



Foundation Document

Grand Teton National Park | John D. Rockefeller, Jr. Memorial Parkway

Wyoming

May 2017

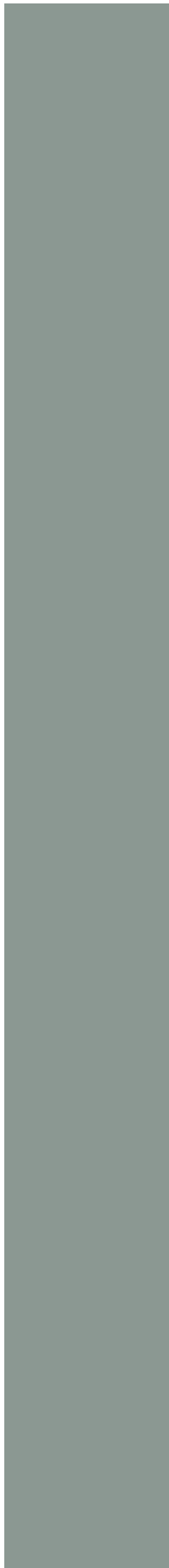




- Ranger station
- Campground
- Tent only campground
- Turnout or overlook
- Unpaved road
- Glacier/snowfield

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Mission of the National Park Service

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship:** We share a commitment to resource stewardship with the global preservation community.
- **Excellence:** We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- **Integrity:** We deal honestly and fairly with the public and one another.
- **Tradition:** We are proud of it; we learn from it; we are not bound by it.
- **Respect:** We embrace each other's differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises more than 400 park units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.



The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological values.

Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park’s purpose, significance, fundamental resources and values, other important resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document aids park managers, staff, and the public in identifying and clearly stating in one document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway can be accessed online at: <http://insideparkatlas.nps.gov/>.



Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, other important resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

Brief Description of Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway

Congress established Grand Teton National Park on February 26, 1929. It was “... dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people of the United States under the name of the Grand Teton National Park of Wyoming” (45 Stat. 1314). The establishment of Jackson Hole National Monument in 1943 was an important part of the park’s history as more than 220,000 acres were transferred to the National Park Service (Presidential Proclamation 2578). The park was enlarged to its present size by Congress on September 14, 1950 (Public Law 81-787, 64 Stat. 849). The expansion was “...for the purpose of including in one national park, for public benefit and enjoyment, the lands within the present Grand Teton National Park and a portion of the lands within Jackson Hole National Monument.” The total authorized area of Grand Teton National Park is about 310,520 acres in Teton County, northwestern Wyoming.

Public Law 92-404 established John D. Rockefeller, Jr. Memorial Parkway (the parkway) on August 25, 1972, “...for the purpose of commemorating the many significant contributions to the cause of conservation in the United States, which have been made by John D. Rockefeller, Jr., and to provide both a symbolic and desirable physical connection between the world’s first national park, Yellowstone, and the Grand Teton National Park.” Legislation designates the parkway as the 82 miles between West Thumb in Yellowstone National Park and the south entrance of Grand Teton National Park. The management area between the two parks includes about 23,775 acres, and is 6.2 miles in distance between the parks.



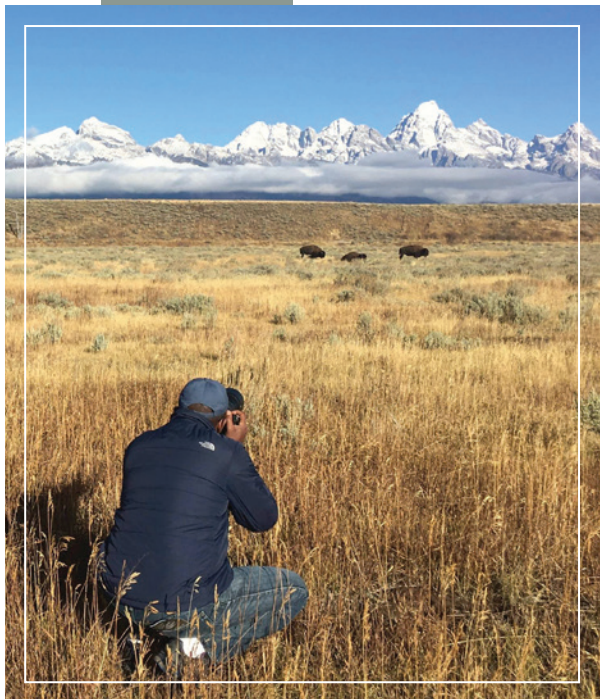


Grand Teton National Park is in the heart of the Greater Yellowstone Ecosystem, one of Earth's largest intact temperate ecosystems. The park is home to some of the greatest populations of wildlife in the world: elk, moose, bison, pronghorn, mule deer, grizzly and black bears, gray wolves, coyotes, otters, wolverines, and about 300 bird species, ranging from raptors, such as bald eagles and great gray owls, to trumpeter swans and sage grouse. The park and the adjacent John D. Rockefeller, Jr. Memorial Parkway provide more than 330,000 acres of largely pristine habitat for rare, threatened, and endangered species as well as hundreds of other ecologically vital native species, such as insects, bull and garter snakes, boreal toads, little brown bats, and several subspecies of native cutthroat trout.



The central feature of the park is the Teton Range, an active, fault-block mountain front that is 40 miles long and 7–9 miles wide. The range includes 12 peaks over 12,000 feet, with the highest in the range over 13,000 feet. The park protects 7 morainal lakes along the base of the Teton Range and more than 100 alpine and backcountry lakes. The Snake River bisects the valley of Jackson Hole and is the headwaters of the Columbia River system.

The park also displays evidence of a rich human history dating back approximately 11,000 years. Early American Indians used the landscape and its resources for subsistence; they hunted, fished, conducted ceremonial activities, and left traces in their pathways and campsites. Hundreds of archeological sites have been found in the small portion of the park that has been surveyed. Park scientists are still learning about the park's prehistory, from archeological research as well as ethnographic studies and oral history interviews with American Indian tribes that still maintain ties to resources and places on the landscape.



More recent developments in the valley of Jackson Hole left their mark through an array of new roads and facilities, as well as nearly 700 historic structures, districts, and landscapes, many of which are still in use. These include former livestock ranches, dude ranches, and "hobby" ranches; homesteads such as the Mormon Row Historic District; visitor accommodations such as Jenny Lake Lodge and Jackson Lake Lodge, designated a national historic landmark in July 2003; the park's original headquarters located at Beaver Creek; and the Murie Ranch, which was owned and occupied by noted naturalist-conservationists Adolph, Olaus, and Mardy Murie, and is the park's second national historic landmark.

In 2015, more than 3.1 million people visited Grand Teton National Park and more than 1.4 million people visited John D. Rockefeller, Jr. Memorial Parkway. Popular visitor activities include hiking and backpacking, camping, fishing, biking, horseback riding, picnicking, auto touring, boating and paddling, wildlife watching, and winter sports. Visitation to the park and parkway is supported by local gateway communities and through partnerships with several nonprofit organizations, commercial services providers, and other land management agencies. The Jackson Hole Airport, within the park's boundary, facilitates easy travel for visitors to and from the park and parkway.

Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statements for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway were drafted through a careful analysis of their enabling legislation and the legislative history that influenced their development. Grand Teton National Park was established when the enabling legislation adopted by Congress was signed into law on February 26, 1929. John D. Rockefeller, Jr. Memorial Parkway was established when the enabling legislation adopted by Congress was signed into law on August 25, 1972 (see appendix A for enabling legislation and subsequent amendments). The purpose statements lay the foundation for understanding what is most important about the park and parkway.

The purpose of GRAND TETON NATIONAL PARK is to preserve and protect the spectacular scenery of the Teton Range and the valley of Jackson Hole; protect a unique geologic landscape that supports abundant diverse native plants and animals and associated cultural resources; protect wildlands and wildlife habitat within the Greater Yellowstone area, including the migration route of the Jackson elk herd; and to provide opportunities for enjoyment, education, inspiration, and scientific investigation compatible with these resources for present and future generations.



The purpose of JOHN D. ROCKEFELLER, JR. MEMORIAL PARKWAY is to commemorate the many significant contributions of John D. Rockefeller, Jr. to the cause of conservation and provide both a symbolic and desirable physical connection between Grand Teton National Park and Yellowstone National Park.



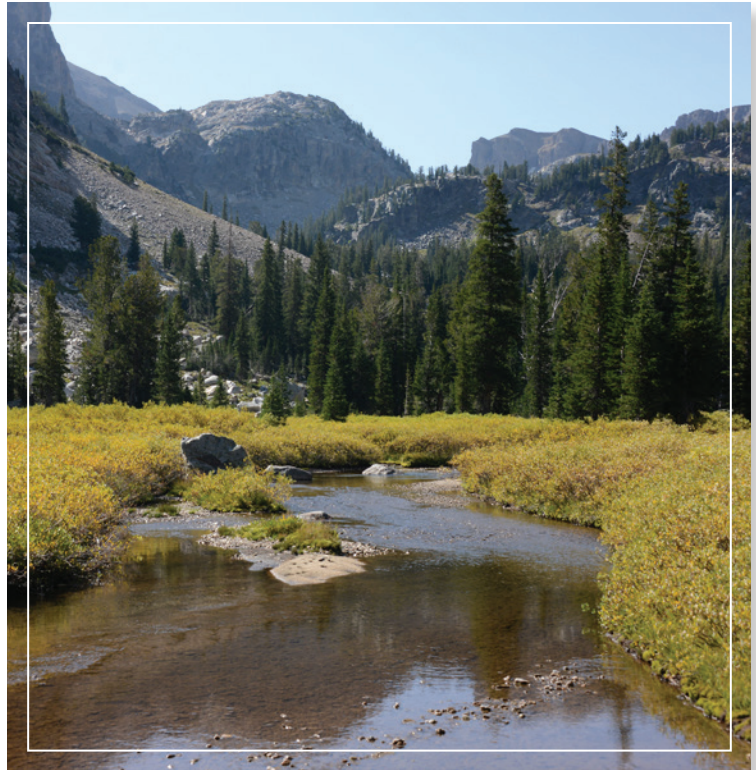
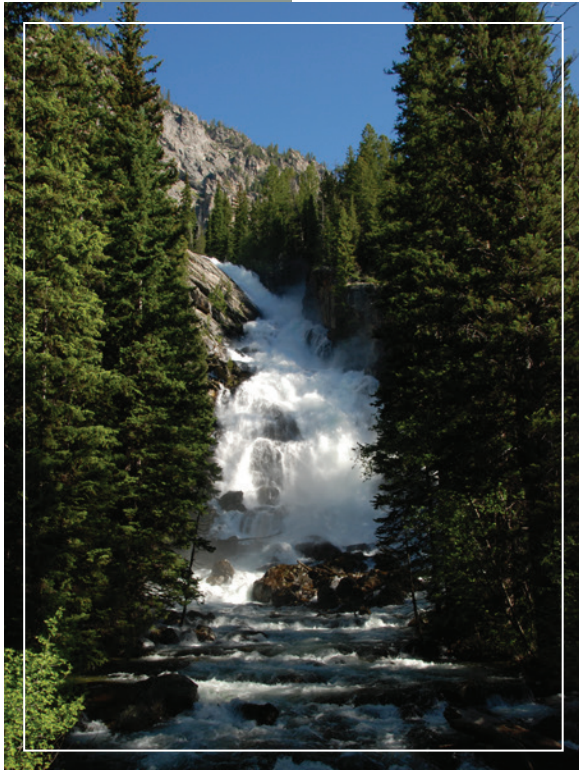
Park Significance

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway. (Please note that the sequence of the statements does not reflect the level of significance.)

