall not enter streams or watercourses without water quality treatment. Turbidity control methods may include settling ponds; gravel-filter entrapment dikes; approved flocculating processes not harmful to fish or other aquatic life; recirculation systems for washing aggregates; or other approved methods.
 6. Any riprap shall be free of contaminants and not contribute significantly to the turbidity of the river.
 7. Appropriate controls to reduce stormwater pollutant loads in post-construction site runoff shall be followed. The appropriate facilities shall be properly designed, installed, and maintained to provide water quality treatment for runoff originating from all recreational facilities.
 8. All parking lots and boat launch areas should be designed to promote efficient vehicle and boat traffic to prevent congestion and pollution.

5.1.5 Pollution Prevention

1. All Federal and State laws related to control and abatement of water pollution will be followed. All waste material and sewage from construction activities or project-related features will be disposed according to Federal and State pollution control regulations.
2. Construction contractors may be required to obtain a National Pollutant Discharge Elimination System permit as established under Public Law 92B500 and amended by the Clean Water Act (Public Law 95B217).
3. Construction specifications shall require construction methods that will prevent entrance or accidental spillage of pollutants into flowing or dry watercourses and underground water sources. Potential pollutants and wastes include refuse, garbage, cement, concrete,

5.1.6 Noise and Air Pollution Prevention

1. Contractors will be required to comply with all applicable Federal, state, and local laws and regulations concerning prevention and control of noise and air pollution. Contractors are expected to use reasonably available methods and devices to control, prevent, and reduce atmospheric emissions or discharges of atmospheric contaminants and noise.
2. Contractors will be required to reduce dust from construction operations and prevent it from damaging dwellings or causing a nuisance to people. Methods such as wetting exposed soil or roads where dust is generated by passing vehicles will be employed.

5.1.7 Cultural Resource Site Protection

1. If necessary, Reclamation will prepare a Cultural Resources Management Plan (CRMP) to define long-term management and protection goals and processes. The CRMP may be a single plan covering the entire RMP area, or it may be specific to a particular site or sites in the RMP area that are in need of management or protection.
2. If there are significant cultural resource sites that may be affected by a Reclamation action (including TCPs), Reclamation will consult with the SHPO and Shoshone-Bannock Tribes regarding appropriate actions to take to protect those sites.
3. When implementing habitat restoration activities, plant resources that have traditional importance to the Shoshone-Bannock and Shoshone-Paiute Tribes shall be used, insofar as these plants accomplish the habitat restoration goal and are reasonably comparable in cost.

4. Information shall be provided about the prehistory and history of the RMP area, for the enjoyment of users.
5. Reclamation will coordinate with the BLM during their resource management planning on lands adjacent to Reclamation's boundary, to identify actions they might implement that would aid in protecting cultural resources on Reclamation's lands.
6. Location-specific cultural resource clearances shall be obtained when the agency acts to enhance recreation and wildlife. Avoid adverse effects to significant cultural properties by relocating or redesigning any proposed development.
7. Historic properties shall be stabilized or protected when avoidance is not possible. Test excavations will be conducted as necessary to determine the presence or nature of subsurface deposits, or whether an archaeological site may be eligible for the National Register. Consultation with the SHPO and Tribes, per 36 CFR 800, will be conducted to determine site eligibility, project effect, and appropriate treatment of adversely affected Register-eligible properties.
8. Actions to protect human burials shall be initiated as soon as possible if they are reported to be exposed or endangered by facilities construction, natural erosion, or land use. Unless the burials are clearly non-Indian, Tribes potentially affiliated with the remains will be consulted upon discovery of a burial, and procedures for protection, treatment, and disposition of the remains will be worked out with those Tribes in accordance with NAGPRA.
9. Archaeological collections shall be curated in most cases at the Archaeological Survey of Idaho,

Western Repository, in Boise (except NAGPRA burials and cultural items). When NAGPRA burials or cultural items are recovered, procedures set forth in 43 CFR Part 10 for consultation and custody will be followed.

10. If consultation with Indian Tribes reveals Indian sacred sites to be present that are being adversely affected by land use, Reclamation will implement actions to avoid or reduce those impacts.

5.1.8 Miscellaneous Comments

Reclamation-issued land use licenses, leases, and permits will contain sufficient language and stipulations to help protect existing resources and mitigate possible conflicts among the various users and between visitors and adjacent land owners.

5.2 Mitigation Measures

Mitigation measures are environmental commitments intended to compensate for impacts that cannot be avoided through implementation of BMPs.

5.2.1 Threatened and Endangered Species

These mitigation (conservation) measures apply only to Alternative A. These conservation measures are included as integral parts of Alternatives B and C. Therefore, no additional conservation measures are required for Alternatives B and C.

Reclamation, in cooperation with BLM and IDFG, would develop nest site management plans in accordance with FWS guidelines for the three current bald eagle nests and any future nests that occur within the RMP Study Area. This includes any nests on Reclamation lands or within the Teton

Canyon and tributaries within the RMP Study Area, because any eagles nesting within the RMP area would forage in the Teton River. Nest site management plans would be developed in cooperation with BLM, IDFG, and FWS. These management plans would be used to assist in decision-making regarding activities conducted by Reclamation or by others on Reclamation lands and waters within the RMP Study Area.

Ongoing and new Reclamation activities conducted without the guidance of an RMP will be reviewed to determine if they may result in adverse effects on bald eagles. Any future project proposals will be thoroughly reviewed for potential impacts to bald eagles. If adverse effects are expected, the activity will be modified to avoid impacts and promote recovery. Eagle nesting productivity and the river corridor will be monitored to determine and evaluate any potential impacts to nesting, foraging, or wintering eagles resulting from human use. Achieving the goal of avoiding adverse effects and promoting bald eagle recovery may require temporal or spatial changes in the nature and extent of human activities within the RMP study area (for example, limitations on the number of launches per day of both commercial and private float trips).

5.2.2 Cultural Resources

5.2.2.1 Alternative A—No Action Alternative

Mitigation under No Action Alternative (and Alternatives B and C) would occur if cultural resources are present that are eligible for the National Register, and if they are being adversely impacted by a Reclamation-sponsored action. If an action is planned that could adversely affect an archaeological, traditional, or historic

resource, Reclamation will investigate options to avoid the site (always the preferred option). Mitigation for impacted cultural resource sites will be planned and implemented in accordance with requirements defined in 36 CFR 800, using methods consistent with the Secretary of the Interior's Standards and Guidelines, in consultation with the SHPO and Shoshone-Bannock Tribes. The NAGPRA will be implemented if human remains or other cultural items that fall under the purview of that statute are located.

5.2.2.2 Alternative B

Mitigation is the same as described for Alternative A.

5.2.2.2 Alternative C

Mitigation is the same as described for Alternative A.

5.2.3 Indian Sacred Sites

5.2.3.1 Alternative A—No Action Alternative

Executive Order 13007 does not authorize agencies to mitigate for the impact of their actions upon Indian sacred sites. However, the Executive Order does direct agencies to avoid adverse impacts whenever possible. For future Reclamation actions in the RMP area that could impact Indian sacred sites, Reclamation will consult with Tribes in conjunction with any 36 CFR 800 consultations. Under these consultations, Reclamation will seek means to avoid adverse impacts to sacred sites.

5.2.3.2 Alternative B

Mitigation is the same as described for Alternative A.

5.2.3.3 Alternative C

Mitigation is the same as described for Alternative A.

6.0 Preparers

Teton River Canyon Resource Management Plan: Draft EA

6.0 Preparers

Name	Background	Responsibility
U.S. Bureau of Reclamation		
Vicki Kellerman	Recreation Planner	Senior Review, RMP Manager, Wild and Scenic River Study
Jill Lawrence	Native American Affairs Coordinator	Indian Trust Assets Tribal Coordination
Ray Leicht	Archaeologist	Cultural Resources and Indian Sacred Sites
EDAW, Inc.		
Kevin Butterbaugh	Senior Environmental Planner	Senior Review, RMP Project Manager, and Principal Planner
Sergio Capozzi	Environmental/Recreation Planner	Land Use, Visual Resources, Environmental Justice, and Recreation and Public Access
Chris Stoll	GIS Specialist	Mapping
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Chuck Blair	Senior Wildlife Ecologist	Senior Review, EA Project Manager, Wildlife, Threatened and Endangered Species
Judy Ferguson	Botanist	Vegetation, Threatened and Endangered Species
Doug Bradley	Fishery Biologist	Aquatic Resources, Threatened and Endangered Species
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Denny Mengel	Soil Scientist	Soils and Geology
Brandy Wilson	Technical Writer	Technical Writing, Editing, and Document Production

7.0 Distribution List

Teton River Canyon Resource Management Plan: Draft EA

7.0 Distribution List

7.1 Overview

The Teton River Canyon Draft EA has been sent to the Tribes, government officials, agencies, libraries, groups and organizations, and individuals named in the following distribution list. Additionally, a newsbrief announcing the availability of the EA and the public comment opportunity was sent to a mailing list of over 200 entities previously identified as having an interest in the project. As noted, the EA is available for review at several libraries; it is also available for viewing (and downloading, if desired) on Reclamation's website at <http://www.usbr.gov/pn>.

7.2 Tribes

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7.3 Government Officials

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Planning & Zoning
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Planning & Zoning
City of Teton
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City Clerk
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7.4 Agencies

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7.5 News Media

Associated Press
P.O. Box 1187
Boise, ID 83701-1187

Idaho Statesman
P.O. Box 40
Boise, ID 83705-1800

Island Park News
P.O. Box 410
Island Park, ID 83429-0410

Post Register
121 E Main St
Rexburg, ID 83440-1911

Dave Plourde
Q102 fm
P.O. Box 54
Driggs, ID 83442

Sho-Ban News
P.O. Box 900
Fort Hall, ID 83203

Standard Journal
P.O. Box 10
Rexburg, ID 83440-0010

Teton Valley News
75 N Main St
Driggs, ID 83422-5141

7.6 Libraries

Boise Public Library – Downtown
715 S Capitol Boulevard
Boise, ID 83702

Madison Library District
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Rexburg, ID 83440

Teton County Library
Alta Branch Library
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8.0 Glossary

8.0 Glossary

1890 Act reserved rights-of-way	Rights-of-way (ROWs) for ditches or canals constructed by the authority of the United States, were reserved in all patents issued on public lands west of the 100th Meridian entered after August 30, 1890. (Patents are the initial conveyance of public lands from the United States.) These reserved rights-of-way can be exercised either by Confirmation Deed, Right-of-Way Notice, or through construction itself.
Accessibility	Providing participation in programs and use of facilities to persons with a disability. Disability is defined with respect to an individual: (1) a physical or mental impairment that substantially limits one or more of the major life activities of such an individual; (2) a record of such an impairment; or (3) being regarded as having such an impairment.
Acquired Lands	Lands that the Bureau of Reclamation has acquired by purchase, donation, exchange, or condemnation.
Acre-foot	Volume of water (43,560 cubic feet) that would cover 1 acre of land, 1 foot deep.
Action Alternative	A change in the current management approach.
Affected environment	Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as the result of a proposed human action. Also, the portion of an environmental document describing current environmental conditions.
Alternatives	Courses of action that may meet the objectives of a proposal at varying levels of accomplishment, including the most likely future conditions without the management plan or action.
Amphibian	Vertebrate animal that has a life stage in water and a life stage on land (for example, salamanders, frogs, and toads).
Aquatic	Living or growing in or on the water.
Archaeology	Related to the study of human cultures through the recovery and analysis of their material relics.
Archaeological site	A discrete location that provides physical evidence of past human use.
Artifact	A human-made object.
Best Management Practices (BMPs)	Activities that are added to typical operation, construction, or maintenance efforts that help to protect environmental resources by avoiding or minimizing impacts of an action.