1. The iconic mountain landscape of the Teton Range rises dramatically above the flat valley of Jackson Hole creating a compelling view that has inspired people to explore and experience the area for thousands of years. The sudden rise of rugged peaks contrasts with the horizontal sagebrush flats. Glacial lakes at the foot of the mountains reflect and expand the view. The awesome grandeur of the ever-present Teton Range under changing weather and seasons provides the superlative setting for unmatched visitor experiences.
2. Grand Teton National Park preserves the landscape of one of the world's most impressive and highly visible fault block mountain ranges that abruptly rises up to 7,000 feet above the valley floor along an active fault (the Teton Fault) formed from the collision of tectonic plates. The range is juxtaposed with landscapes shaped by glacial processes and braided river geomorphology. The Teton Range is one of the continent's youngest mountain ranges, yet exposes some of the oldest rocks on earth.
3. Grand Teton National Park and the John D. Rockefeller, Jr. Memorial Parkway are within the Greater Yellowstone Ecosystem, one of the largest, intact temperate ecosystems on Earth. Within the park and parkway this diverse ecosystem is composed of alpine, forest, sagebrush, wetland, aquatic, and other ecological communities where natural processes continue to function with little human alteration.





4. The Snake River Headwaters flow through an iconic landscape of stunning canyons, open meadows, broad vistas, striking mountains, glacial lakes, and sage flats. These landscapes provide spectacular settings undeveloped by humans that create a distinctive sense of place and offer world-class recreational opportunities. The rivers and associated habitats of the Snake River Headwaters are critical to the sustainability of a full complement of native plants, wildlife, and aquatic species. In addition to the abundant natural resources, the cultural resources of these rivers reflect thousands of years of diverse people, cultures, and uses, which continue to carry cultural significance to American Indian tribes and others.
5. From prehistoric times to the present day, numerous diverse cultures, cultural trends, and values have influenced and been influenced by the Teton Range and Jackson Hole valley, and are reflected in the park's built heritage and ancestral landscape. The park and parkway represent two of the most notable conservation stories of the 20th century, which continue to inspire present and future generations. The formation of the park, a process that took more than half a century, was a struggle between private economic interests and a concern for conserving the Teton Range and valley floor.
6. Within the park and parkway, visitors can experience solitude, wilderness character, and a rare combination of outdoor recreational and educational activities, world-renowned wildlife and landscapes, and the cultural amenities of a vibrant community. Opportunities to view an impressive array of wildlife are extraordinary, including grizzly bears, gray wolves, North American bison, pronghorn, and one of the world's largest elk herds. Visitors of all abilities and interests can enjoy opportunities for physical, emotional, and inspirational experiences.
7. As part of the Greater Yellowstone Ecosystem, the park and parkway offer easily accessible and unparalleled opportunities for scientific research and educational study of temperate zone natural systems and processes in a range of elevations, and human relationships to these systems. The relatively pristine landscape serves as "control" or baseline for scientific study.

Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a park's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway:

- **Scenery.** The park and parkway contain an exceptionally wide array of scenery that can be viewed throughout the seasons. The iconic peaks of the Teton Range, its high elevation canyons, and its system of winding rivers and morainal, alpine, and backcountry lakes offer stunning views. Other exceptional scenic landscapes within the park and parkway include forests, sagebrush flats, and wet meadows and wetlands. These diverse scenic landscapes and clean, clear air provide visitors with ample opportunities to view the natural beauty and wildlife of the park and parkway.



- **Geologic Features and Processes.** Powerful ongoing geologic forces shape the park, parkway, and nearby Yellowstone National Park. Regional heat from the earth’s mantle combined with local heat from the plume of magma under Yellowstone have lifted and cracked the earth’s crust. Earthquakes generated along one of these cracks—the Teton fault—tilted the Teton Range skyward while dropping the valley of Jackson Hole. As the mountains were rising, massive glaciers flowed south from Yellowstone and alpine glaciers carved out U-shaped canyons and piedmont lakes ringed by glacial moraines. The glaciers melted, washing soil from the valley floor, and leaving behind an outwash plain covered with cobbles and carving terraces that step down to the modern Snake River. Today, small earthquakes occasionally shake the region, suggesting the power of future mountain-building. Remnant glaciers serve as reminders of the powerful and massive glaciers that shaped the landscape. All the while, rainfall and freeze-thaw cycles cause landslides and rockfalls.
- **Ecological Communities and Natural Processes.** The ecological communities of the park and parkway are vitally connected to the larger Greater Yellowstone Ecosystem and flourish through this connectivity. The extreme local topography, ranging from the rugged peaks of the Teton Range to the valley floor of Jackson Hole, and the lakes and streams that flow from the range, shape these communities and foster diverse vegetation and wildlife. Natural processes, including natural disturbances such as fire and landslides, as well as predator-prey interactions and long-distance migrations, exemplify a healthy, evolving landscape and ecosystem. Access to these dynamic ecological communities provides an opportunity for scientific and educational study and visitor enjoyment.
- **Aquatic Resources and Processes.** The park and parkway contain portions of the designated wild and scenic Snake River Headwaters and associated floodplains and riparian areas. There are complex systems of high-value wetlands throughout the park. Meltwater from mountain snowpack, remnant glaciers, and streams drain the high elevation areas, providing clean, cold water inputs to stream and lake habitats critical to native aquatic species such as the cutthroat trout. The upper Snake River drainage is the only place where native Yellowstone cutthroat trout and Snake River cutthroat trout coexist. The diverse aquatic communities in the park and parkway also provide important habitat for beaver, water birds, and other wildlife, as well as outstanding recreational opportunities for visitors.





- Cultural History and Resources.** The park and parkway tell important stories that illustrate the evolution of human relationships with the Teton mountain range and Jackson Hole. These stories reveal how the rugged mountains, rivers, sagebrush flats, wildlife, and the harsh climate have shaped humans, and how people have in turn shaped and protected those same resources on a landscape scale. The park tells the story of the American West and the American Indian communities who traversed and used the landscape. Archeological sites represent approximately 11,000 years of human presence on the landscape, and ethnographic resources give cultural meaning to natural features. Significant historical contexts tell the history of homesteading, environmental conservation, and dude ranching and tourism (significant to the establishment of Jackson Hole National Monument). These important historical contexts are memorialized in five nationally significant historic properties, including the Murie Ranch and Jackson Lake Lodge National Historic Landmarks, and the Bar BC Dude Ranch, Snake River Land Company Office and Residence, and Menor's Ferry / Maud Noble historic districts.
- Visitor Experiences in an Outstanding Natural Environment.** The park and parkway provide an excellent area in which visitors may immerse themselves in the spectacular natural setting of the Teton Range. Easy access, a range in the level of ability from beginner to expert (e.g., from a simple stroll to a moderate hike, a backcountry expedition, or technical mountaineering) and a wide range in the type of activities (such as boating, horseback riding, fishing, bicycling, cross-country skiing, snow shoeing, or leisurely driving) make spectacular recreational experiences available to a variety of people. The ability to be in the park and parkway throughout the day and night and year round allows visitors opportunities to experience an infinite combination of light, color, dark night skies, clean and clear air, natural sounds, smells, weather, seasons, variations in vegetation, movements of wildlife, and wilderness character.
- Natural Soundscapes and Night Skies.** Because of the diversity of habitats and wildlife species, the park and parkway have abundant and varied natural sounds that not only enhance visitor experience, but serve a critical ecological role. Spring's early morning bird chorus heralds the arrival of migrants and the resumption of breeding activities for many species of wildlife. Territories are defended and mates are attracted through the use of songs and calls. In the wetland areas, amphibians join the chorus for the same purposes. Summer brings thunderstorms and the sounds of insects during warm afternoons. Elk bugling in the fall portends the upcoming winter season with both its winter snow storms and impressive silent nights. The sound of flowing water from the Snake River and its cascading tributaries and the common sound of wind pervades the forests and sagebrush flats year-round. These sounds add depth and meaning for visitors, as does the opportunity to hear nothing—the sound of natural quiet. The park and parkway have historically had some of the clearest night skies in the country due to low humidity and isolation of the area. Naturally dark skies provide refuge for wildlife and are vital in sustaining migratory patterns, breeding, and feeding habits. Dark skies are important to visitors who experience stargazing, night walks, full moon hikes, and other nighttime activities.

Other Important Resources and Values

Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway contain other resources and values that are not fundamental to the purpose of the park units and may be unrelated to their significance, but are important to consider in planning processes. These are referred to as “other important resources and values” (OIRV). These resources and values have been selected because they are important in the operation and management of the park units and warrant special consideration in park planning.

The following other important resources and values have been identified for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway:

- **Recommended, Potential, and Eligible Wilderness.** Grand Teton National Park protects 122,604 acres of recommended wilderness and 20,850 acres of potential wilderness, as recommended in the 1972 wilderness suitability study by the National Park Service, and subsequent NPS recommendations in 1978. Together, these lands account for about 46% of Grand Teton National Park. A wilderness eligibility assessment was completed in 2013 for lands within the John D. Rockefeller, Jr. Memorial Parkway. The assessment determined that 21,500 acres (about 91%) of the parkway is eligible for possible inclusion in the national wilderness preservation system.
- **Other Historic Properties.** The park and parkway protect a wide range of other historic properties listed in or eligible for listing in the National Register of Historic Places. These properties, which include historic structures, cultural landscapes, and archeological sites, represent historic and prehistoric contexts that are significant on the state and local levels, rather than nationally. Examples of these properties include, but are not limited to, the Mormon Row, Beaver Creek, and Colter Bay historic districts.
- **Park Museum and Archive Collection.** The park’s museum collection tells the unique story of Grand Teton National Park and the John D. Rockefeller, Jr. Memorial Parkway through art, objects, scientific collections, and paper-based records. The David T. Vernon Collection, a collection of high quality American Indian items from approximately 100 tribes from all over the United States, is curated offsite and exhibited at the park. The park’s archival collections document the complex history of the park and parkway, including photographs, maps, early summit registers, administrative records, and other significant archival resources.



Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental and other important resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway:

- **Geology.** The Teton Range provides visitors unparalleled opportunities to comprehend powerful geologic processes and their influences on the natural and human world—the unique combination of fault-block geology, water, and glaciers shape this dynamic landscape.
- **Ecology.** As part of the Greater Yellowstone Ecosystem, one of the largest intact temperate ecosystems on Earth, the park and parkway preserve the resources of geology, water, air and the processes for plants and animals to coexist as they have for thousands of years.
- **People.** We celebrate nearly 11,000 years of human connection to this landscape and protect those cultural treasures that serve as touchstones to stories from every age.
- **Legacy.** The American people’s passion, commitment, and action have contributed to preserving the park and parkway through conservation, stewardship, and philanthropy—inspiring today’s stewards and future generations.
- **Inspiration.** The majestic landscape and deep cultural connections at the park and parkway inspires lifelong learning and meaningful place-based experiences; inviting all to share their stories, make their own connections, enrich each other’s lives, and find personal renewal.
- **Discovery.** Scientific discovery propels understanding and informs decisions that best preserve the integrity of the ever-changing and interdependent natural processes and human presence in the park and parkway.



Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental and other important resources and values change over time, the analysis of planning and data needs will need to be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

Special Mandates and Administrative Commitments

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memorandums of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway.

For more information about the existing special mandates and administrative commitments for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway, please see appendix B.

Assessment of Planning and Data Needs

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the park's fundamental and other important resources and values, and develop a full assessment of the park's planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

There are three sections in the assessment of planning and data needs:

1. analysis of fundamental and other important resources and values
2. identification of key issues and associated planning and data needs
3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental and other important resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

Analysis of Fundamental Resources and Values

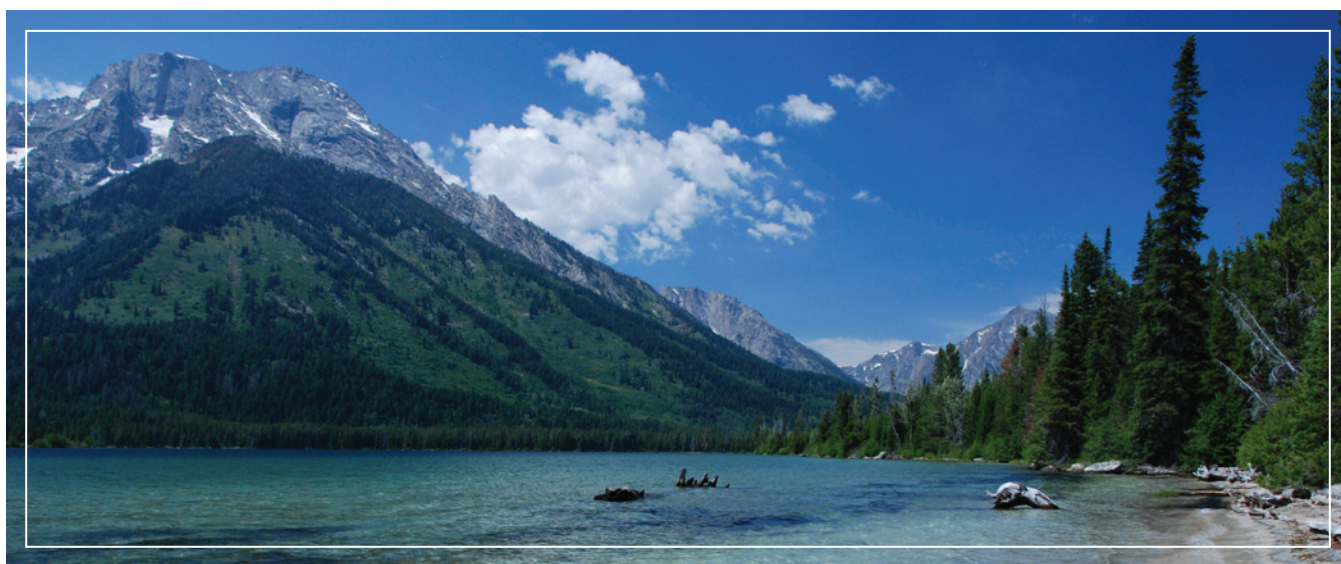
The fundamental resource or value analysis table includes current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.



Fundamental Resource or Value	Scenery
Related Significance Statements	Significance statements 1, 2, 3, 4, and 5.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • Grand Teton National Park is classified as a Mandatory Class I Federal Area under the Clean Air Act, which provides special protection for air quality and clean, clear views. • The John D. Rockefeller, Jr. Memorial Parkway is a Class II area and benefits from protections afforded by nearby Class I areas. • In the region, average natural visual range is reduced from almost 180 miles (without the effects of pollution) to about 140 miles because of pollution. The visual range is reduced to less than 75 miles on high pollution days. • Visitors come to the park and parkway to enjoy spectacular views of the windswept granite of the Teton Range, mountain lakes, and the Jackson Hole valley floor. Although air quality is generally good, park scenic vistas are sometimes obscured by regional haze caused by fine particles in the air from sources of pollution. • Developments in and around Grand Teton National Park continue to have a minor impact on the park's scenery. The addition of multistory housing and administrative office structures within the park have contributed to this impact. • The communities of Jackson and Teton Village and the Jackson Hole Airport are continuing to affect night skies within the southern portion of Grand Teton National Park. <p>Trends</p> <ul style="list-style-type: none"> • Increased visitation to popular frontcountry and backcountry/wilderness areas as well as greater motor vehicle traffic on park roads and aircraft landings/departures and overflights at and around the Jackson Hole Airport have impacted the scenery of the park, most notably at vantage points that look out upon the Jackson Hole valley from the Teton Range. • Development has continued to occur in the local Jackson Hole area including expansion of the resort community Teton Village. • The need for additional housing within Grand Teton National Park for its employees, volunteers, and partners will intensify as housing outside the park becomes less obtainable due to availability and costs. This need will impact the scenic resources of the park when existing structures are modified or new structures are constructed for housing purposes. • Growing use of wireless technology to communicate with others and have near instantaneous access to data and media will intensify the need to install towers throughout the park and parkway. • The visual integrity of cultural landscapes may have a higher value than their functional use. Native species have successfully replaced nonnative species of similar visual quality in historically significant agricultural landscapes. • From 2004–2013, the trend in visibility improved on the 20% clearest days and remained relatively unchanged on 20% haziest days, resulting in a relatively unchanging visibility trend.

Fundamental Resource or Value	Scenery
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • Scenic resources in the park and parkway are susceptible to air pollution-caused haze. Emissions from coal-fired power plants, vehicle exhaust, oil and gas development, fires, and agriculture are contributors to air quality impacts regionally. Nitrogen, sulfur, ozone, toxic air contaminants, and fine particles impact scenic resources such as visibility. Many of the same pollutants that ultimately fall out as nitrogen and sulfur deposition contribute to haze and visibility impairment. Sources of these pollutants include increasing traffic, air traffic at the nearby airport, and regional energy development. • Development, such as houses, within the park and the surrounding area threatens the scenic views from the park, particularly from high elevation trails and overlooks. • Tree growth at significant viewpoints obscures historic viewsheds. • Increased lights from the nearby communities of Jackson and Teton Village and the Jackson Hole Airport and motor vehicle traffic within the parks continue to affect night skies. • Effects of climate change, such as glacier retreat, decreased snow pack during the winter months, and lower lake levels, impact scenic values. • New and increased recreational demands and associated infrastructure continue to have an effect on scenic resources. Examples include the construction of multiuse pathways and trails for hiking and equestrian use. At night, air pollution scatters artificial lights, increasing the effect of light pollution on the night sky. <p>Opportunities</p> <ul style="list-style-type: none"> • Continue to comply with all federal, state, interstate, local requirements, and administrative authority, respecting the control and abatement of air pollution from federal facilities in the park. • Implement and update as necessary the fire management plan, which includes strategies for minimizing the effects of smoke during controlled burns. • Conduct prescribed fires under conditions more favorable to smoke management considerations (distribution, timing, ventilation, etc.) that may not affect air quality as significantly as a summer wildland fire. • Significant emissions reductions from the Jim Bridger and Colstip power plants, along with other regional power plants, are scheduled for 2018 for the protection of regional Class I areas. Combined with the expected shutdown of the Corrette power plant and expected reductions in vehicle exhaust emissions, this may improve air quality conditions at the park and parkway. • Interpret and highlight the ecological value of recently burned areas and other disturbances that contribute to the diversity of plant and animal communities. • Continue transportation planning to reduce vehicle use and congestion within the park and parkway. • Monitor vital attributes of air quality around the park and parkway to keep track of changes. • Work with the Greater Yellowstone Area Clean Air Partnership and federal, state, and local agencies, industry, and public interest groups to develop strategies to reduce air pollution and protect and restore park resources. • Participate in the Climate Friendly Parks Program, increase use of hybrid vehicles, promote “no idling” of vehicles throughout the park, and improve energy conservation measures in park facilities. • Continue to work closely with the Jackson Hole Airport, local governments, and businesses and residences within and outside of the park on the importance of protecting the park’s scenic resources. • Restore significant viewpoints and historic viewsheds that have become obstructed by vegetation growth. • Interpret the importance of and threats to the scenic values to park visitors and the local community.

Fundamental Resource or Value	Scenery
<p>Data and/or GIS Needs</p>	<ul style="list-style-type: none"> • Visual resource inventory. • Continue glacier photo monitoring. • Collect data on visitor perception of human impacts on scenery (i.e., crowding, etc.).
<p>Planning Needs</p>	<ul style="list-style-type: none"> • Visual resource management plan. • Fire management plan (update). • Telecommunications plan (update). • Land protection plan (update).
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • Clean Air Act (42 USC 7470(2)) • National Parks Air Tour Management Act of 2000 • National Parks Overflight Act of 1987 (Public Law 100-91) • Acid Rain Precipitation Act of 1980 • Airport and Airway Development Act of 1970 • Airports in National Parks, Monuments, and Recreation Areas (16 USC 7a) • National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) • Telecommunications Act of 1996 (47 USC 332 note; PL 104-104 704(c)) • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and other Natural and Cultural Resources" • Executive Order 13728, "Wildland-Urban Interface Federal Risk Mitigation" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS Management Policies 2006 (§1.4) "Park Management" • NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS Management Policies 2006 (§4.7) "Air Resource Management" • NPS Management Policies 2006 (§8.4) "Overflights and Aviation Uses" • NPS Management Policies 2006 (§8.6.4.3) "Telecommunication Sites" • NPS Reference Manual 18: Wildland Fire Management • NPS Natural Resource Management Reference Manual 77 • NPS-28: Cultural Resource Management Guideline



Fundamental Resource or Value	Geologic Features and Processes
Related Significance Statements	Significance statements 1, 2, 5, and 6.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • Geologic features are intact and processes continue in a natural manner with negligible impacts from visitor activities. • The Teton Fault is the most important factor contributing to the spectacular topography and scenery of the Teton Range. The most likely seismic hazards in the Teton region are ground shaking and deformation, and associated secondary effects, including rock and snow avalanches, landslides, and flood inundation of low-lying areas. • Conditions that produce landslides in the park and parkway include (1) vulnerable rock, (2) slopes parallel to dipping strata, (3) saturated ground, (4) seismic activity, and (5) removal of base support by undercutting of the slope toe. In addition to landslide deposits, talus and related deposits are widespread throughout the Teton Range. • The 1968 U.S. Geological Survey (USGS) topographic map of Grand Teton National Park shows 9 named glaciers and approximately 136 undifferentiated glaciers or perennial snow fields. A thorough inventory of the park's glaciers, however, has not been conducted to date, and long-term documentation is sparse. <p>Trends</p> <ul style="list-style-type: none"> • Glaciers and snowfields are sensitive to climatic change, and are presently getting smaller each year. Past records of glacier extent indicate both advance and retreat, although the overall trend is one of retreat. Models that simulate the response of alpine glaciers in Wyoming to projected climate change predict the near-complete disappearance of Teton Glacier within 30 to 75 years. • Braided rivers and streams are dynamic. Existing numerous dikes, dams, and diversions affect the natural flow of rivers, causing changes in geomorphology. • Landslides, avalanches, and natural events occur, changing the landscape and posing potential hazards to visitors. Landslides, avalanches, and other mass movements are exacerbated by increasing climate variability, including more extreme events and increasing peak runoff.
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> • Potential disruption of geothermal resources from activities on adjacent land (i.e., geothermal development, oil and gas development). • Climate change may pose a threat to the geologic features and processes in a number of ways, including alterations in the severity and frequency of the monsoons and winter storms (which would affect erosion rates and levels of snowfall), and changes in temperature and number of nights of freezing temperatures (which could alter freeze-thaw processes and size and duration of the snowpack). These changes could affect glacial processes. • Increased interest in diversions and dams, and increasing water rights demands for development outside of the park affect natural flow and cause changes in geomorphology. • Climate change and retreating glaciers and snow/ice fields would have impacts on an array of natural and cultural resources. <p>Opportunities</p> <ul style="list-style-type: none"> • Cooperate with the U.S. Geological Survey, Bureau of Reclamation, and other state and local agencies and academic institutions to identify and monitor geologic hazards and processes throughout the park and parkway. • Continue to pursue research regarding the interconnected underground geothermal system of the Greater Yellowstone area and the Teton fault system to develop a deeper understanding as a basis for protecting the system from human caused changes.

Fundamental Resource or Value	Geologic Features and Processes
<p>Threats and Opportunities</p>	<p>Opportunities (continued)</p> <ul style="list-style-type: none"> • Develop interpretive and educational programs to inform visitors and neighbors about geologic processes and potential hazards associated with those processes. • Design and locate future development and infrastructure changes in a manner that will not impede natural processes. • Develop a geologic hazards response plan.
<p>Data and/or GIS Needs</p>	<ul style="list-style-type: none"> • Continue research on geologic processes to better identify hazards in high visitor use areas. • Identify areas of concentrated development and visitor use near known geologic hazards. • Expand inventorying and monitoring to better understand the role of climate change and to assess the effects of this change on glaciers, snowfields, and soils. • Map geologic and soil layers with greater accuracy than what is currently provided on a 1:24,000 scale. • Water table / aquifer level monitoring. • Complete inventory of glaciers and permanent snow fields to support monitoring of decline/change. • Track trends in pathogens and visitor use of thermal features.
<p>Planning Needs</p>	<ul style="list-style-type: none"> • None identified.
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • Geothermal Steam Act of 1970, and amendments • Clean Water Act of 1972 • Clean Air Act (42 USC 7470(2)) • Federal Cave Resources Protection Act of 1988 • National Environmental Policy Act of 1969 • National Parks Omnibus Management Act of 1998 • Paleontological Resources Preservation Act of 2009 • “Parks, Forests, and Public Property” (36 CFR 36) • Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and other Natural and Cultural Resources” <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (§4.6.1) “Protection of Surface Waters and Groundwaters” • NPS <i>Management Policies 2006</i> (§4.6.2) “Water Rights” • NPS <i>Management Policies 2006</i> (§4.6.4) “Floodplains” • Directors Order 77: <i>Natural Resource Management</i> • NPS <i>Natural Resource Management Reference Manual 77</i>



Fundamental Resource or Value	Ecological Communities and Natural Processes
Related Significance Statements	Significance statements 3, 4, 5, and 6.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • The park and the parkway, combined with other federal lands in the Greater Yellowstone Ecosystem, provide one of the largest intact temperate ecosystems on Earth. • Wolves and grizzly bears have achieved biological recovery goals and are continuing to fill their natural role in the park and parkway as the populations move into the area. • The park and parkway have joined other agencies in an agreement for “no net loss” of grizzly bear habitat in the Primary Conservation Area. • Park staff and volunteers manage human-wildlife interactions whenever possible to ensure safety for both humans and wildlife such as bears. • Fragmentation of habitat occurs from many sources inside and outside the park. Within the park, roads, trails, park development, and development on inholdings fragment the land. Outside the park, fragmentation occurs from roads and other development. • Increased backcountry use also affects biotic communities. Trails, campsites, and human waste are the result of longer seasons of backcountry use, and other visitor trends. • The parkway allows hunting in accordance with applicable laws of the United States and the state, except the Secretary can designate zones or periods where no hunting or fishing is allowed for reasons of public safety, administration, or public use and enjoyment. • The Jackson elk herd receives supplemental winter feeding on lands outside the park, which bolsters the population. As stated in enabling legislation, elk are subject to a reduction program within Grand Teton National Park. Predators influence the productivity and distribution of elk. Chronic wasting disease is currently found in elk, deer, and moose populations in south central and eastern Wyoming and is an increasing threat. A proportion of the bison and elk populations has brucellosis and can transmit it to domestic livestock. • Wetland habitats throughout the park are relatively intact, although areas near roads and developments have been impacted by infrastructure and development. • Associated tribes have a cultural interest in the ecological health of the ecosystems of the park and parkway. • Invasive animal and plant species continue to expand and affect native communities. • Climate change is impacting abiotic and biotic communities as described in the key issues section of this document. • A wildlife hazard management plan (2014) was prepared for the Jackson Hole Airport to monitor and reduce the presence of potentially hazardous wildlife that can pose risks to wildlife and aircraft operations. • The park/parkway fire management plan allows wildland fire to play its natural role in maintaining natural communities. <p>Trends</p> <ul style="list-style-type: none"> • Concordant with increased visitation, the number of vehicle-wildlife conflicts is increasing. • The Moose-Wilson corridor, Jenny Lake, String and Leigh Lakes, Lupine Meadows, and Taggart Lake are receiving traffic and parking pressure due to increased park visitation. • Habitat fragmentation is increasing as a result of many sources inside and outside the park. Soaring real estate prices prevent acquisition of inholdings, and drive residential development within and adjacent to the park. Energy exploration and production on non-park lands throughout the ecosystem has increased significantly. • Approximately half of all naturally ignited wildland fires are suppressed at initial attack. • Invasive nonnative plants are increasing in acreage and number of species.

Fundamental Resource or Value	Ecological Communities and Natural Processes
<p>Current Conditions and Trends</p>	<p>Trends (continued)</p> <ul style="list-style-type: none"> • Agricultural practices and livestock grazing have altered habitats and facilitated the spread of more than 12,000 acres of invasive plant species inside the park. • Livestock grazing use has decreased from historic levels within the park. • The number of nonnative mountain goats has increased. • Increased visitation is affecting vegetation, soils, and other natural resources. • Recent studies have shown that noise from road traffic displaces birds and other wildlife.
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • There will be increasing fragmentation of habitat from development of adjacent lands and inholdings, as well as additional park infrastructure (i.e., Grand Teton National Park transportation plan and pathways, new park housing, improved commercial services). Increased visitation within wilderness and backcountry areas has also affected wildlife and wildlife habitat. The slow but steady incremental development could have significant cumulative effects on wildlife habitats. • Inappropriate human-wildlife interactions can disturb wildlife, instill negative behavior, and potentially threaten the safety of humans and wildlife alike. • If the grizzly bear and wolf are de-listed, these species could possibly be hunted in the parkway under existing law. • Invasive nonnative plants are continuing to spread, and are displacing native plant communities and critical wildlife habitats. • Increased energy and gas development can impact migration routes for terrestrial species, such as deer and pronghorn. • Diseases and pathogens, such as white pine blister rust, could alter vegetative communities and wildlife habitat. • A significant number of naturally ignited wildland fires are suppressed, thereby removing the effects of that disturbance event from the ecosystem. • Climate change could alter vegetative communities and wildlife habitat. • Natural resources in the park and parkway are at risk for harmful effects of air pollution including nutrient enrichment and acidification from excess deposition of nitrogen and sulfur air pollutants. Nitrogen deposition levels are above critical loads for lichen, herbaceous, and forest vegetation. Alpine, subalpine meadow, wetland, and arid and semi-arid vegetation types are sensitive to nutrient enrichment effects of excess nitrogen from deposition, which can help invasive plant species to grow faster and out-compete native vegetation adapted to lower nitrogen conditions. High elevation lakes are especially sensitive to the excess deposition, which can alter lake diversity. Also, airborne toxics including current-use pesticides and mercury have been found in park air, vegetation, lakes, and snow. • Ground-level ozone sometimes reaches levels that cause injury to ozone-sensitive plants including quaking aspen, spreading dogbane, and Scouler's willow, although the low level of ozone exposure makes the risk of foliar ozone injury to plants low. • Expanding population of nonnative mountain goats could impact native bighorn sheep population through competition for resources and disease transmission. • Natural soundscapes are being altered by increased visitation. • Effects of climate changes on the structure and function of ecological communities as well as timing and duration of park visitation. • Increased development outside the park. • Outside influence to add new and increased recreation.