Community	A group of one or more interacting populations of plants and animals in a common spatial arrangement at a particular point in time.
Conservation Measures	Similar to mitigation measures (defined below), conservation measures are actions taken to avoid impacts to species protected under the Endangered Species Act.
Cultural resources	Cultural resources are archaeological, historical, architectural, and traditional properties that reflect our heritage.
De-authorizing project	The Teton Dam Project was originally authorized by Congress in 1964. Additional legislation is also required to cancel the original direction from Congress to Reclamation.
Drawdown	Lowering of a reservoir's water level; process of releasing reservoir storage.
Endangered species	A species or subspecies that is in danger of extinction throughout all or a significant portion of its range.
Ephemeral stream	A stream that flows only in direct response to precipitation, and thus discontinues its flow during dry seasons. Such flow is usually of short duration. Most of the dry washes of more arid regions may be classified as ephemeral streams.
Erosion	Refers to soil and the wearing away of the land surface by water, wind, ice, or other physical processes.
Exotic species	A non-native species that is introduced into an area.
Facilities	Manmade structures.
Federal Lands	Lands, or interests in lands (such as easements and rights-of-way), owned by the United States.
Fish and Wildlife Service Species of Concern	Species identified by the U.S. Fish and Wildlife Service for which further biological research and field study are needed to resolve these species' conservation status.
Forb	Herbaceous plant that is not a grass, sedge, or rush. Non-woody herbs and wildflowers are examples of forbs.
Grass	Herbaceous plants with jointed stems, slender sheathing leaves, and flowers borne in spikelets of bracts.
Habitat	Area where a plant or animal finds suitable living conditions.
Hydrologic	Pertaining to the quantity, quality, and timing of water.

Indian Sacred Sites	Defined in Executive Order 13007 as “any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site.”
Indian Trust Assets (ITAs)	Legal interests in property held in trust by the United States for Indian Tribes or individuals, such as lands, minerals, hunting and fishing rights, and water rights.
Intermittent streams	Streams that contain running water longer than ephemeral streams but not all year.
Mitigation measures	Action taken to avoid, reduce the severity of, or eliminate an adverse impact. Mitigation can include one or more of the following: (1) avoiding impacts; (2) minimizing impacts by limiting the degree or magnitude of an action; (3) rectifying impacts by restoration, rehabilitation, or repair of the affected environment; (4) reducing or eliminating impacts over time; and (5) compensating for an unavoidable impact by replacing or providing substitute resources or environments to offset the loss.
National Register of Historic Places (National Register)	A Federally maintained register of districts, sites, buildings, structures, and properties that meet the criteria of significance defined in 36 CFR 63.
Neotropical migrant	Birds that breed in North America and winter in tropical and subtropical America.
No Action Alternative	The outcome expected from a continuation of current management practices.
Perennial	Plants that have a life cycle that lasts for more than 2 years.
Precipitation	Rain, sleet, and snow.
Preferred Alternative	The primary alternative considered by Reclamation for implementation following analysis in the Environmental Assessment. This analysis, along with public input, could alter management actions described in the Preferred Alternative. If this occurs, any changes would be documented in the Final Environmental Assessment.

Project facilities	<p>Canals, laterals, drains, pumps, buildings, etc. owned by the United States.</p> <p><i>Note:</i> Title to project facilities and lands remains in the United States until specific legislation is enacted to authorize disposal (regardless of who is responsible for care, operation, and maintenance of the facilities).</p>
Project purposes	<p>Lands are withdrawn and acquired for authorized purposes of the specific Reclamation Project. These can include irrigation, flood control, recreation, and fish and wildlife.</p>
Public involvement	<p>The systematic provision for affected publics to be informed about and participate in Reclamation decision making. It centers around effective, open exchange and communication among the partners, agencies, organizations, and all the various affected publics.</p>
Public lands	<p>Public lands include only those Federal lands administered by the Bureau of Land Management (with the exception of lands located on the Outer Continental Shelf and lands held for the benefit of Indians, Aleuts, and Eskimos).</p>
Raptor	<p>Any predatory bird, such as a falcon, eagle, hawk, or owl, that has feet with sharp talons or claws and a hooked beak.</p>
Reclamation Project Lands	<p>Federal lands or interests in lands under the jurisdiction of the Bureau of Reclamation. Includes withdrawn lands, acquired lands, and 1890 Act reserved rights-of-way that have been exercised.</p> <p><i>Note:</i> Reclamation Project Lands are not the same as public lands. Reclamation Project Lands were initially withdrawn, acquired, or exercised for specific project purposes, and are governed by different Federal land management laws and regulations than public lands. Public uses of Reclamation Project Lands can be suspended as necessary to protect Project Facilities, and Reclamation Project Lands are not open to off-road vehicles unless specifically opened for that use.</p>
Reptile	<p>Cold-blooded vertebrate of the class Reptilia, composed of turtles, snakes, lizards, and crocodiles.</p>
Resource topics	<p>The components of the natural and human environment that could be affected by the alternatives, such as water quality, wildlife, socioeconomic, and cultural resources.</p>
Resource Management Plan	<p>A 15-year plan developed by Reclamation to manage their lands and resources in the study area.</p>

Restoration	An action by the Bureau of Land Management that restores withdrawn land to the status of unreserved public lands subject to settlement, sale, location, or entry under some or all of the general land laws.
Riparian	Of, on, or pertaining to the bank of a river, pond, or lake where soil moisture levels are higher than in surrounding uplands.
Runoff	That part of precipitation that contributes to streamflow, groundwater, lakes, or reservoir storage.
Sediment	Unconsolidated solid material that comes from weathering of rock and is carried by, suspended in, or deposited by water or wind.
Shrub	A woody perennial, smaller than a tree, usually with several stems.
Spawning	Laying eggs directly in water, especially in reference to fish.
Species	In taxonomy, a subdivision of a genus that (1) has a high degree of similarity, (2) is capable of interbreeding only within the species, and (3) shows persistent differences from members of allied species.
Steppe	A plain without trees (apart from near rivers and lakes), the same as a prairie. It may be semi-desert or covered with grass or shrubs, or both depending on the season.
Study Area	The area evaluated in this Environmental Assessment as being directly affected by potential management actions described in the Resource Management Plan.
Threatened species	Any species that has the potential of becoming endangered in the near future and is listed as a threatened species under the Endangered Species Act.
Total Maximum Daily Load (TMDL)	A TMDL is a pollution reduction plan that accounts for all pollutant sources to the water and determines how much each source is allowed to contribute. The basic premise is that if existing pollutant inputs (loads) from all sources are reduced to a specified level (the maximum daily load), and a margin of safety is added, then water quality goals will be achieved.
Traditional Cultural Property (TCP)	A site or resource that is eligible for inclusion in the <i>National Register of Historic Places</i> because of its association with cultural practices or beliefs of a living community.
Water quality limited	A water body that exceeds water quality standards or does not support its designated beneficial use, such as cold water habitat or primary contact recreation.

Wetland habitat	Wildlife habitat associated with water less than 6 feet deep, with or without emergent and aquatic vegetation in wetlands.
Wetlands	Lands transitional between aquatic and terrestrial systems where the water table is usually at or near the land surface or the land is covered by shallow water. Often called marshes or wet meadows.
Wildlife Management Area	A category of land use. An area of Bureau of Reclamation-owned land that is managed for wildlife habitat and preservation. The goal is to ensure that wildlife values are preserved as recreation use, residential use, and commercial development increases near recreation sites.
Withdrawn lands	Withholding of an area of public land from settlement, sale, location, or entry under some or all of the general land laws for the following purposes: (1) to limit activity under those laws in order to maintain other public values in the area; (2) to reserve the area for a particular public purpose or program; or (3) to transfer jurisdiction of the area from one Federal agency to another.

9.0 Bibliography

Teton River Canyon Resource Management Plan: Draft EA

9.0 Bibliography

9.1 Literature Cited

- Agee, J. K. 1999. "Disturbance Ecology of North American Boreal Forests and Associated Northern Mixed/Subalpine Forests." In Ruggiero, L. F., K. B. Aubry, S. W. Buskirk, et al. (tech. eds.). *The Scientific Basis for Lynx Conservation in the Contiguous United States*. General Technical Report RMRS-GTR-30. U.S. Forest Service, Rocky Mountain Research Station, Ogden, Utah.
- Cordell, H. K. 1999. *Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends*. Sagamore Publishing. Champaign, IL.
- Duncan, J. R. 1987. Movement strategies, mortality, and behavior of radio-marked great gray owls. Pp. 101-107 In Nero, R. W., R. J. Clark, R. J. Knapton, and H. Hamre, eds. *Biology and conservation of northern forest owls*. USDA For. Serv. Gen. Tech. Rep. RM-142, USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado.
- Fields, T. 2005. Surveys for the Desert Valvata (*Valvata utahensis*) in the Upper Snake River Drainage. Idaho Conservation Data Center, Idaho Dept. of Fish and Game. Boise, Idaho.
- Friends of the Teton River. 2005. Water quality monitoring program. http://www.tetonwater.org/programs_wq_overview.php. Website accessed May 11, 2005.
- FWS. See U.S. Fish and Wildlife Service.
- Gaines, D. 1977. Current status and habitat requirements of the Yellow-billed Cuckoo in California: 1977 Endangered Wildlife Program, Nongame Wildlife Investigations, California Department of Fish and Game.
- _____. 1974. Distribution, density, and habitat requirements of the Yellow-billed Cuckoo in the Sacramento Valley: 1972-1973. California Department of Fish and Game, Nongame Wildlife Investigations, W-54-R Progress Report.
- Gaines, D. and S. A. Laymon. 1984. Decline, status and preservation of the Yellow-billed Cuckoo in California. *Western birds* 15:49-90.
- Groves, C. R., B. Butterfield, A. Lippincott, B. Csuti, and J. M. Scott. 1997. *Atlas of Idaho's Wildlife: Integrating Gap Analysis and Natural Heritage Information*. Idaho Department of Fish and Game, Nongame and Endangered Wildlife Program. Boise, Idaho.
- Idaho CDC Data. 2005. Rare and protected species information provided to CH2M HILL by the Idaho Conservation Data Center, Idaho Department of Fish and Game, Boise, Idaho.
- Idaho Department of Environmental Quality. 2003. Teton River Subbasin Assessment and Total Maximum Daily Load. Idaho Falls Office, Idaho Department of Environmental Quality. January 10, 2003.
- Idaho Department of Fish and Game. 2003a. Letter report from Kim Ragotzkie, Idaho Department of Fish and Game, to Larry White, U. S. Bureau of Reclamation regarding winter mule deer surveys in Teton Canyon.