Fundamental Resource or Value	Ecological Communities and Natural Processes
<p>Threats and Opportunities</p>	<p>Opportunities</p> <ul style="list-style-type: none"> • Continue and expand ongoing collaboration, communication, agreements, and partnerships with other agencies, organizations, citizens, American Indian tribes, and communities to protect the Greater Yellowstone Ecosystem. • Implement and keep current the fire management plan to restore a more natural role for wildland fire in the Greater Yellowstone Ecosystem under closely managed conditions. • Use management treatments, such as prescribed fire, as a surrogate for suppressed wildland fires to introduce this process as a disturbance element that can influence the landscape. • Continue to manage human-wildlife interactions when possible and appropriate through NPS staff and volunteer presence when wildlife is close to roads or other areas where visitors are present. • Explore additional management strategies, such as hazing and temporary road closures, to ensure human-wildlife safety when potentially dangerous or sensitive wildlife species are present. • Maintain and restore predator-prey relationships through ongoing interagency planning. • Work with the State of Wyoming regarding hunting and trapping in the parkway. • Continue to implement the recommendations of the <i>National Elk Refuge and Grand Teton National Park Bison and Elk Management Plan/Environmental Impact Statement</i> (completed in 2007) to address bison and elk ecology, loss and degradation of elk winter range, the number of elk and bison inhabiting the refuge and park, population control measures, forage management, winter feeding, disease management, and the restoration of habitats. These recommendations include developing an adaptive management plan for the bison/elk management. • Develop an invasive plant management plan for the park and parkway. Increase the use of early detection and rapid treatment methods on new invasive plant species and in backcountry areas. Aggressively act to reduce valley floor invasive species populations that alter habitats and act as seed sources. Work with cooperators to increase public education and involvement in invasive plant species management. • Pursue avenues for propagation of native seed for use in restoration of agricultural lands and post-weed treatment. • Continue to inventory and monitor specific park resources identified in the Greater Yellowstone Ecosystem Inventory and Monitoring Program. • Continue to monitor visitor use and experience in frontcountry, backcountry, and wilderness areas. • Promote research to increase the understanding of natural resources, systems, and processes in Greater Yellowstone Ecosystem and human interactions with the ecosystem. • Institute science-informed decision-making, incorporating the results of resource monitoring and research into all aspects of park operations. • Identify lands external to the park where ecological processes, natural and cultural resources, and human use affect park resources or are closely related to park resource management considerations. Initiate joint management actions, agreements, or partnerships to promote resource conservation. • Improve interpretation and education about the Greater Yellowstone Ecosystem and threats to those resources to enhance visitor understanding and appreciation and improve resource stewardship. Incorporate research and new information. • Balance cultural resource values and traditional ecological knowledge with ecological needs where significant cultural resources exist within the ecosystems. • Continue cooperative efforts with Greater Yellowstone Area Clean Air Partnership and other federal and state air quality agencies and local stakeholders to reduce air quality impacts in the park from sources of air pollution. Consider options for action with the Greater Yellowstone Coordinating Committee to address the excess nitrogen deposition issue. • Develop a strategy for agricultural lands to meet desired conditions in balance with cultural resource values.

Fundamental Resource or Value	Ecological Communities and Natural Processes
Data and/or GIS Needs	<ul style="list-style-type: none"> • Location of primary conservation area/secure habitat (bears), wolf dens, range of/critical habitat for elk, bison, moose, pronghorn, etc. • Update existing locations of invasive nonnative plants. • Continue to assess locations of agricultural disturbances and long-term monitoring of native vegetation restoration in these disturbed areas. • Wildlife habitat connectivity and effects of infrastructure and development. • Study movement, distribution, diets, disease, and productivity of nonnative mountain goats in Teton Range. • Collect data on type, timing, duration, and intensity of winter recreational activities throughout the park as well as potential influences on wildlife. • Continue to update and investigate fire history / vegetation disturbance regimes in the park and surrounding lands in order to plan treatments in line with a well understood disturbance history. • Monitoring of neotropical migratory birds. • Understanding ecological role of bats and foxes and mitigating human-animal interactions and conflicts. • Rare plant inventory and management guidelines. • Continue research on resources sensitive to air pollution and critical loads of pollutant deposition to establish goals for ecosystem protection and recovery. • Ongoing in-park and nearby air quality monitoring (for deposition, ozone, visibility, particulate matter) to maintain a long-term record for understanding of threats from development. • Traditional ecological knowledge studies. • Effects of livestock grazing on native plant and animal communities (cattle, horses, and pack stock). • Study to determine which invasive species are the most threatening to ecological processes and/or most treatable. • Data on the economic value of ecological services. • Information on the ecosystem community energy flow.
Planning Needs	<ul style="list-style-type: none"> • Resource stewardship strategy. • Wilderness stewardship and backcountry management plan for the park and parkway. • Vegetation management plan including invasive plant management. • Mountain goat management plan. • Airport wildlife hazard mitigation plan. • Bear management plan. • Fire management plan (update). • Livestock management plan. • Land protection plan (update).

Fundamental Resource or Value	Ecological Communities and Natural Processes
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • Grand Teton National Park Grazing Study Act • Bald and Golden Eagle Protection Act of 1940, as amended • Endangered Species Act of 1973, as amended • National Invasive Species Act of 1996 • Lacey Act of 1900, as amended • Federal Noxious Weed Act of 1974, as amended • Clean Water Act of 1972 • Clean Air Act (42 USC 7470(2)) • Federal Cave Resources Protection Act of 1988 • Federal Insecticide, Fungicide, and Rodenticide Act • Migratory Bird Treaty Act of 1918 (16 USC 703-711) • Executive Order 11514, "Protection and Enhancement of Environmental Quality" • Executive Order 11990, "Protection of Wetlands" • Executive Order 12088, "Federal Compliance with Pollution Control Standards" • Executive Order 13112, "Invasive Species" • Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" • Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds" • Executive Order 13728, "Wildland-Urban Interface Federal Risk Mitigation" • Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" • Secretarial Order 3336, "Rangeland Fire Prevention, Management and Restoration" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • Director's Order 18: <i>Wildland Fire Management</i> • Director's Order 77: <i>Natural Resource Management</i> • NPS <i>Management Policies 2006</i> (chapter 1) "The Foundation" • NPS <i>Management Policies 2006</i> (chapter 3) "Land Protection" • NPS <i>Management Policies 2006</i> (chapter 4) "Natural Resource Management" • NPS <i>Management Policies 2006</i> (chapter 6) "Wilderness Preservation and Management" • NPS <i>Management Policies 2006</i> (chapter 8) "Use of the Parks" • NPS <i>Management Policies 2006</i> (chapter 9) "Park Facilities" • NPS <i>Management Policies 2006</i> (chapter 10) "Commercial Visitor Services" • NPS <i>Reference Manual 18: Wildland Fire Management</i> • NPS <i>Natural Resource Management Reference Manual 77</i> • <i>Department of the Interior Policy on Consultation with Indian Tribes</i>



Fundamental Resource or Value	Aquatic Resources and Processes
Related Significance Statements	Significance statements 3, 5, and 6.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • The Upper Snake River is impounded by Jackson Lake Dam, operated by the Bureau of Reclamation to supply agricultural water to Idaho. Jackson Lake provides a variety of popular opportunities for fishing and boating. The current lake is about 40 feet higher than the natural lake, and has a highly fluctuating shoreline that affects vegetation, habitat, scenic views, recreation, and commercial services. Dam operations affect downstream hydrology, streambed geomorphology, habitat, fisheries, and recreation. Drought in recent years has further impacted lake levels and downstream flow. • All of the waters in Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway have been designated as Outstanding Natural Resource Waters by the U.S. Environmental Protection Agency (they exceed the standard due to near pristine condition). • The larger natural lakes are increasingly popular for boats, kayaks, and canoes. Use of Jackson and Jenny Lakes has the potential to impact water quality. • Lakes are magnets for large numbers of hikers and day-users, increasing shoreline trampling, loss of vegetation, erosion, impacts on reptiles and amphibians, and loss of water quality. • Some 88,000 people per year float the Snake River, most with commercial guides. • The park and parkway completed the <i>Snake River Headwaters Comprehensive River Management Plan / Environmental Assessment (2013)</i> in coordination with Yellowstone National Park and the U.S. Fish and Wildlife Service. The plan includes desired conditions for resources and visitor use, sets carrying capacities, and includes a strategy for monitoring. • Aquatic invasive species including nonnative fish, plants, and invertebrates pose a threat to the aquatic ecosystem. Fishing for native and nonnative fish is popular. • Nonnative lake trout have been historically stocked in Jackson Lake. This practice was discontinued in 2007. Stocking of native species continues in other lakes. Native and nonnative fish are being stocked outside the park but within the watershed. Nonnative rainbow trout hybridize with the cutthroats. • The Gros Ventre River goes dry in the fall due to water diversion. • The NPS inventory and monitoring network has implemented a water quality monitoring plan. • Historic irrigation networks flow from natural water sources. • The natural integrity of Huckleberry Hot Springs, Kelly Warm Spring, and other geothermal features are protected. However, nonnative fish, frogs, and other organisms are present and thriving in Kelly Warm Spring. • The waters of the park and parkway are naturally inhabited by cold water fish species primarily limited to waterways with connectivity to the Snake River (limited dispersal in high elevation portions of the park due to natural fish barriers). There are two to five human-caused barriers to fish movement still present in the park. Irrigation structures currently cause significant entrainment issues in three to four perennial streams and rivers in the parks. Nonnative fishes, primarily trout, are abundant in a majority of the fish-inhabited waters, causing minor to serious detriments to the persistence of native fishes. • The Bureau of Reclamation continues to advise the park prior to operational changes in storage or releases of water from Jackson Lake Dam as part of a long-term agreement between the National Park Service and Bureau of Reclamation.

Fundamental Resource or Value	Aquatic Resources and Processes
<p>Current Conditions and Trends</p>	<p>Trends</p> <ul style="list-style-type: none"> • Changes in water use and irrigation outside of the park are impacting water quantity, particularly in the lower Gros Ventre River, where dewatering occurs during the irrigation season. • Concentrations of ammonium in wet deposition from regional agricultural sources are elevated and increasing at sites in or near to the park. • Measurements indicate higher atmospheric nitrogen (N) inputs to the north of the park and lower levels to the south—a gradient reflected in nitrogen concentrations in rain and snow, soils, and plants. • There have been elevated concentrations of current-use pesticides (<i>chlorpyrifos</i>, <i>endosulfans</i>, <i>dacthal</i>, and <i>lindane</i>) found in park air and vegetation samples. • There have been elevated concentrations of mercury, pesticides, and other contaminants found in high altitude lakes at the park, including increasing concentrations of mercury and ammonium in snow in the park. • Growth in watercraft use increases the potential for aquatic invasive species in the park. • Increase of didymo and other algae blooms. • Mean annual temperatures in the region are projected to rise 5.8 degrees Fahrenheit (°F) to 10.8° (3.2° to 5.6° Celsius) by 2100, with temperatures rising at similar rates across all seasons. • The Greater Yellowstone Ecosystem is projected to be largely snow-free on April 1 by 2075 under the highest emission scenario as a result of warming temperatures and a declining snow water equivalent. • Mean annual precipitation is projected to increase an average 5% +/- 8% by 2100, with precipitation increasing most rapidly in the spring and decreasing slightly in the summer. • The aridity of the region is projected to increase between 7% and 18% by 2100. While mean annual precipitation is projected to rise, these increases will not be adequate to offset increases in potential evapotranspiration that will result from increases in temperature; therefore, aridity is projected to increase. • The mean annual runoff is projected to increase, with pronounced increases in the spring runoff, more extreme spring peak runoff volumes, and decreases in the summer. • The parks’ limited data suggest that the native fish populations are relatively stable, despite being greatly reduced in abundance in some water bodies as a result of the introduction and proliferation of nonnative fishes.
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • Long-term drought cycle and increase in runoff extremes will continue adverse effects of lake levels and downstream flows. • NPS and commercial development, boating, large and increasing numbers of visitors (both frontcountry and backcountry), could cause water quality to deteriorate. • Aquatic invasive species (including nonnative fish, invertebrates, amphibians, and plants) may displace native species. • Emissions from coal-fired power plants, vehicle exhaust, oil and gas development, fires, and agriculture contribute to excess atmospheric deposition of nitrogen and sulfur pollutants affecting high elevation lakes, wetland, and aquatic biota. • Increasing development and concurrent increasing water demands deteriorate aquatic habitat and water quality. • Hydroelectric development at Jackson Lake Dam could exacerbate flow regimes of the Snake River and its flood plain. There have been proposals for such changes in the past. • Changes in irrigation will alter significant cultural landscapes through lack of water if the networks are not maintained. • Climate change will probably change the seasonal flow and water temperature of the rivers, lakes, and other water bodies.

Fundamental Resource or Value	Aquatic Resources and Processes
Threats and Opportunities	<p>Threats (continued)</p> <ul style="list-style-type: none"> • Diminished capacity of ephemeral wetland habitats and wetland-dependent species to endure altered hydrological regimes. • Threats to the parks' fishery include the persistence of nonnative species, introduction of new invasive species, habitat degradation and fragmentation, changes in water demand, entrainment of native fish within water diversion systems, and climate change. <p>Opportunities</p> <ul style="list-style-type: none"> • Continue to work with Bureau of Reclamation, Wyoming Game and Fish Department, and the public to update the memorandum of understanding regarding the operation of the Jackson Lake Dam and surrounding lands. • Seek opportunities to restore natural flows to the Gros Ventre River. • Continue to work with Wyoming Game and Fish Department to ensure healthy, sustainable native populations of fish, including research, management of public use, and enforcement of regulations. • Minimize the use of pesticides and chemicals within the park and manage the use in accordance with NPS policy and federal regulations. • Ensure that new or redesigned facilities do not adversely affect water quality. Use best management practices for controlling stormwater runoff throughout the developed areas of the park. • Avoid potential impacts on wetlands or floodplains through mitigation measures for construction. • Strive to conserve water in all park and concession operations. • Continue to educate and promote public understanding of water quality issues at the park and encourage behavior that minimizes visitor impacts on water quality. • Promote research and institute science based decision-making for aquatic resources, including water quality and pathogen monitoring. • Implement aggressive aquatic invasive species prevention program to prevent introduction of aquatic invasive species in park and parkway waters. • Address areas where aquatic invasive species are established and plan for removal of aquatic invasive species. • Seek alternate methods of cultural landscape preservation when irrigation is not feasible. • Work with partners to initiate and/or increase monitoring of amphibian populations. • Work with partners to evaluate habitat connectivity and entrainment of native fish populations in natural and man-made aquatic systems. • Address nonnative fish distribution and consider management plan for restoration of certain park waters where native fish restoration would be feasible. • Continue to implement actions approved in the <i>Snake River Headwaters Comprehensive River Management Plan / Environmental Assessment (2013)</i>. • Study and improvement opportunities including restoring fragmented and degraded aquatic habitats, reducing fish entrainment, assessing the impacts of climate change on the cold water fishery, and understanding the current status of native fishes in the park. • Develop cooperative agreements with users with water rights within the park. • Continue cooperative efforts with Greater Yellowstone Area Clean Air Partnership and other federal and state air quality agencies and local stakeholders to reduce air quality impacts in the park from sources of air pollution. Consider options for action with the Greater Yellowstone Coordinating Committee to address the excess nitrogen deposition issue.

Fundamental Resource or Value	Aquatic Resources and Processes
Data and/or GIS Needs	<ul style="list-style-type: none"> • Collect water flow and temperature data relative to health of river ecosystem. • Collect water flow data relative to recreation demands. • Study trends in fish and amphibian populations (native vs. nonnative) as well as potential responses of these species to climatic drivers. • Understanding of acoustic resources underwater. • Collect data to address aquatic invasive species data needs within and surrounding (regional and national) the parks. • Collect geothermal resources data (including human pathogens, thermophilic organisms, hydrogeologic system, impacts from human use, effects of climate change on physical resource). • Update the hydrologic features of the park (major Snake River and other tributary channels, changes in flow, and permanent and perennial stream locations). • Collect data on life histories/strategies of native fishes and their current status in the parks. • Documentation and evaluation of irrigation networks within the park. • Continue research on resources sensitive to air pollution and critical loads of pollutant deposition to establish goals for ecosystem protection and recovery. • Ongoing in-park and nearby air quality monitoring (for deposition, ozone, visibility, particulate matter) to maintain a long-term record for understanding of threats from development. • Quantify water rights for the Snake River Headwaters wild and scenic river segments. • Water quality monitoring on public beaches. • Water table / aquifer level monitoring. • Track trends in pathogens and visitor use of thermal features.
Planning Needs	<ul style="list-style-type: none"> • Water resources management plan, including water quality and quantity monitoring. • Develop plan to address aquatic invasive species, including removal of aquatic invasive species from Kelly Warm Spring. • Fisheries management plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • Reclamation Act of June 17, 1902 (32 Stat.388) • Bald and Golden Eagle Protection Act of 1940, as amended • Endangered Species Act • Clean Air Act (42 USC 7470(2)) • Federal Insecticide, Fungicide, and Rodenticide Act • Federal Water Pollution Control Act (Clean Water Act) • Migratory Bird Treaty Act of 1918 (16 USC 703-711) • National Environmental Policy Act of 1969 • National Flood Insurance Act • National Invasive Species Act • National Parks and Recreation Act • NPS Concessions Management Improvement Act of 1998 • Park System Resource Protection Act • Snake River Compact (1948, 1950, 1955) • Water Resource Planning Act of 1965 • Watershed Protection and Flood Prevention Act • Wild and Scenic Rivers Act

Fundamental Resource or Value	Aquatic Resources and Processes
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV (continued)</p> <ul style="list-style-type: none"> • Executive Order 11514, "Protection and Enhancement of Environmental Quality" • Executive Order 11988, "Floodplain Management" • Executive Order 11990, "Protection of Wetlands" • Executive Order 12088, "Federal Compliance with Pollution Control Standards" • Executive Order 13112, "Invasive Species" • Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and other Natural and Cultural Resources" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS Management Policies 2006 (chapter 1) "The Foundation" • NPS Management Policies 2006 (chapter 4) "Natural Resource Management" • NPS Management Policies 2006 (chapter 8) "Use of the Parks" • NPS Management Policies 2006 (chapter 9) "Park Facilities" • NPS Management Policies 2006 (chapter 10) "Commercial Visitor Services" • Director's Order 77-2: Floodplain Management • NPS Natural Resources Reference Manual 77



Fundamental Resource or Value	Cultural History and Resources
Related Significance Statements	Significance statements 4 and 6.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • There are 474 recorded archeological sites within Grand Teton National Park and 20 recorded archeological sites within the John D. Rockefeller, Jr. Memorial Parkway. Of these 494 documented sites, 124 are in fair condition, 208 are in good condition, 17 are inundated, 77 are in poor condition, 44 are in unknown condition, 1 has been destroyed, and 23 lack data. A total of 185 of these sites are considered eligible for or are listed in the National Register of Historic Places, 261 are considered not eligible for listing in the national register, and 48 are unevaluated. • Of the recorded archeological sites, 150 are historic, 4 are modern, 341 are prehistoric, and 3 are unknown. Historic districts are presumed to include historical archeology. • High elevation ice patches are likely to contain cultural material. • The Enclosure Site is a presumed high elevation vision quest site and is the only prehistoric architectural site within the park. • There are currently 24 associated tribes identified through various treaty rights outlined in an ethnographic study. “An Assessment of American Indian Occupation and Uses of the Cultural and Natural Resources of Grand Teton National Park and the National Elk Refuge” by the Walker Research Group, was completed in 2007. • Ethnographic resources exist in the park that are not reflected in archeological sites, including traditionally harvested natural resources (plants, animals, and minerals) and sacred landscapes. Three traditional cultural properties have been formally recorded and more are likely to exist within the park. • Historic resources span temporally from the fur trade era, through homesteading, Civilian Conservation Corps era, dude ranching, the conservation movement, and up to the Mission 66 era. • The settlement history of Jackson Hole has altered native conditions in some places. Some of these settlements and cultural landscapes have acquired historical significance of their own. • There are 695 historic structures listed in or eligible for listing in the National Register of Historic Places, including buildings, structures, linear resources, and features. The Murie Ranch and Jackson Lake Lodge are national historic landmarks. • Four historic structures reports have been completed for historic properties in the park, and additional ones are planned in the future. • Rehabilitation of the White Grass Dude Ranch was completed in 2016. • Many historic properties currently serve park and visitor needs, including as hotels, residences, trails, and storage. • Extensive linear features, such as buck and rail fencing and irrigation ditches, were part of homesteading and ranching. Many of these features are no longer in use and are deteriorating. Other linear features in current use include roads and trails. • Several cultural landscape inventories and cultural landscape reports have been completed. Additional cultural landscapes are awaiting documentation and evaluation. • Historically significant viewpoints and viewsheds exist within the park but are not well understood. <p>Trends</p> <ul style="list-style-type: none"> • Documented archeological resources are generally stable and their understanding and protection is increasing. • Climate change is resulting in ice patch retreat. Melting ice patches may expose significant archeological resources. • Recent archeological surveys revealed an increase in documented stone circles, which are most likely tipi rings.

Fundamental Resource or Value	Cultural History and Resources
<p>Current Conditions and Trends</p>	<p>Trends (continued)</p> <ul style="list-style-type: none"> • The number of associated tribes identified for government to government consultation is increasing. • Historic buildings in poor condition continue to deteriorate, and historic buildings in use continue to be used and improved. • Conditions have improved significantly at White Grass Dude Ranch and Murie Ranch in the last 12 years (2004–2016). • Built resources continue to age, reaching the 50-year mark required for national register evaluation. • Partners are increasingly responsible for appropriate care of historic resources under more active park management.
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • Climate change leads to ice patch retreat, which exposes sensitive organic archeological and archeobiological materials. Once exposed, these resources decay rapidly. • Proposed construction and maintenance activities may damage archeological resources. • Inadvertent human impact and vandalism may lead to the loss of archeological resources. • Culturally modified trees are probably present within the park but have not been surveyed or identified, and are therefore subject to natural mortality or intentional removal without prior documentation. • Many historic properties are badly deteriorating due to exposure and lack of resources for deferred maintenance. • Partners adaptively using historic structures sometimes make inappropriate changes. • Vandalism, including graffiti and damage, of historic buildings threatens their integrity and requires costly repairs. • Oral histories, which can enlighten knowledge of human history of the region, are in danger of being lost if not collected. • Cultural landscapes are in danger of being adversely affected or lost from park management actions and increased visitation. • Ethnographic resources are in danger of damage through park development and increased visitation. • Significant increases in visitation threaten to damage cultural resources and traditional cultural properties. • Archeological surveys and deferred cultural maintenance activities are delayed due to lack of resources. <p>Opportunities</p> <ul style="list-style-type: none"> • Complete traditional use and ethnographic study for the Enclosure Site. • Consult regularly with associated American Indian tribes to develop and accomplish the programs and interpretive exhibits within the park and parkway in a way that respects the beliefs, traditions, and other cultural values of the American Indian tribes that have ties to the region. In consultation with associated tribes, recognize the past and present people in the region and traces of their use as an important part of the cultural environment to be preserved and interpreted. • Periods of ice patch retreat provide the opportunity to conduct ice patch archeological surveys. • Culturally modified trees from the historic and prehistoric period are likely to exist within the park, and there is an opportunity to conduct research to identify such trees and study their significance. • Seek funding to implement the 2016 historic properties management plan environmental assessment.