- _____. 2003b. Project W-170-R-27, Progress Report. Teton Zone Elk Report. IDFG, Boise, Idaho.
- _____. 1990. Upland Game Management Plan; 1991-1995. Idaho Department of Fish and Game. Boise, Idaho.
- _____. 1998a. Tex Creek Wildlife Management Area Management Plan. Idaho Department of Fish and Game. Idaho Falls, Idaho.
- _____. 1998b. Cartier Slough Wildlife Management Area Management Plan. Idaho Department of Fish and Game. Idaho Falls, Idaho.
- Idaho Department of Parks and Recreation. 2003. Idaho Statewide Comprehensive Outdoor Recreation and Tourism Plan 2003-2007. Boise, ID.
- Idaho Transportation Department. 2004. Teton Scenic Byway. <http://www.itd.idaho.gov/byways/Online.Brochure/27Teton/Teton.htm>. Website accessed June 2, 2005.
- Koehler, G. M. and J. D. Brittell. 1990. "Managing Spruce-Fir Habitat for Lynx and Snowshoe Hares." *Journal of Forestry*. October.
- Lacey, J. R., C. B. Marlow, and J. R. Lane. 1989. Influence of spotted knapweed (*Centaurea maculosa*) on surface water runoff and sediment yield. *Weed Technology* 3:627-631.
- Laymon, S. A. and M. D. Halterman. 1987. A proposed habitat management plan for Yellow-billed Cuckoos in California. USDA Forest Service, Gen. Tech. Rep. PSW-110.
- Laymon, S. A., P. L. Williams, and M. D. Halterman. 1997. Breeding status of the Yellow-billed Cuckoo in the South Fork Kern River Valley, Kern County, California: summary report 1985-1996. Administrative Report. U.S. Forest Service, Cannell Meadow Ranger District, Sequoia National Forest.
- Laymon, S. A. and M. D. Halterman. 1989. A proposed habitat management plan for Yellow-billed Cuckoos in California. USDA Forest Service, Gen. Tech. Rep. PSW-110.
- Loomis, J. 2005. The Economic Value of Recreational Fishing and Boating to Visitors and Communities along the Upper Snake River. Trout Unlimited and Henrys Fork Foundation. May 1, 2005.
- McKelvey, K. S., K. B. Aubry, and Y. K. Ortega. 1999. "History and Distribution of Lynx in the Contiguous United States." In Ruggiero, L. F., K. B. Aubry, S. W. Buskirk, et al. (tech. eds.). *The Scientific Basis for Lynx Conservation in the Contiguous United States*. General Technical Report RMRS-GTR-30. U.S. Forest Service, Rocky Mountain Research Station, Ogden, Utah.
- National Park Service. 2005. National Wild and Scenic Rivers System. <http://www.nps.gov/rivers/>. Website accessed September 2005.
- Natural Resource Conservation Service. 1993. Soil Survey Report of Fremont County, Idaho. By Ray Grow, Soil Conservation Service. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with U.S. Department of the Interior, Bureau of Land Management; University of Idaho, College of Agriculture; and Idaho Soil Conservation Commission.

- _____. 1981. Soil Survey Report of Madison County, Idaho. By Harley R. Noe, Soil Conservation Service. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with University of Idaho, College of Agriculture; and Idaho Soil Conservation Commission.
- _____. 1969. Soil Survey Report of Teton Area, Idaho-Wyoming. By D. M. Daniels, H. L. Hansen, T. W. Priest, and W. G. Perrin, Soil Conservation Service. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with University of Idaho, Idaho Agricultural Experiment Station, and University of Wyoming, Wyoming Agricultural Experiment Station.
- NatureServe Explorer. 2004. NatureServe Explorer: An online encyclopedia of life. www.natureserve.org/explorer/servlet/NatureServe. Version 1.8. NatureServe, Arlington, Virginia. <http://www.natureserve.org/explorer> (13 January 2004).
- Pierson, Jr., F. B., Robichaud, P. R., Spaeth, K. E., and Moffet, C. A. 2003. Impacts Of Fire On Hydrology And Erosion In Steep Mountain Big Sagebrush Communities. In: Proceedings Of The First Interagency Conference On Research In The Watersheds., Benson, AZ, P. 625-630.
- Randle, T. J., J. A. Bountry, R. Klinger, and A. Lockhart. 2000. Geomorphology and river hydraulics of the Teton River upstream of Teton Dam, Teton River, Idaho. U.S.D.I. Bureau of Reclamation Technical Service Center, Denver, CO and Pacific Northwest Region, Boise, Idaho.
- Reclamation. See U.S. Bureau of Reclamation.
- Schrader, B. 2000. Progress report-Teton Canyon fishery study. Idaho Department of Fish and Game. Boise, Idaho.
- Selleck, G. W., R. T. Coupland, and C. Frankton. 1962. Leafy spurge in Saskatchewan. *Ecological Monographs* 32: 1-29.
- Shoshone-Bannock Tribes. 1994. Treaty Right Seminar Pocatello, Idaho. May 18-20. The Shoshone-Bannock Tribes Treaty Right Seminar Planning Committee.
- Squires, J. R., and T. Laurion. 1999. "Lynx Home Range and Movements in Montana and Wyoming: Preliminary Results." In Ruggiero, L. F., K. B. Aubry, S. W. Buskirk, et al. (tech. eds.). *The Scientific Basis for Lynx Conservation in the Contiguous United States*. General Technical Report.
- TREC, Inc. 2003. A survey for Yellow-billed Cuckoo in recorded historic and other likely locations in Idaho. Prepared for Idaho Department of Fish and Game, Conservation Data Center, Boise, Idaho.
- U.S. Bureau of Reclamation. 2005. Teton Basin Project. Accessed July 10, 2005. <http://www.usbr.gov/dataweb/html/teton1.html>.
- _____. 2003a. Comparison of Vegetation on Historically Inundated and Non-Inundated South-Facing Slopes in Teton River Canyon, Fremont County, Idaho. Implications for Mule Deer Winter Habitat. Technical Service Center Ecological Planning and Assessment Group. Denver, Colorado. 26 pp.

- _____. 2003b. *Teton Resource Management Plan, Class I Cultural Resource Inventory*. Report No. 1073. Prepared for Bureau of Reclamation, Snake River Area Office, by Archaeological Investigations Northwest, Inc. Portland, Oregon.
- _____. 2001. Ririe Reservoir Resource Management Plan. USDI Bureau of Reclamation, Pacific Northwest Region, Snake River Area Office. November 2001.
- _____. 2000. *Geomorphology and River Hydraulics of the Teton River Upstream of Teton Dam, Teton River, Idaho*. U.S. Department of the Interior, Bureau of Reclamation. Technical Service Center, Denver, Colorado, and Pacific Northwest Region, Boise, Idaho.
- _____. 1998. *Biological Assessment—Bureau of Reclamation Operations and Maintenance in the Snake River Basin above Lower Granite Dam*. U.S. Bureau of Reclamation, Northwest Region, Boise, Idaho.
- U.S. Census Bureau. 2000a. *Profile of General Demographic Characteristics: 2000; Geographic Area: Fremont County, Idaho*. U.S. Census Bureau. Washington, D.C.
- _____. 2000b. *Profile of General Demographic Characteristics: 2000; Geographic Area: Madison County, Idaho*. U.S. Census Bureau. Washington, D.C.
- _____. 2000c. *Profile of General Demographic Characteristics: 2000; Geographic Area: Teton County, Idaho*. U.S. Census Bureau. Washington, D.C.
- U.S. Department of Transportation Federal Highway Administration. 2005. *Teton Scenic Byway*. <http://www.byways.org/browse/byways/2046/>. Website accessed June 2, 2005.
- U.S. Fish and Wildlife Service. 2005a. *Idaho Endangered, Threatened, Proposed and Candidate Species by County: Fremont, Madison, and Teton Counties*. <http://idahoes.fws.gov/county/Fremont.htm>, <http://idahoes.fws.gov/county/Teton.htm>, and <http://idahoes.fws.gov/county/Madison.htm>. Websites accessed September 2005.
- _____. 2005b. *U.S. Fish and Wildlife Service to Review Status of Yellowstone Cutthroat Trout*. September 1, 2005, Request 05-61.
- _____. 2004. *Grizzly Bear Fact Sheet*. U.S. Fish and Wildlife Service, Idaho. <http://idahoes.fws.gov/fact/griz.html> (July 19, 2004).
- _____. 2003. *Gray wolf (Canis lupus)*.
- _____. 1995. *Snake River Aquatic Species Recovery Plan*. November 26, 1995.
- _____. 1986. *Recovery Plan for the Pacific Bald Eagle*. U.S. Fish and Wildlife Service, Portland, Oregon. 160 pp.
- _____. 1961. *Teton Basin Project, Upper and Lower Teton Divisions*. Report to U. S. Bureau of Reclamation on effects of the project on fish and wildlife resources. FWS, Portland, Oregon. 14 pp.
- U.S. Fish and Wildlife Service, Nez Perce Tribe, National Park Service, and USDA Wildlife Services. 2002. *Rocky Mountain Wolf Recovery 2002 Annual Report*. T. Meier, ed. FWS, Ecological Services, 100 N. Park, Suite 320, Helena MT. 64 pp.

- Van Kirk, R. and A. Jenkins. 2005. Hydrologic alteration in the Upper Teton Watershed and its implications for cutthroat trout restoration. Project completion report for the Friends of the Teton River, Driggs, Idaho.
- Van Kirk, R. and Affiliate Faculty of Idaho State University. 1999. Status of fisheries and aquatic habitats in the greater Yellowstone ecosystem. Project completion report for the Greater Yellowstone Coalition, Bozeman, Montana.
- Watson, A. K. and A. J. Renney. 1974. The biology of Canadian weeds. 6. *Centaurea diffusa* and *C. maculosa*. Canadian Journal of Plant Science 54:687-701.
- Widen, P. 1989. The hunting habitat of goshawks *Accipiter gentilis* in boreal forests of central Sweden. Ibis. 131(2): 205-31.

9.2 Personal Communications

- Eborn, Ben, Teton County Weed Agent, Teton County, Telephone Conversation with Judy Ferguson, CH2M HILL, August 30, 2005.
- Ragotzkie, Kim, Habitat Biologist, Idaho Department of Fish and Game, Meeting with Chuck Blair, CH2M HIL, June 2005.
- Schrader, Bill, Fisheries Biologist, Idaho Department of Fish and Game, Idaho Falls, Telephone Conversation with Doug Bradley, CH2M HILL. May 16, 2005.

Appendix A: Scoping Report

Teton River Canyon Resource Management Plan: Draft EA

**Teton River Canyon
Resource Management Plan & Environmental Assessment
ISSUE SCOPING REPORT
Spring - Summer 2005**

This Issues Scoping Report is intended to summarize all of the issues and comments collected during scoping for the Teton River Canyon RMP and EA. The issues were received from the following outreach efforts:

1. a series of informal outreach/introductory meetings held by Reclamation personnel with interested agencies and public groups (including: the Teton and Madison County Commissions, Rexburg City Council, Henrys Fork Watershed Council, and Idaho Department of Fish and Game);
2. public meetings held in Rexburg, Driggs, and Fort Hall on April 6, 7, and 25, 2005, respectively;
3. mail-in responses from the first RMP Newsbrief mailed to approximately 200 people and other mail correspondence; and
4. meetings held with the Shoshone-Bannock Tribes.

Preparation of this document reflects Reclamation's practice of: [1] reporting all input received on issues and opportunities pertinent to its Resource Management Plan efforts, and [2] considering this input in the process of making decisions on short- and long-term management of lands under the Agency's jurisdiction.

However, it should be noted that this reporting does not necessarily infer endorsement of all comments received. Situations often arise where opposing points of view exist regarding how issues or opportunities should be addressed, and a decision must ultimately be made on which direction the RMP will follow. All issues will be comprehensively analyzed and evaluated with many considerations in mind. Additionally, Federal laws and Reclamation regulations, policies, and/or authorities (or those of other involved agencies) can limit the range of feasible responses.

Issues from Response Forms (newsbrief mail-in forms & meeting comment forms)	Number of Responses
Provide for big game habitat	3
Improve habitat for T & E species	3
Control noxious weeds	8
Provide for commercial recreation opportunities	0
Maintain a primitive recreation experience	3
Keep recreation use at current levels	6
Facilitate increases in recreation use	0
Improve boat ramps	1
Define parking areas to limit use	1
Provide for agricultural uses	8
Provide interpretation on historic significance	2
Facilitate education opportunities	0
Protect cultural resources and sacred sites	1
Protect Indian Trust Assets	1
Improve fishing	3
Improve fish habitat	6
Maintain water quality	7
Improve law enforcement	0
Attempt to reduce vandalism	2
Maintain visual quality	0

Issues from Letters & Write-in Comments	Number of Responses
Fire prevention	1
Maintain aesthetic qualities of the canyon	1
Concern about waterflow stoppage by Felt power plant for surges. It produces silt and bank erosion and is bad for fishing and boating.	1
Improve access roads	2
Designate rustic campsites	1
Improve awareness of recreation	1
Maintain a sustainable population of Yellowstone Cutthroat Trout	1
Enhance structural diversity of the channel	1
Improve fish habitat	1
Need for boat launch at Spring Hollow	1
Allow current level of recreation use to continue	1
Improve upper takeout site (1-mile above old dam site) for boats	1
Develop a boat ramp and visitor facilities above old dam site	1
Improve primitive camping /day-use stops along river	1
Restore shrub community in inundated areas	1
Protect & enhance mule deer wintering areas	1
Convert certain agricultural leases to permanent cover and wildlife habitat	1
Protect existing regeneration (cottonwood) in lower reaches near dam site	1
May be opportunities to plant willows or other woody species	1
Explore restoration of reed canarygrass to typical mix of riparian species.	1
Continue work on noxious weeds	1
Consider a winter closure of Reclamation lands to all human entry, especially along the north side rim for big-game	1

<p style="text-align: center;">Issues, Comments & Questions from Government to Government Meeting Fort Hall Business Council of the Shoshone-Bannock Tribes April 25, 2005</p>
Are there rainbow & cutthroat trout?
Are the adjacent lands private?
Is this the last Yellowstone Cutthroat hold?
Have the cultural interests of the Tribe been determined?
Are deer, elk, moose populations sustained at this location?
Will or have big horn sheep been introduced at this location? Are there transplants near Bitch Creek?
Will Upper Snake River snail studies be tied to this RMP?
Are there any petroglyphs or caves?
Was land ever put in the Conservation Reserve Program?
When will BLM become involved in the process?
What studies have we done in the canyon?
Would like Tribal Cultural interests inventory
Would like co-management of resources & fisheries
What about liability if they were to co-manage?
Want copy of comments from other public meetings
Tribes not consulted at the time the dam was built
Land set aside for hunting permits
Want opportunity to contract for work

Issues & Comments from Rexburg, ID Public Meeting April 6, 2005
Concern about noxious weeds
Can Parkinson's lock their gate and deny public access to all but Teton Lodge?
Improve access to the canyon
Suggest using switchbacks to reduce erosion and improve access at Bitch Creek slide
Desire for interpretive signs and restrooms at overlook
Want legal public access routes more clearly identified
Inform people about Teton Flood Museum at the dam overlook area
Consider removing landslide material in places where it is constricting the river
Want to be notified when planning documents (issues & opportunities, goals, objectives) are available to look at. Want hard copies as well as website.
Concern about environmental protection
Want boat launch if water is deep enough
Build switchbacks from rim near overlook
Want historic interpretation at dam site
Use volunteers and students for projects
Too expensive to try to restore cutthroat habitat completely. Let them restore themselves. Do not wipe out other species at their expense
Try to plant landslide areas
Minimize commercialism and recreation
Desire to lease back Spring Hollow area and put it into a conservation easement area
Trespass (hunting) occurs now and don't want it any worse
Gate is being locked which is supposed to be open for public access. Need to make entire road public from Hog Hollow to river

Issues & Comments from Driggs, ID Public Meetings April 7, 2005
Area where topsoil was removed to build dam still needs to be reclaimed
Concern that dollars that went to IDFG to restore Teton Canyon were used elsewhere.
Farmers have helped keep soils stable along canyon rim after dam failure
Why not do one plan for Reclamation and BLM lands in the Canyon?
Noxious weed control needed
Landowners are concerned about access through private road to river. Turning road(s) over to public may help.
Leasee(s) would like to buy lands back from BOR
North road to old dam site sees a lot of vandalism
Farmed lands along Canyon creek seeing increasing public access and vandalism, hunting issues.
Farmers have done a great deal to make wildlife habitat better.
Fire is a concern along canyon rim by adjacent residents and landowners.
Law enforcement is minimal at best in this area
Lower Teton Canyon is known by IDFG as one of the worst for deer poaching
Poaching for fish is also a big problem, need more IDFG busts to get the word out
Need more woody species planted in the area. Reed canary grass better than no vegetation
If access remains minimal then not much more law enforcement would be needed.
Sense of some is that demand will increase, therefore access will need to be strictly controlled
Do not see need to open up anymore access. Spring Hollow is often trashed.
Seems to be a lot of "no trespassing" signs, gates, fences, and mentality in the area. Would like to see good public access, but limited.
No trespassing signs are out of a concern for lawsuits and recreation liability
Would like to see safety hazards in river cleared to make floating safer.
All access routes to canyon are open except road through Parkinson's which was closed due to road being torn up, crops destroyed, vandalism, and property damage

<p style="text-align: center;">Issues & Comments from Fort Hall, ID Public Meeting April 25, 2005</p>
Request that Tribal members have free access to Teton Flood Museum in Rexburg
Would like to add tribal history and interpretation to the displays at the Teton Flood Museum
Would like to see what the area looked like prior to building the dam
Concern over possibility of BLM exchanging lands in the project area. Concern about potential private demand in the future.
What cultural surveys were done prior to building the dam and what was found?
Will environmental justice for any future development be addressed in the plan?
Tribes would like to be co-managers along with Reclamation and BLM
Consideration for natural resources claims on and off reservation prior to and after dam construction
Amendment to Shoshone-Bannock land use ordinance to off-reservation regulations. Implement with an MOU.
Interested in employment opportunities associated with RMP such as monitoring, cultural surveys, studies, etc.
Recognize Tribal treaty and hunting rights; gathering & camping

Appendix B:
Soil Types in the Teton River Canyon RMP Study Area

APPENDIX B

Soil Description for Teton River Canyon RMP Study Area

Name	Typical Profile	Location	Depth Class	Drainage Class	Permeability (P) and Available Water Capacity (C)	Runoff (R) and Erosion Hazard (E)
Fremont County: North Side of Teton River Canyon (NRCS 1993)						
Rubble land	<ul style="list-style-type: none"> 95 percent rubble land 5 percent rock outcrops and shallow soils 	Side slopes of the Teton River Canyon	N/A	N/A	N/A	N/A
Rexburg-Ririe silt loams, 1 to 4% slopes, 4 to 12% slopes, and 12 to 20% slopes	<p>Rexburg:</p> <ul style="list-style-type: none"> 0 to 5 inches dark grayish-brown silt loam 5 to 14 inches grayish-brown silt loam 14 to 25 inches light brownish-gray silt loam 25 to 60 inches light gray silt loam <p>Ririe:</p> <ul style="list-style-type: none"> 0 to 8 inches dark grayish-brown silt loam 8 to 11 inches yellowish-brown silt loam 11 to 20 inches very pale brown silt loam 20 to 60 inches light yellowish-brown silt loam 	Farmland abutting the north bench of Teton River Canyon from the dam site in the west to the confluence with an unnamed tributary to the east that joins the Teton River at Spring Hollow, prior to the confluence with Bitch Creek	Very deep	Well drained	P = Moderate C = Very high	R = Slow (1 to 4% slopes); rapid (4 to 12% slopes); very rapid (12 to 20% slopes) E = Moderate to slight (1 to 4% slopes); severe (4 to 12% slopes); very severe (12 to 20% slopes)
Tetonia-Rin silt loams, 4 to 12% slopes	<p>Tetonia:</p> <ul style="list-style-type: none"> 0 to 32 inches brown silt loam 32 to 47 inches light brownish-gray silt loam 47 to 60 inches light gray silt loam <p>Rin:</p> <ul style="list-style-type: none"> 0 to 12 inches brown silt loam 12 to 36 inches yellowish-brown silt loam 36 to 60 inches light yellowish-brown silt loam 	Between the unnamed tributary at Spring Hollow and the confluence with Bitch Creek, upslope of the canyon	Very deep	Well drained	P = Moderate C = Very high	R = Rapid E = Severe

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Soil Description for Teton River Canyon RMP Study Area

Name	Typical Profile	Location	Depth Class	Drainage Class	Permeability (P) and Available Water Capacity (C)	Runoff (R) and Erosion Hazard (E)
Tetonia-Ririe silt loams, 1 to 4% slopes; 4 to 12% slopes; and 12 to 20% slopes	<p>Tetonia:</p> <ul style="list-style-type: none"> 0 to 32 inches brown silt loam 32 to 47 inches light brownish-gray silt loam 47 to 60 inches light gray silt loam <p>Ririe:</p> <ul style="list-style-type: none"> 0 to 8 inches dark grayish-brown silt loam 8 to 11 inches yellowish-brown silt loam 11 to 20 inches very pale brown silt loam 20 to 60 inches light yellowish-brown silt loam 	Same as above	Very deep	Well drained	<p>P = Moderate</p> <p>C = Very high</p>	<p>R = Slow (1 to 4% slopes); rapid (4 to 12% slopes); very rapid (12 to 20% slopes)</p> <p>E = Moderate to slight; (1 to 4% slopes); severe (4 to 12% slopes); very severe (12 to 20% slopes)</p>
Madison County, South Side of Teton River Canyon from Dam Site to Past Canyon Creek (NRCS 1981)						
Harston sandy loam, 0 to 1% slopes	<ul style="list-style-type: none"> 0 to 8 inches light brownish-gray sandy loam 8 to 16 inches light brownish-gray sandy loam 16 to 20 inches light gray loamy sand 20 to 60 inches loose sand and gravel. The depth to sand and gravel ranges from 25 to 40 inches. In some profiles, the lower part of the underlying material is sandy loam or gravelly sandy loam. 	Within Teton River Canyon	Deep	Well drained	<p>P = Moderately rapid to very rapid</p> <p>C = Moderate</p>	<p>R = Very slow</p> <p>E = Slight</p>
Labenzo silt loam. Slopes are 0 to 1%	<ul style="list-style-type: none"> 0 to 12 inches grayish-brown silt loam 13 to 34 inches stratified, pale brown; light brownish-gray; and dark gray silt loam and loamy sand about 21 inches thick 35 to 60 inches sand and gravel 	River terraces and floodplains in Teton River Canyon		Moderately well drained	<p>P = Moderate in the upper part and very rapid in the sand and gravel</p> <p>C = Moderate</p>	<p>R = Slow</p> <p>E = Slight</p>
Rammel-Rock outcrop complex, 20 to 60% slopes	<ul style="list-style-type: none"> 0 to 8 inches dark grayish-brown very stony loam 8 to 26 inches brown stony loam Substratum is pale brown, slightly effervescent stony loam 	Sides of the Teton River Canyon	Moderate-deep	Well drained	<p>P = Moderate</p> <p>C = Very Low or Low</p>	<p>R = Very rapid</p> <p>E = High</p>