Fundamental Resource or Value	Cultural History and Resources
<p>Threats and Opportunities</p>	<p>Opportunities (continued)</p> <ul style="list-style-type: none"> • Seek new partnership opportunities to carry out cultural resources stewardship activities. In 2016, the park launched the Grand Teton Hammer Corps, a volunteer preservation maintenance group, and started to seek opportunities to establish a new curatorial facility through philanthropy. • Improve interpretation and education about cultural resources to enhance visitor understanding and appreciation of human history and to improve resource stewardship. Incorporate research and new information. • Collect oral histories that strengthen the understanding of human use and cultural resources in the region. • Continue inventorying the park and parkway for cultural landscapes, and if indicated, identify appropriate treatment. • Assess linear features as part of a large-scale context. • Investigate potential documentation of resources within the park associated with the fur trade era. These resources are currently not documented, though they are probably present. • Work with the Wyoming State Historic Preservation Office to develop a park- and parkway-specific programmatic agreement for archeological resources. • Collect oral histories or ethnographic information that reveal “untold” stories related to cultural resources.
<p>Data and/or GIS Needs</p>	<ul style="list-style-type: none"> • Complete near 100% archeological survey of the park and parkway, including ice patches, and update the Archeological Sites Management Information System (ASMIS) database. • Complete predictive modeling of ice patches to determine which may be more likely to contain cultural materials. • Re-evaluate archeological sites and historic properties determined not eligible for listing in the National Register of Historic Places and update the ASMIS and List of Classified Structures (LCS) databases. • Survey and document culturally modified trees. • Clarify tribal consultation lists for the park and parkway. • Complete determinations of eligibility for structures and features within the park and parkway that are 50 years old or older that have not yet been evaluated and update the LCS database, as needed. • Complete mapping (GIS) and inventory of cultural landscapes and historic district boundaries. • Visual resource inventory. • Comprehensive condition assessments for high-priority historic structures and districts. • Inventory and monitoring of natural resources that may be affected by management/ maintenance of historic properties.
<p>Planning Needs</p>	<ul style="list-style-type: none"> • Complete an ethnographic assessment of the Enclosure Site and evaluate appropriateness of current recreational access and use. • Develop a parkwide transportation context for the evaluation of linear transportation features (especially roads and trails). • Visual resource management plan. • Complete cultural landscape reports for all significant cultural landscapes and implement appropriate recommendations. • Conduct long-term planning to streamline internal cultural compliance review. • Address climate change as a topic in each of the planning needs previously described. • Resource stewardship strategy.

Fundamental Resource or Value	Cultural History and Resources
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • Antiquities Act of 1906 • “Preservation of American Antiquities” (43 CFR 3) (implementing regulations for the Antiquities Act) • Historic Sites Act of 1935 • Museum Properties Management Act of 1955, as amended • Reservoir Salvage Act of 1960, as amended (16 USC 469 - 469C) • National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) • National Environmental Policy Act of 1969 • Archeological and Historic Preservation Act of 1974 • Indian Self-Determination and Education Assistance Act of 1975 (25 USC 450-451n, 455-458e) • American Indian Religious Freedom Act of 1978 • Archaeological Resources Protection Act of 1979 • Native American Graves Protection and Repatriation Act of 1990 • National Parks Omnibus Management Act of 1998 (16 USC 5937 Sec. 5937) • Executive Order 11593, “Protection and Enhancement of the Cultural Environment” • Executive Order 13007, “Indian Sacred Sites” • Executive Order 13175, “Consultation and Coordination with Indian Tribal Governments” • Executive Order 13728, “Wildland-Urban Interface Federal Risk Mitigation” • Secretarial Order 3206, “American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act” • Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources” • “Curation of Federally-Owned and Administered Archaeological Collections” (36 CFR 79) • “Protection of Historic Properties” (36 CFR 800) • “Protection of Archeological Resources: Uniform Regulations” (43 CFR 7) • “Federal Property Management Regulations” (41 CFR 101) prescribes regulations, policies, procedures, and delegations of authority about the management of federal property • “Research Specimens” (36 CFR 2.5) <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)</p> <ul style="list-style-type: none"> • <i>NPS Management Policies 2006</i> (chapter 5) “Cultural Resource Management” • Director’s Order 11D: <i>Records and Electronic Information Management</i> • Director’s Order 24: <i>NPS Museum Collections Management</i> • Director’s Order 28: <i>Cultural Resource Management</i> • Director’s Order 28A: <i>Archeology</i> • <i>NPS Museum Handbook</i>, parts I, II, and III • <i>Department of the Interior Policy on Consultation with Indian Tribes</i> • <i>The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation</i> • <i>The Secretary of the Interior’s Standards for the Treatment of Historic Properties</i> • <i>The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes</i>



Fundamental Resource or Value	Visitor Experiences in an Outstanding Natural Environment
Related Significance Statements	Significance statement 1, 4, 5, and 6.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • More than 3.1 million people visited Grand Teton National Park and more than 1.4 million people visited John D. Rockefeller, Jr. Memorial Parkway in 2015. • Overall, the park and parkway get high satisfaction ratings from visitors—people are finding and enjoying the wide array of activities in this spectacular setting. • There are places and times where congestion and crowding are becoming a problem—more than 340,000 people per year visit Jenny Lake in the frontcountry and backcountry areas. Frequently during the summer there are more than 500 people per hour at Hidden Falls, causing congestion, crowding, human waste, and visible physical impacts. This led to the Jenny Lake Renewal Project, which is currently underway as of 2016. After the renovation is complete, the frontcountry and backcountry areas of Jenny Lake will be more sustainable and durable. The frontcountry effort was designed in large part to address the need for improved visitor orientation and interpretation and to improve visitor circulation throughout the South Jenny Lake developed area. The backcountry design and construction work includes rerouting and restoration of some trails, addressing circulation and crowding, and improving viewing areas. • Congestion and crowding is generally not a problem on the Snake River—commercial allocations are working. Although private boat use on the Snake River is inadequately understood, there appears to be an increase in this use. Parking at Deadmans Bar boat launch area is significantly increasing and is more frequently at or beyond capacity. • There are a few visitor activities using the same resources that are not always compatible, such as motorized and non-motorized use of Jackson and Jenny Lakes. • The park has constructed more than 20 miles of the 41 miles of approved multiuse pathways described and analyzed in the 2006 transportation plan and environmental impact statement. • Concessioners have a major role in providing visitor services and facilities in the park and parkway. • There are limited opportunities for public transit in the park. • Visitors come to the park and parkway to enjoy spectacular views. Although air quality is generally good, park scenic vistas are sometimes obscured by regional haze caused by fine particles in the air from sources of pollution. • Dark night skies continue to play an integral part of enhancing visitor experiences. Park interpretive staff conduct interpretive programs regarding the ecological and cultural importance of dark night skies, and visitors staying overnight are able to experience the park's nighttime setting.

Fundamental Resource or Value	Visitor Experiences in an Outstanding Natural Environment
<p>Current Conditions and Trends</p>	<p>Conditions (continued)</p> <ul style="list-style-type: none"> • Compared to other non-urban parks, the night skies at the park and parkway are in good condition, though slightly degraded due to the proximity of population light domes from the communities of Jackson and Teton Village and lights from the Jackson Hole Airport. Vehicles lights from highways and Teton Park Road and less so at Moose-Wilson Road also impact night skies. • Visitor facilities at Colter Bay have undergone only a few changes. These changes include the rehabilitation of the visitor center and removal of the Vernon Collection for restoration and preservation at the NPS Western Archeological and Conservation Center. • The Laurance S. Rockefeller (LSR) Preserve continues to be operated under a conservation easement and a property maintenance plan. • A comprehensive management plan has been finalized for the Moose-Wilson corridor. This plan addresses visitor use and experience in the corridor. • Several water and wastewater systems in the park and parkway need to be improved. • Visitor use is increasing with degradation to park resources and visitor experience primarily at Jenny Lake, Leigh and String Lakes, and the Moose-Wilson corridor. • Increased fluctuation of water levels on Jackson Lake and Snake River has been affecting water-based recreation, particularly at marinas and boat launch locations. • Increase in aquatic invasive species inspections impacts visitor experience for some as they are required to wait in line for inspection before they can launch boats in park waters. • There is a Wyoming statewide fish advisory with consumption guidelines due to mercury that includes fish caught within the park. • Low flying aircraft coming and going from the Jackson Hole Airport are visible and audible to many visitors, an atypical phenomenon in a national park. Ground activities, including road traffic accessing the airport and aircraft on the taxiways and runways, also are audible and visible from many areas of the park. <p>Trends</p> <ul style="list-style-type: none"> • The overall numbers of visitors are increasing significantly, and the patterns and type of use are changing. From 2006 through 2015 park recreation visitation at Grand Teton National Park increased from 2.4 million to 3.1 million (31% increase) and at John D. Rockefeller, Jr. Memorial Parkway from 1.0 million to 1.4 million (38% increase). The average annual recreation visitation increase for this time period is 6.0% at the park and 6.8% at the parkway. • The season of use is also changing. Changing demographics and year-round opportunities at the park and parkway have resulted in significant levels of use throughout the year. Due to this, there are less distinct “shoulder” seasons when visitation used to decline. Although winter visitation is far less than summer visitation, there is an overall increase in winter use of all kinds, increasing the demand for plowing roads and grooming trails. There has been increased demand for cross-country skiing, snowshoeing, and snow biking (fat tires), though snowmobiling in the park and parkway has significantly decreased. • There is a trend toward shorter, more compressed visits. Changes in fuel costs change visitation patterns. • The type of use is changing. While expert mountaineering has long been a part of the Teton Range, there are more people pursuing extreme sports, pushing further into the backcountry and increasing demands on search and rescue operations. This is coupled with some visitors overall having less prior experience in remote or wild natural areas. At the same time there are more people who stay in their vehicles, particularly bus tours. Small portable boats have made kayaking and canoeing more popular on Jenny Lake and other lakes. The arts community is pursuing more interface and organized events. • In addition to more extreme sports mentioned above, new generations of visitors are seeking ways to find information and to connect with park resources through digital media that provide current if not real-time information. • Recreational opportunities on the park’s multiuse pathway system are steadily increasing.