APPENDIX B

Soil Description for Teton River Canyon RMP Study Area

Name	Typical Profile	Location	Depth Class	Drainage Class	Permeability (P) and Available Water Capacity (C)	Runoff (R) and Erosion Hazard (E)
Xerofluvents channeled	The surface layer is grayish-brown, light brownish-gray, or pale brown sand, loamy sand, or sandy loam. It is gravelly, very gravelly, cobbly, or very cobbly. All material above the sand and gravel is extremely variable. At intervals of about 50 feet, old channels about 2 feet deep occur. These channels are about 15 feet wide.	River terraces in the Teton River Canyon	Deep	Well drained and moderately well drained	P = Moderately rapid C = Very low	R = Slow E = Slight
Pocatello Variant silt loam, 4 to 8% slopes, 8 to 12% slopes, and 12 to 20% slopes	<ul style="list-style-type: none"> 0 to 12 inches light brownish-gray, moderately to strongly effervescent silt loam 13 to 60 inches light gray, violently effervescent silt loam 	Farmland abutting the south rim of Teton River Canyon in Madison County	Deep	Well drained	P = Moderate C = High	R = Medium (4 to 12% slopes, high (12 to 20% slopes) E = Moderate (4 to 12% slopes), high 12 to 20% slopes)
Rexburg silt loam, 4 to 8% slopes	<ul style="list-style-type: none"> 0 to 12 inches dark grayish-brown silt loam 13 to 22 inches brown and light brownish-gray silt loam 23 to 60 inches light gray, violently effervescent silt loam 	Same as above	Deep	Well drained	P = Moderate C = High	R = Medium E = Moderate
Ririe silt loam, 4 to 8% slopes, and 8 to 12% slopes	<ul style="list-style-type: none"> 0 to 9 inches grayish-brown silt loam 10 to 60 inches pale brown and light gray, violently effervescent silt loam 	Same as above	Deep	Well drained	P = Moderate C = High	R = Medium E = Moderate

APPENDIX B

Soil Description for Teton River Canyon RMP Study Area

Name	Typical Profile	Location	Depth Class	Drainage Class	Permeability (P) and Available Water Capacity (C)	Runoff (R) and Erosion Hazard (E)
Ririe-Rexburg silt loams, 4 to 12% slopes	<p>Ririe:</p> <ul style="list-style-type: none"> 0 to 9 inches grayish-brown silt loam 10 to 60 inches pale brown and light gray, violently effervescent silt loam <p>Rexburg:</p> <ul style="list-style-type: none"> 0 to 12 inches dark grayish-brown silt loam 13 to 24 inches brown and light brownish-gray silt loam 25 to 33 inches brown and light brownish-gray silt loam 34 to 60 inches light gray, violently effervescent silt loam 	Same as above	Deep	Not reported	<p>P = Moderate</p> <p>C = High</p>	<p>R = Medium</p> <p>E = Moderate</p>
Tetonia silt loam, 0 to 4% slopes, 4 to 8% slopes, and 8 to 12% slopes	<ul style="list-style-type: none"> 0 to 12 inches grayish-brown silt loam about 13 to 24 inches brown silt loam 25 to 60 inches light brownish-gray, violently effervescent silt loam 	Same as above	Deep	Well drained	<p>P = Moderate</p> <p>C = High</p>	<p>R = Slow (0 to 4% slopes), medium (4 to 12% slopes)</p> <p>E = Slight (0 to 4% slopes), moderate (4 to 12% slopes)</p>
Tetonia-Ririe silt loams, 4 to 12% slopes	<p>Tetonia:</p> <ul style="list-style-type: none"> 0 to 10 inches grayish-brown silt loam about 10 inches thick 11 to 23 inches brown silt loam 24 to 60 inches light brownish-gray, violently effervescent silt loam <p>Ririe:</p> <ul style="list-style-type: none"> 0 to 9 inches grayish-brown silt loam 10 to 60 inches pale brown and light gray, violently effervescent silt loam 	Same as above	Deep	Well drained	<p>P = Moderate</p> <p>C = High</p>	<p>R = Medium to rapid</p> <p>E = Moderate</p>

APPENDIX B

Soil Description for Teton River Canyon RMP Study Area

Name	Typical Profile	Location	Depth Class	Drainage Class	Permeability (P) and Available Water Capacity (C)	Runoff (R) and Erosion Hazard (E)
Teton County, South Side of Teton River Canyon Past the Confluence with Canyon Creek to the Study Area Past Badger Creek (NRCS 1969)						
Swanner stony loam (0 to 12% slopes) to Swanner extremely stony loam, 30 to 60% slopes and 60 to 80% slopes	<ul style="list-style-type: none"> 0 to 5 or 11 inches grayish-brown or brown stony, very stony, or extremely stony loam Above soil is underlain by light-gray, extremely stony loam that extends to the light-gray rhyolite or rhyolitic tuff bedrock at a depth of 10 to 20 inches The reaction grades from neutral in the upper part of the profile to moderately alkaline in the lower part 	Teton River Canyon walls, south side	Moderate	Natural drainage is good	P = Moderate C = Low	R = Not reported E = Moderate (0 to 12% slopes) to very severe (30 to 80% slopes)
Ririe silt loam, 4 to 12% slopes, 12 to 20% slopes, and 12 to 30% slopes, eroded	<p>The Ririe series consists of medium-textured soils that formed in loess.</p> <ul style="list-style-type: none"> The surface layer is grayish-brown silt loam 4 to 9 inches thick The underlying layers are pale-brown and light gray, strongly calcareous silt loam to a depth of more than 60 inches 	Upland areas adjacent to the south rim of the Teton River Canyon	Deep	Natural drainage is good	P = Moderate C = Very high	R = Not reported E = Moderate to severe (4 to 12% slopes); severe to very severe (12 to 30% slopes)
Ririe-Tetonia silt loams, 4 to 12% slopes	From 40 to 60% of any given area is eroded Ririe soil, and most of the rest is Tetonia soil.	Same as above	Deep	Natural drainage is good	P = Moderate C = Very high	R = Not reported E = Moderate to severe
Tetonia silt loam, 0 to 4% slopes and 4 to 12% slopes	<p>The Tetonia series is medium-textured, gently undulating to hilly soils that formed in loess.</p> <ul style="list-style-type: none"> The surface layer is dark grayish-brown to grayish-brown silt loam 10 to 15 inches thick It is underlain by dark grayish-brown to brown silt loam that extends to a depth of about 24 inches The substratum is light-gray or light brownish-gray, strongly calcareous silt loam that extends to a depth of more than 60 inches 	Same as above	Very deep	Well drained	P = Moderate C = Very high	R = Not reported E = Slight to moderate

APPENDIX B

Soil Description for Teton River Canyon RMP Study Area

Name	Typical Profile	Location	Depth Class	Drainage Class	Permeability (P) and Available Water Capacity (C)	Runoff (R) and Erosion Hazard (E)
Lantonia silt loam, Lantonia silt loam, 0 to 4% slopes and 4 to 12% slopes	<p>Lantonia series consists of medium-textured soils that formed in very deep deposits of loess.</p> <ul style="list-style-type: none"> The surface layer, to a depth of 14 to 18 inches, is dark grayish-brown silt loam It is underlain by dark grayish-brown and brown silt loam to a depth of about 37 inches The substratum is strongly calcareous silt loam. The reaction grades from neutral in the surface layer to mildly or moderately alkaline in the substratum. 	Same as above	Very deep	Natural drainage is good	P = Moderate C = Very high	R = Not reported E = Slight to moderate
Lantonia-Tetonia silt loams, and Tetonia-Lantonia silt loams, 12 to 20% slopes, eroded	<p>Lantonia-Tetonia:</p> <ul style="list-style-type: none"> From 50 to 75% of any mapped area is Lantonia silt loam, and most of the rest is Tetonia silt loam <p>Tetonia-Lantonia:</p> <ul style="list-style-type: none"> From 50 to 75% of any given area is Tetonia silt loam, and most of the rest is Lantonia silt loam 	The largest area of this complex is just west of the junction of the North Fork Teton River and Badger Creek.	Very deep	Natural drainage is good	P = Moderate C = Very high	R = Not reported E = Slight to moderate

Source: NRCS soil reports as indicated for each county above.

Appendix C:
Consultation and Coordination with
Tribal Governments

Teton River Canyon Resource Management Plan: Draft EA

Consultation and Coordination with Tribal Governments

Consultation and Coordination History

2002

November 26, 2002 Letter to the Chairman and staff of the Shoshone-Bannock Tribes notifying them of plans to prepare the Teton Resource Management Plan (RMP) and a cultural resources inventory, including an inventory of traditional cultural properties

2003

March 11, 2003 Meeting with the Shoshone-Bannock staff to discuss RMPs

2005

January 6, 2005 Letter to the Chair and staff of the Shoshone-Bannock Tribes requesting a meeting with the Fort Hall Business Council to discuss Reclamation programs and projects including the Teton River Canyon RMP

January 7, 2005 Letter to the Chairman and staff of the Shoshone-Paiute Tribes of Duck Valley requesting a meeting with the Tribal Council to discuss Reclamation programs and activities including the Teton River Canyon RMP

January 24, 2005 Letter to the Chair of the Northwestern Band of the Shoshoni Nation requesting information from, and a meeting with, the tribal staff regarding Reclamation's development of the River Canyon RMP

January 24, 2005 Letter to the Chair of the Fort Hall Business Council of the Shoshone-Bannock Tribes requesting information from, and a meeting with, the tribal staff regarding Reclamation's development of the Teton River Canyon RMP

February 4, 2005 Meeting with the Fort Hall Business Council of the Shoshone-Bannock Tribes to discuss Reclamation programs and activities including the Teton River Canyon RMP

March 15, 2005 Meeting with a member of the Land Use Commission and staff of the Shoshone-Bannock Tribes to specifically discuss the Teton River Canyon RMP

March 15, 2005 Teton River Canyon RMP newsletter distributed to the Chair of the Fort Hall Business Council and staff of the Shoshone-Bannock Tribes

April 15, 2005 Media Release announcing the Tribal public meeting on April 25, 2005, at Fort Hall

April 21, 2005	Article in the Sho-Ban News about the Teton River Canyon RMP tribal public meeting on April 25, 2005
April 25, 2005	Meeting with the Fort Hall Business Council to discuss the development of the Teton River Canyon RMP
April 25, 2005	Tribal public meeting conducted by Reclamation at the Fort Hall Business Council Chambers from 5-7:00 p.m.
April 28, 2005	Article in the Sho-Ban News about the Teton River Canyon RMP tribal public meeting on April 25, 2005
May 26, 2005	Letter summarizing the April 25, 2005 meeting with the Fort Hall Business Council
June 22, 2005	Field trip to the Teton River Canyon RMP study area hosted by Reclamation and attended by Shoshone-Bannock staff
July 14, 2005	Letter from the Chairman of the Fort Hall Business Council regarding the Teton River Canyon RMP and site visit.

**THE POLICY OF THE SHOSHONE-BANNOCK TRIBES
FOR MANAGEMENT OF
SNAKE RIVER BASIN RESOURCES**

ISSUE DEFINITION

Beginning in 1989 and continuing through 2008, many non-Federal hydroelectric projects (Projects) within the Snake River Basin (Basin) will be reviewed under the Federal Energy Regulatory Commission relicensing process. In addition, subsequent to the listing of various salmon and snail species under the Endangered Species Act as well as the initiation of other conservation efforts, the Basin is being viewed, as never before, as a valuable resource contributing to the overall Pacific Northwest regional conservation framework. The Shoshone-Bannock Tribes support efforts to conserve, protect, and enhance natural and cultural resources within the Basin and therefore establish this policy to re-emphasize previous policy statements and provide new direction with regards to recently initiated Basin actions.

BACKGROUND AND INTRODUCTION

Since time immemorial, the Snake River Basin has provided substantial resources that sustain the diverse uses of the native Indian Tribes including the Shoshone-Bannock. The significance of these uses is partially reflected in the contemporary values associated with the many culturally sensitive species and geographic areas within the Basin. Various land management practices, such as the construction and operation of hydroelectric projects have contributed extensively to the loss of these crucial resources and reduced the productive capabilities of many resource systems. These losses have never been comprehensively identified or addressed as is the desire of the Shoshone-Bannock Tribes.

The Shoshone-Bannock Tribes reserved guaranteed continuous use Rights to utilize resources within the region that encompasses and includes lands of the Snake River basin. The Fort Hall Business Council has recognized the contemporary importance of these Rights and resources by advocating certain resource protection and restoration programs and by preserving a harvest opportunity on culturally significant resources necessary to fulfill inherent, contemporary and traditional Treaty Rights. However, certain resources utilization activities including the operation of federal and non-federal hydroelectric projects effect these resources and consequently, Tribal reserved Rights.

It has always been the intent and action of the Shoshone-bannock Tribes to promote the conservation, protection, restoration, and enhancement of natural resources during the processes that consider the operation and management of Federal projects and during the land management activities of other entities.

This policy re-emphasizes the Tribes previous policies with regards to these processes and activities. However, the formal relicensing process for non-federal projects (Projects) as well as other recent undertaking that will consider the overall management of the Basin represent previously unavailable opportunity to comprehensively identify and address impacts to and losses of, resources affected by these Projects.

The importance of considering Tribal goals and objectives for effected resources is specifically recognized in the regulations outlining the federal relicensing process. The Fort Hall Business Council has established the following policy for the Basin in order to provide guidance in determining these goals and objectives. This direction is intended to be consistent with existing Tribal policy for participating in processes dealing with other land and water management activities.

STATEMENT OF POLICY

The Shoshone Bannock Tribes (Tribes) will pursue, promote, and where necessary, initiate efforts to restore the Snake River systems and affected unoccupied lands to a natural condition. This includes the restoration of component resources to conditions which most closely represents the ecological features associated with a natural riverine ecosystem. In addition, the Tribes will work to ensure the protection, preservation, and where appropriate-the enhancement of Rights reserved by the Tribes under the Fort Bridger Treaty of 1868 (Treaty) and any inherent aboriginal rights.

CONCLUSION

In addition to the ongoing efforts of the Tribes and its cooperating agencies, the relicensing process as well as recently initiated Basin recovery efforts provide a firm basis for striving to meet Tribal needs regarding resource conservation protection, and enhancement. This policy will provide direction to Tribal staff for participating in regional processes as well as for the future development of resource and process specific Tribal plans and guidelines.

Tribal participation in the Project relicensing efforts will be used to identify the direct, indirect, and cumulative effects attributable to the construction, operation, and any proposed modifications of Project facilities. The tribes expect the license applicant(s) and the Federal Energy Regulatory Commission, in consultation with the Tribes and agencies during the

relicensing process, to identify alternative management strategies and develop mitigation measures to reduce or eliminate the identified impacts consistent with this Policy.

In combination with existing policy and direction, other natural and cultural resource management activities (typically those undertaken by the Tribes cooperating agencies) will be utilized to identify additional land management impacts within the Snake River Basin and will similarly identify alternative management strategies and apply mitigation measures consistent with this Policy.

All cooperating agencies will be expected to utilize all available means, consistent with their respective trust responsibility mandates, to protect Treaty rights and Tribal interests consistent with this Policy.

Appendix D: Wild & Scenic River Review

Teton River Canyon Resource Management Plan: Draft EA

APPENDIX D

Wild & Scenic River Review

The Wild and Scenic Rivers Act of 1968 was passed to preserve free-flowing rivers with special values in their natural condition for the use and enjoyment of the public, balancing the nation’s water resource development policies with river conservation and recreation goals.

The Wild and Scenic Rivers Act states, “In all planning for the use and development of water and related lands resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas...” As part of the current Teton River Canyon RMP, Reclamation is conducting an inventory of the Teton River within the RMP project boundary to determine if it is eligible under the Wild and Scenic River Act. Because of intermixed ownership, Reclamation and BLM are jointly conducting this study to address all Federal lands within the RMP Study Area.

For this RMP, the Study Area boundary was defined as a large rectangle encompassing all of the Reclamation lands in and around the Teton River Canyon. The area and river segments are shown on the map on the following page.

Table D-1 displays land ownership in river miles by segment of the Teton River and its tributaries.

This eligibility study will address the seven river segments listed above.

TABLE D-1
Land Ownership within RMP Boundary (in river miles)

Segment No.	Teton River or Tributary Segment	USBR	BLM	Private	Total
<i>Teton River</i>					
1	Felt Power Plant to Bitch Creek	.56	1.17	.07	1.80
2	Bitch Creek to Spring Hollow	1.47	3.53	0	5.00
3	Spring Hollow To Canyon Creek	4.49	2.71	0	7.20
4	Canyon Creek to the Dam Site	5.98	.28	0	6.26
<i>Teton River Tributaries</i>					
5	Badger Creek to Teton River	0	1.02	4.97	5.99
6	Bitch Creek from RMP Boundary to Teton River	0	1.81	3.15	4.96
7	Canyon Creek from RMP Boundary to Teton River	.51	3.25	3.62	7.38

D.1 Eligibility

The first step in the Wild and Scenic River study process is to determine if the river or river segment is eligible for inclusion in the National Wild and Scenic River System, and if it is, to then give it a proposed classification as “wild,” “scenic,” or “recreational.”

D.1.1 Free Flowing Criteria

To be eligible for inclusion into the national system of rivers, the Wild and Scenic Rivers Act specifies that two criteria be met. The first criteria is that a river must be “free-flowing.”

Three structures in the Study Area have either currently or historically served as dams and diversion structures:

- 1) Felt Power Plant is a small hydropower plant located just above the start of Segment 1 near the confluence of Badger Creek with the Teton River. This small (7450 kW) private hydroelectric plant is associated with a rock dam approximately 12 feet high and 135 feet long.
- 2) Linderman dam is a partially exposed low dam at the confluence of Milk Creek. This now defunct dam has a hydraulic drop of only about 2 feet and some adjacent concrete abutments.
- 3) The Teton Dam remains are located at the end of Segment 4. Remains include a large section of earthen dam, a concrete spillway, and the outlet works structures.

Existing minor dams or diversion structures within the Study Area do not necessarily render a river segment non-eligible. The Felt Power Plant dam can be considered a minor dam and diversion structure and is located just above the start of Segment 1. Linderman dam is a low head defunct dam with no remaining impact on river flows. The remnants of the failed Teton Dam provide no control over water flow above or below Segment 4 of the Teton River.

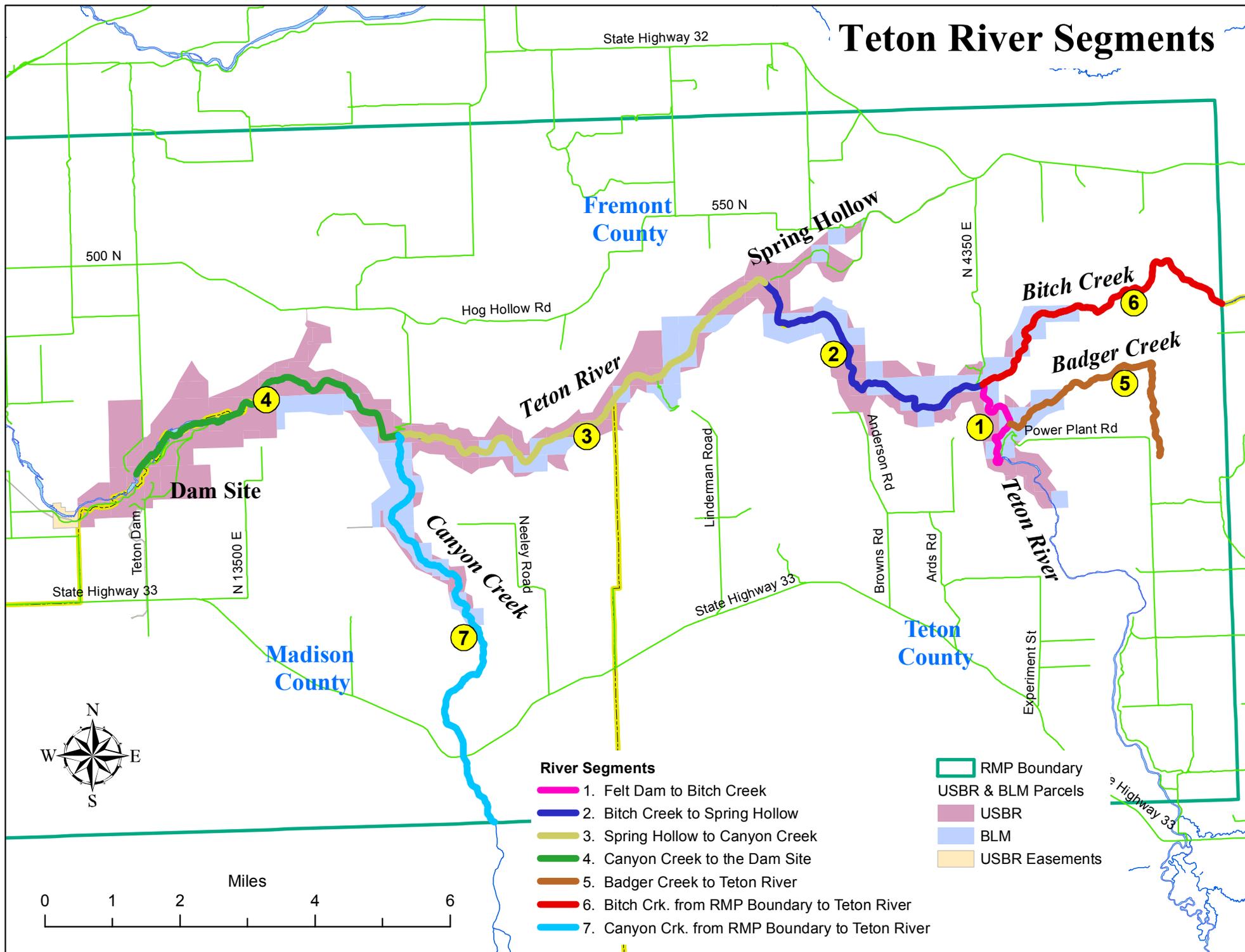
For these reasons, all seven segments of the Teton River can be considered free-flowing at this time.

D.1.2 Outstandingly Remarkable Values

The second criteria for eligibility is that the river must exhibit one or more “outstandingly remarkable values.” An outstandingly remarkable value is a natural, cultural, recreational, or similar feature that is unique or especially significant when viewed from a regional or national context. Only one such value is needed for eligibility. Two questions must be considered for outstandingly remarkable values:

1. Is the value river-related or river-dependent?
2. Is the value rare, unique, or exemplary in a regional or national context?

Teton River Segments



Each river segment is assessed individually for outstandingly remarkable values. General findings are summarized below.

- *Scenic.* The Teton River Canyon provides a unique and dramatic landform in an area immediately surrounded by largely flat agricultural lands with little variations in topography or visual contrast. Views may include a steep, deep canyon with striking rock cliffs and variations in vegetation and ecologic features. River views include whitewater rapids, gently flowing currents, and sharp cascading river bends all within a pronounced river canyon. Wildlife viewing includes bald eagles, osprey, otters, and the occasional moose. Some views include the failed dam site and striking evidence of the tragedy that occurred here.
- *Recreational.* Upper segments of the Teton River provide one of the few Class VI and V whitewater boating opportunities in this part of the state. The canyon holds trophy deer, excellent bird watching, and opportunities for solitude close to Rexburg, one of the fastest growing communities in Idaho.
- *Fish.* The historic Yellowstone cutthroat has been eliminated from a significant portion of its historic range in Montana, Idaho, Wyoming, Utah, and Nevada because of a combination of habitat loss, disease, and replacement by non-native trout. The Teton River Canyon is one of the last strongholds for the Yellowstone cutthroat trout.
- *Wildlife.* The Teton River Canyon provides a unique refuge for wildlife because of its difficult access and steep topography. IDFG has identified the Teton River Canyon and adjacent rims are one of the most important mule deer wintering areas in eastern Idaho. Slow pools and slack water make for good Trumpeter Swan wintering habitat. Elk, moose, bald eagles, and osprey also frequent the Teton River Canyon.
- *Cultural.* Cultural resource surveys found that the river corridor contained sites indicating occupation or use by Native Americans. The Shoshone Bannock Tribe has identified the entire Teton River Canyon as an area of historical and cultural importance to the tribe.
- *Historic.* On June 5, 1976, the Teton Dam structure failed within days of filling for the first time. The dam failure resulted in the loss of 11 lives, millions of dollars in property damage, and the total loss of the structure. Visitors, scientists, and engineers still come to view the site and learn from this tragic event. It is anticipated the Teton dam site will be listed on the National Register on or before its 50-year anniversary in the year 2026. The overlook of the failed dam site attracts many visitors wanting to see the remains of this dramatic engineering disaster and significant event in U.S. history.
- *Other.* BLM has identified Bitch Creek and Badger Creek as having some of the best riparian qualities in the area. These communities are pristine and undisturbed, with stable and diverse channel types.

All segments of the Teton River and its tributaries have at least one outstandingly remarkable value including scenic, recreational, fish, wildlife, cultural, historic, and other values. Because the Teton River is free flowing and has outstandingly remarkable values, Reclamation and BLM have made a preliminary determination of “eligible” for all segments of the Teton River and its tributaries within the project boundary.

D.1.3 Classifications

As a final step in the eligibility process, Wild and Scenic rivers are given one of three possible classifications: *wild*, *scenic*, or *recreational*. These classifications are based on the type and degree of human development associated with the river and adjacent lands present at the time of inventory. Classification establishes a guideline for management until either a suitability determination or designation decision is reached. It is a determination based on existing characteristics of a river area resulting from human-caused change or levels of development. Classification does not affect land use decisions related to private property. Final classification is determined if, and when, a river is designated into the national system by Congress. The classification system is shown in Table D-2.

TABLE D-2
Classification Criteria For Wild, Scenic, and Recreational River Areas

Attribute	Wild	Scenic	Recreational
Water Resources Development	Free of impoundment.	Free of impoundment.	Some existing impoundment or diversion. The existence of low dams, diversions, or other modifications of the waterway is acceptable, provided the waterway remains generally natural and riverine in appearance.
Shoreline Development	Essentially primitive. Little or no evidence of human activity. The presence of a few inconspicuous structures, particularly those of historic or cultural value, is acceptable. A limited amount of domestic livestock grazing or hay production is acceptable. Little or no evidence of past timber harvest. No ongoing timber harvest.	Largely primitive and undeveloped. No substantial evidence of human activity. The presence of small communities or dispersed dwellings or farm structures is acceptable. The presence of grazing, hay production, or row crops is acceptable. Evidence of past or ongoing timber harvest is acceptable, provided the forest appears natural from the riverbank.	Some development. Substantial evidence of human activity. The presence of extensive residential development and a few commercial structures is acceptable. Lands may have been developed for the full range of agricultural and forestry uses. May show evidence of past and ongoing timber harvest.
Accessibility	Generally inaccessible except by trail. No roads, railroads or other provision for vehicular travel within the river area. A few existing roads leading to the boundary of the river area is acceptable.	Accessible in places by road. Roads may occasionally reach or bridge the river. The existence of short stretches of conspicuous or longer stretches of inconspicuous roads or railroads is acceptable.	Readily accessible by road or railroad. The existence of parallel roads or railroads on one or both banks as well as bridge crossings and other river access points is acceptable.

TABLE D-2
Classification Criteria For Wild, Scenic, and Recreational River Areas

Attribute	Wild	Scenic	Recreational
Water Quality	Meets or exceeds Federal criteria or federally approved State standards for aesthetics, for propagation of fish and wildlife normally adapted to the habitat of the river, and for primary contact recreation (swimming), except where exceeded by natural conditions.	No criteria prescribed by the Act. The Federal Water Pollution Control Act Amendments of 1972 have made it a national goal that all waters of the United States be made fishable and swimmable. Therefore, rivers will not be precluded from scenic or recreational classification because of poor water quality at the time of their study, provided a water quality improvement plan exists or is being developed in compliance with applicable Federal and State laws.	

Source: NPS 2005

The tentative classifications for each segment are as follows:

1. Felt Dam to Bitch Creek—*Scenic*. The Felt Power plant is located just above the start of this 1.8-mile long segment. This small (7450 kW) private hydro plant sits partially on Reclamation land. A small dam is associated with this plant (12 feet high and 135 feet long). An expert kayak run begins on private land 8.5 miles upstream at the Highway 33 bridge. This Class IV-V run provides a regionally significant whitewater experience.

2. Bitch Creek to Spring Hollow—*Scenic*. Access to this 5-mile river segment is particularly difficult. A user-created boat slide is the put-in point and is located near the confluence of Bitch Creek with the Teton River. This boat access is little more than a drag route down a very long and steep slope where some vegetation has been worn away from use. No other routes access the river in this segment. The reservoir inundation zone affected this stretch upstream from Spring Hollow, leaving evidence including landslides and a line of cleared trees below the reservoir's intended full pool level. This stretch provides a regionally significant whitewater experience. IDFG has identified this as an excellent and critical mule deer wintering area.

3. Spring Hollow to Canyon Creek—*Scenic*. This segment begins from a remnant boat ramp that was built for the reservoir and now provides one of the few semi-improved access routes into the canyon. Many landslides are visible in this river segment and are in various stages of recovery. Most have a least some vegetation growth and do not visually dominate the landscape. Access points are few and signs of human use are fairly limited. A seldom used road and old low head dam are visible at Linderman. The dam has a concrete wall and abutments that are visually dominate as boaters must float through this structure on their way downstream. This segment also has beautiful rhyolite rock formations in a fairly steep and narrow canyon. Wildlife viewing is good and most visitors would find this a primitive and scenic float. Although this stretch provides good recreational opportunities, they are not unique or significant at a regional level.

4. Canyon Creek to Dam site—*Recreational*. This stretch begins where a major side canyon joins the Teton River. A major pumping plant is prominent at this location, with large pipes across the river and pumping units visible and audible for some distance in either direction. A road to the pumps from the north side of the canyon is generally not open to the public. The canyon begins to open up and become wider from here down river and scenery remains good. As one gets nearer the dam site, the river is more pool-like, with long stretches of slow water that are the remnants of the borrow pits used for construction. At the dam site, signs of human use and disturbances are prominent. This is a unique site; however, and although disturbed, many

would find the views fascinating. Motorized vehicle and boating use occurs for several miles upstream from this point. Although this stretch provides good recreational opportunities, they are not unique or significant at a regional level.

5. Badger Creek to Teton River—*Scenic*. This 6-mile segment contains 5 miles of private land and 1 mile of BLM land near the creek’s confluence with the Teton River. Access is limited.

6. Bitch Creek from RMP Boundary to Teton River—*Scenic*. This 5-mile segment contains 3 miles of private land and less than 2 miles of BLM land near the creek’s confluence with the Teton River. The canyon here is a steep and narrow gorge with basalt pinnacles and rock formations. Access is limited.

7. Canyon Creek from RMP Boundary to Teton River—*Scenic*. This more than 7-mile segment contains greater than 3.5 miles of private land, 3.25 miles of BLM land, and a half mile of Reclamation land. This small steep creek has been run by kayakers; however, numerous portages and debris make this a difficult and seldom-used run. Access is limited.

D.2 Eligibility Determinations

The Teton River within the project boundary passes through lands managed by both Reclamation and BLM. Reclamation has coordinated with the BLM Upper Snake Field Office and both agencies are in agreement with a preliminary determination of “eligible” for these segments of the Teton River. The preliminary classification is summarized in Table D-3.

TABLE D-3
Preliminary Classification as Wild, Scenic, or Recreational Rivers

	Segment	Outstandingly Remarkable Values	Tentative Classification	Free Flowing	Eligible
1	Felt Dam to Bitch Creek	Scenic quality, recreation, fish, wildlife, cultural, and historic	Scenic	Yes	Yes
2	Bitch Creek to Spring Hollow	Scenic quality, recreation, fish, wildlife, cultural, and historic	Scenic	Yes	Yes
3	Spring Hollow to Canyon Creek	Fish, wildlife, cultural, and historic	Scenic	Yes	Yes
4	Canyon Creek to Dam site	Fish, wildlife, cultural, and historic	Recreational	Yes	Yes
5	Badger Creek to Teton River	Scenic quality, fish, wildlife, and cultural	Scenic	Yes	Yes
6	Bitch Creek from RMP Boundary to Teton River	Scenic quality, recreation, fish, wildlife, and cultural	Scenic	Yes	Yes
7	Canyon Creek from RMP Boundary to Teton River	Scenic quality, fish, wildlife, cultural, and historic	Scenic	Yes	Yes

D.3 Suitability

The final step in the river assessment process is the determination of suitability. A river's suitability for wild and scenic designation is a matter of whether it is free-flowing and contains outstandingly remarkable resources, whether designation makes sense, and whether designation provides lasting protection.

D.4 Congressional Direction

In 1964, Congress authorized the construction of the Lower Teton Division, with Teton Dam and Reservoir as key features. Reclamation acquired approximately 5,804 acres of lands in the Teton Basin Project for construction of Teton Dam. BLM also manages 3,496 acres within the project boundary. Project purposes included irrigation, flood control, power, recreation, and fish and wildlife.

Although the dam failed, the project authorization remains in place unless, and until, it is officially de-authorized, or cancelled, by Congress. A formal process, environmental analyses, and Congressional action are required to deauthorize the project.

D.5. State Direction

The Idaho State Legislature specifically identifies the Teton Dam site as a potential reservoir site that should be protected by the State from significant land use changes. Fremont-Madison Irrigation District originally contracted with Reclamation to build the Teton Dam and has continued to express a strong interest in seeing the dam rebuilt.

Although there are no active plans to re-build the dam, the project lands have been kept intact consistent with Federal and State direction.

D.6 Conflict

Section 7(a) of the Wild and Scenic Rivers Act prohibits Federal authorization of any water resources project, such as a dam, that would have an adverse impact on the values for which the river is designated. All of the Reclamation lands and BLM lands in the project area were acquired for the purpose of constructing the Teton Dam and related facilities. Designation of the Teton River as a Wild and Scenic River at this time would be in direct conflict with the existing Congressional authorization and State direction for these lands. If, and when, the project is de-authorized, consideration of the Teton River for designation under the Wild and Scenic Rivers Act can, and must, be reassessed.

D.7 Proposed Management

No actions proposed in the draft Teton RMP will negatively affect the potential for future designation of the Teton River under the Wild and Scenic Rivers Program. Additionally, BLM intends to propose managing their lands in the Teton River Canyon as an ACEC during their land management planning process. This would provide additional protection to this area including prohibiting mining and ORV use, neither of which presently occur in the Study Area.

Appendix E: Draft Goals and Objectives

Teton River Canyon Resource Management Plan: Draft EA

Teton River Canyon RESOURCE MANAGEMENT PLAN DRAFT GOALS & OBJECTIVES

LAND USE MANAGEMENT (LUM)

Goal LUM 1: Provide comprehensive land use management based on a range of natural and socio-cultural resources.

Objective LUM 1.1: Implement clear direction for agricultural leasing and grazing on Reclamation lands.

Objective LUM 1.2: Provide clear direction regarding easements and rights-of-use on Reclamation lands.

Objective LUM 1.3: Define and protect necessary access routes for administrative purposes.

Objective LUM 1.4: Complete an evaluation of the Teton River within the study area for potential inclusion in the National Wild and Scenic River System.

Goal LUM 2: Ensure protection of the public, and public resource values and facilities.

Objective LUM 2.1: Reduce vandalism.

Objective LUM 2.2: Manage wildfire risk in the river canyon and along the canyon rim.

Objective LUM 2.3: Identify and resolve current and future unauthorized uses such as trespasses and encroachments.

Goal LUM 3: Achieve timely implementation and coordination of RMP programs and projects.

Objective LUM 3.1: Update management agreement and continue cooperative efforts with BLM.

Objective LUM 3.2: Continue cooperative efforts with IDFG.

NATURAL RESOURCES (NAT)

Goal NAT 1: Conserve, restore, and enhance natural ecosystems.

Objective NAT 1.1: Provide information to reduce the spread of noxious weeds through a variety of mediums.

Objective NAT 1.2: Continue to work with IDFG, BLM, and local weed management entities on cooperative management controls of noxious weeds.

Objective NAT 1.3: Establish management actions to help prevent erosion in the river canyon.

Objective NAT 1.4: Minimize the potential for pollutants to enter the Teton River and its tributaries from Reclamation lands.

Objective NAT 1.5: Continue to work with IDFG to maintain and/or enhance the Yellowstone cutthroat trout fishery and habitat in the Teton River Canyon.

Objective NAT 1.6: Protect, enhance, and restore native vegetation (e.g. bitterbrush, cottonwoods, willows), where feasible.

Objective NAT 1.7: Protect, enhance, and restore deer and elk winter habitat, where feasible.

Objective NAT 1.8: Work with adjacent landowners and partners to protect resource values within the canyon and along the canyon rim.

Objective NAT 1.9: Monitor and track natural resource changes over time in the Teton River Canyon.

Objective NAT 1.10: Support BLM efforts for special designations of the Teton River Canyon.

Objective NAT 1.11: Protect habitat for rare, threatened and endangered species.

CULTURAL RESOURCES (CTA)

Goal CTA 1: Protect and preserve cultural resources, including prehistoric and historic-period archaeological sites and traditional cultural properties.

Objective CTA 1.1: In accordance with Section 106 of the National Historic Preservation Act (NHPA) seek to protect National Register-eligible sites from impacts from new undertakings.

Objective CTA 1.2: In accordance with Section 110 of NHPA, implement proactive management of cultural resources focusing on protecting identified resources from damage.

Objective CTA 1.3: Increase awareness of cultural resources compliance and protection requirements among resource management partners.

Objective CTA 1.4: Provide opportunities for public education on area prehistory and history, including the importance of, and requirements for, protecting these resources.

Goal CTA 2: Comply with requirements of Executive Order 13007 (Indian Sacred Sites)

Objective CTA 2.1: Avoid damage to Indian sacred sites (when present and identified), when avoidance is consistent with accomplishing Reclamation's mission and larger public responsibilities.

Objective CTA 2.2: Allow for access by traditional religious practitioners to sacred sites, when consistent with mission.

INDIAN TRUST ASSETS (ITA)

Goal ITA 1: Conduct Government-to-Government Consultation with Tribes to discuss the RMP

Objective ITA 1.1: Consult to the greatest extent practicable and to the extent permitted by law with tribal governments prior to taking actions that affect federally recognized tribal governments.

Objective ITA 1.2: Protect Indian Trust Assets that may exist.

RECREATION, ACCESS & VISUAL QUALITY (RAV)

Goal RAV 1: Provide for recreation use within Reclamation's authorities, to afford a quality recreation experience consistent with natural and cultural resource management objectives.

Objective RAV 1.1: Maintain the existing semi-primitive recreation setting and experience, while providing for recreation opportunities and the continued protection of natural and cultural resources.

Objective RAV 1.2: Provide adequate access to the river canyon, where appropriate.

Objective RAV 1.3: Monitor visitor use levels, minimize conflicts, and visitor use impacts.

Objective RAV 1.4: Coordinate with BLM on outfitter and guide use, authorized put-in and take-out points, and routine patrols.

Goal RAV 2: Preserve and enhance existing scenic quality.

Objective RAV 2.1: Manage to retain the existing visual character of the landscape.

INTERPRETATION, EDUCATION & INFORMATION (IEI)

IEI Goal 1: Provide informational, educational, and interpretive messages through a variety of means to increase the public's awareness of opportunities, restrictions, safety, and natural and cultural resource values in the Teton River Canyon area.

Objective IEI 1.1: Provide interpretive information at the dam overlook site and other public access areas.

Objective IEI 1.2: Improve identification of Reclamation lands and recreational opportunities through signage, posting, and providing information on maps, brochures, and websites.

Objective IEI 1.3: Improve public awareness of rules and regulations on Reclamation lands.

Objective IEI 1.4: Coordinate with others on interpreting the natural and cultural history of the area.

APPLICABLE FEDERAL LAWS, ORDERS, AND POLICIES

Reclamation is required to comply with a number of legal mandates in the preparation and implementation of the RMP. The following is a list of the environmental laws, executive orders, and policies that may have an effect on the RMP or Reclamation actions in the implementation of the plan:

Law, Executive Order, or Policy	Description
Accessibility for Persons with Disabilities – Reclamation Policy (November 18, 1998)	Established a Pacific Northwest regional policy to assure that all administrative offices, facilities, services, and programs open to the public, utilized by Federal employees, and managed by Reclamation, a managing partner, or a concessionaire, are fully accessible for both employees and the public.
American Indian Religious Freedom Act of 1978	Provides for freedom of Native Americans to believe, express, and exercise their traditional religion, including access to important sites.
Archaeological Resources Protection Act (ARPA) of 1979, as amended	Ensures the protection and preservation of archaeological sites on Federal land. ARPA requires that Federal permits be obtained before cultural resource investigations begin on Federal land. It also requires that investigators consult with the appropriate Native American groups before conducting archaeological studies on Native American origin sites.
Archaeological and Historic Preservation Act of 1974	Provides for the preservation of historical buildings, sites, and objects of national significance.
Clean Water Act (CWA) of 1974, as amended*	Provides for protection of water quality.
Clean Air Act (CAA) of 1970	Provides for protection of air quality.
Department of Defense (DoD) American Indian and Alaska Native Policy, October 20, 1998	The policy supports Tribal self-governance and government-to-government relations between the Federal government. It specifies that DoD will meet its trust responsibilities to Tribes and will address Tribal concerns related to protected Tribal resources, Tribal rights, and Indian lands.
Endangered Species Act (ESA) of 1973, as amended	Provides for protection of plants, fish, and wildlife that have a designation as threatened or endangered.
Executive Order 12875, Enhancing the Intergovernmental Partnership, October 26, 1983	Establishes "regular and meaningful consultation and collaboration with state, local, and Tribal governments on Federal matters that significantly or uniquely affect their communities."
Executive Order 12898, February 11, 1994, Environmental Justice	Requires Federal agencies to consider the effects of its programs and policies on minority and lower income populations.
Executive Order 11990, Protection of Wetlands	Directs all Federal agencies to avoid, if possible, adverse impacts to wetlands and to preserve and enhance the natural and beneficial values of wetlands.
Executive Order 13007, Indian Sacred Sites, May 24, 1996	Provides for access to, and ceremonial use of, Indian sacred sites on Federal lands used by Indian religious practitioners.

Law, Executive Order, or Policy	Description
Executive Order 13175, Consultation and Coordination with Indian Tribal Government, November 6, 2000 (revokes EO 13084)	The EO builds on previous administrative actions and is intended to: <ul style="list-style-type: none"> • Establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications. • Strengthen government- to-government relations with Indian tribes; and • Reduce the imposition of unfunded mandates upon Indian tribes.
Fish and Wildlife Coordination Act (FWCA) of 1958	Requires consultation and coordination with the U.S. Fish and Wildlife Service
Indian Trust Assets Policy (July 1993)	Requires that Reclamation provide protection and continuation of Tribal hunting, fishing, and gathering Treaty Rights.
Migratory Bird Treaty Act of 1918, as amended	Provides protection for bird species that migrate across state lines.
National Environmental Policy Act (NEPA) of 1969	Council on Environmental Quality regulations implementing NEPA specify that as part of the NEPA scoping process, the lead agency "...shall invite the participation of affected Federal, State, and local agencies, any affected Indian tribe,... (1501.7[a] I."
National Historic Preservation Act (NHPA) of 1966, as amended	Section 106 of the NHPA requires Federal agencies to consider the effects of any actions or programs on historic properties. It also requires agencies to consult with Native American Tribes if a proposed Federal action may affect properties to which they attach religious and cultural significance.
Native American Graves Protection and Repatriation Act (NAGPRA) of 1990	Regulations for the treatment of Native American graves, human remains, funeral objects, sacred objects, and other objects of cultural patrimony. Requires consultation with Native American Tribes during Federal project planning.
Presidential Memorandum: Government-to-Government Relations with Native American Tribal Governments, April 29, 1994	Specifies a commitment to developing more effective day-to-day working relationships with sovereign Tribal governments. Each executive department and agency shall consult to the greatest extent practicable and to the extent permitted by law, with Tribal governments prior to taking actions affecting Federally recognized Tribal governments.
Rehabilitation Act of 1973, Title V, Section 504	Provides for access to Federal or Federally assisted facilities for the disabled. The Uniform Federal Accessibility Standards (UFAS) or the Americans with Disabilities Act Accessibility Guidelines (ADAAG), whichever is the more stringent, are followed as compliance with Section 504.
Title 28, Public Law 89-72, as amended	Provides Reclamation with the authority to cost-share on recreation projects and fish and wildlife enhancement facilities with managing partners on Reclamation lands.

*A permit may need to be required for construction related activities.