Fundamental Resource or Value	Visitor Experiences in an Outstanding Natural Environment
<p>Current Conditions and Trends</p>	<p>Trends (continued)</p> <ul style="list-style-type: none"> • More visitors are exploring areas further into the backcountry and wilderness areas, making solitude harder to find. • Technology, demographics, and economics continue to change, and with them patterns of use and visitor needs. Visitors do a lot of advance planning with the internet, and visitors are looking for more customized experiences. There is also an increased need and demand for improved wireless telecommunications in the parks. • Concession operation of campgrounds, the addition of recreational vehicle hook-ups, and the ability to reserve recreational vehicle sites is changing the character of camping resulting in fewer spontaneous visitors and longer lengths of stay. • There has been an increase in opportunities to view large carnivores, which is tied closely with increased visitation resulting in an increase in wildlife-vehicle conflicts and increased incidents of visitors getting too close to wildlife. Since 2008, through combined efforts of the Grand Teton National Park Foundation and the National Park Service, boxes to secure food from bears have been installed in 60% of campsites in the park. • There is a significant increase in visitation to the Mormon Row Historic District, Jenny Lake, String and Leigh Lakes, and the Moose-Wilson corridor. • Increases in climbing the Grand and other prominent peaks in the Teton Range. • Increase in search and rescues and the number of requests for emergency assistance due to ease of cellular communications in backcountry areas. • Foreign visitation has increased. • Increased recreational interest in opening new waters to boating and in private use of the Snake River and Jackson Lake. • User groups from diverse backgrounds are showing more interest in the parks in general, including the park and parkway. Particularly, public campaigns to better engage black and Latino groups are receiving more attention.
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • Trends toward increasing concentrations of visitors or new visitor activities could lead to resource degradation or crowding that diminishes the quality of experience. Climate change may significantly increase visitation, especially during the shoulder seasons. • Parking lots at Jenny Lake, String and Leigh Lakes, and trailheads at Taggart Lake, Lupine Meadows, and Death Canyon are increasingly at and beyond capacity. • New development, whether NPS, concessioner, private inholding, or adjacent land has the potential to diminish the superb scenery and natural environment. Threats to the visitor experience include loss of natural beauty, wilderness character, opportunities for solitude, air pollution, dark night sky, and natural soundscapes. A specific current threat is in the southwest part of the park, where the adjacent Teton Village expansion and potential commuter traffic on the Moose-Wilson corridor could have significant impacts. Increased visitation is affecting the resources at Jenny Lake, Leigh and String Lakes, Mormon Row, and major wilderness access trailhead areas at Lupine Meadows, Taggart Lake, and Death Canyon. • Continued use of the Jackson Hole Airport and the adjacent heliport with private and commercial aviation, and new air tours may negatively impact visitor experience, wilderness character, opportunities for solitude, dark night skies, and opportunities to experience natural soundscapes. • Emissions from coal-fired power plants, vehicle exhaust, oil and gas development, and agriculture diminish air quality which negatively impact scenic and wildlife viewing within the park and parkway. • Drought patterns are affecting water recreation. • Increase in lake and river use and changing types of boat use can lead to conflicts between users. • The mixing of managed hunting, elk reduction, and wildlife viewing results in user conflicts. • Change in protected status of large carnivores could influence wildlife viewing opportunities (e.g., harvest of bears and wolves outside and adjacent to park boundaries).

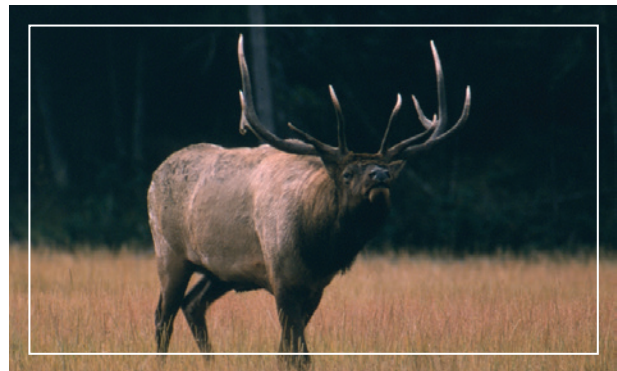
Fundamental Resource or Value	Visitor Experiences in an Outstanding Natural Environment
Threats and Opportunities	<p>Opportunities</p> <ul style="list-style-type: none"> • Continue to implement the transportation plan for roadway shoulder improvements, separated multiuse pathways, travel information systems, and a limited pilot transit program. • Implement the <i>Moose-Wilson Corridor Comprehensive Management Plan / Environmental Impact Statement</i>. • Continue to implement <i>Snake River Headwaters Comprehensive River Management Plan / Environmental Assessment (2013)</i>, update as necessary. The plan provides for the protection of the resources of the river corridor from human impacts, provides for a variety of visitor experiences, and establishes carrying capacities for the river. • Continue to participate in regional planning efforts, such as the interagency assessment of recreation in the Greater Yellowstone area. • Strive to improve visitor services in ongoing commercial services management. • Continue to implement the winter use management plan (2009). • Implement cooperative agreements with the University of Wyoming and the Teton Science Schools. • Continue to implement Jackson Hole Airport Agreement. • Implement the <i>University of Wyoming-NPS Research Center Campus Improvements Environmental Assessment</i> at AMK Ranch. • Continue to work with partners to minimize human wildlife interactions. • Pursue designation as a “Dark Sky Park” by the International Dark-Sky Association. • Increase interpretive and educational opportunities related to programs about natural and cultural resources, including scenic landscapes, historic views, dark night skies, and natural sounds. • Determine how to meet public demand for wireless communications in the park and parkway while protecting park resources and equipping visitors with necessary safety knowledge for the backcountry. • Provide mercury fish consumption advisory information to anglers. • Conduct research to better understand the expectations and desires of diverse user groups who are showing more interest in experiencing these and other national park units.
Data and/or GIS Needs	<ul style="list-style-type: none"> • Continue periodic recreational ecology and visitor use trends studies for frontcountry, backcountry, and wilderness areas of the park and parkway, and synthesize information from multiple sources. • Collect and analyze data documenting visitor use impacts. • Evaluate night sky conditions in order to describe a trend. • Evaluate effectiveness of visitor interpretive programs. • Determine estimates of pre-settlement era ambient air quality and regional haze. • Visitor surveys related to visitor needs, expectations, technology use, and baseline knowledge from visitors of various cultures/backgrounds (related to programs like Leave No Trace, or NPS rules/policies, key park issues, perceptions of crowding, etc.).
Planning Needs	<ul style="list-style-type: none"> • Wilderness stewardship and backcountry management plan for the park and parkway. • Comprehensive visitor use management plans for the most highly visited developed areas of the park and parkway. • Comprehensive interpretive plan.

Fundamental Resource or Value	Visitor Experiences in an Outstanding Natural Environment
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • Americans with Disabilities Act of 1990 (28 CFR 36) • Architectural Barriers Act of 1968 • “Accessibility Guidelines” (36 CFR 1191.1) • Rehabilitation Act of 1973 • National Parks Omnibus Act of 1998 • NPS Concessions Management Improvement Act of 1998 • National Parks Air Tour Management Act of 2000 • National Parks Overflight Act of 1987 (Public Law 100-91) • Executive Order 13728, “Wildland-Urban Interface Federal Risk Mitigation” • Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and other Natural and Cultural Resources” • “Bicycles” (36 CFR 4.30) <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (§1.6) “Cooperative Conservation Beyond Park Boundaries” • NPS <i>Management Policies 2006</i> (§2.3.1.4) “Science and Scholarship” • NPS <i>Management Policies 2006</i> (§4.1) “General Management Concepts” • NPS <i>Management Policies 2006</i> (§4.1.4) “Partnerships” • NPS <i>Management Policies 2006</i> (§4.2) “Studies and Collections” • NPS <i>Management Policies 2006</i> (§4.4.1) “General Principles for Managing Biological Resources” • NPS <i>Management Policies 2006</i> (§4.7.2) “Weather and Climate” • NPS <i>Management Policies 2006</i> (§4.10) “Lightscape Management” • NPS <i>Management Policies 2006</i> (§5.1) “Research” • NPS <i>Management Policies 2006</i> (§8.10) “Natural and Cultural Studies, Research, and Collection Activities” • NPS <i>Management Policies 2006</i> (chapter 7) “Interpretation and Education” • NPS <i>Management Policies 2006</i> (chapter 8) “Use of the Park” • NPS <i>Management Policies 2006</i> (chapter 9) “Park Facilities” • NPS <i>Management Policies 2006</i> (chapter 10) “Commercial Visitor Services” • Director’s Order 6: <i>Interpretation and Education</i> • Director’s Order 42: <i>Accessibility for Visitors with Disabilities in National Park Service Programs and Services</i> • NPS <i>Transportation Planning Guidebook</i>



Fundamental Resource or Value	Natural Soundscapes and Night Skies
Related Significance Statements	Significance statements 3, 5, and 6.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • The acoustic environment in the park and parkway varies across the landscape, with a variety of audible natural and nonnatural sounds, depending on the location. For example, the sound levels of backcountry winter areas are sometimes close to the lower limit of human hearing, while vehicles, especially loud motorcycles, on roadways and aircraft, associated with the Jackson Hole Airport and transients, create loud nonnatural sounds that transmit into areas of the park and parkway. • In general, the acceptability of human-caused sound varies throughout the park and parkway, being generally greater in developed areas and less in undeveloped areas. However, the average existing sound levels in the park and parkway away from travel corridors and flowing water are typical of natural areas. • The Jackson Hole Airport is within Grand Teton National Park, to the east of the Moose-Wilson corridor, and air traffic can be heard, sometimes at high levels, especially nearby. The northern areas of the park and the parkway have aircraft sounds at levels typical of this area of the country. • Loud motorcycles have a disproportionate negative impact on the acoustic environment of the park and parkway during the months of use. • Grand Teton National Park and the surrounding area have historically had some of the clearest night skies in the country due to low humidity and the isolated area. As light from urban areas has increased and suburban areas have encroached on the park, this world class night-time visibility has decreased. <p>Trends</p> <ul style="list-style-type: none"> • The park and parkway have a full complement of natural sounds from biological, geological, and atmospheric activity. These acoustic resources are healthy and show no changes over the last decade. • Sources of artificial light continue to increase inside and outside of the park, particularly at residential developments and from local communities south of the park.
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> • Noise from NPS and concession development, cars, trucks, buses, and loud motorcycles on the roads and in campgrounds, development on private lands within and around the park. • Aircraft noise originating from the Jackson Hole Airport. • Noise from unmanned aerial vehicles (drones), though currently prohibited from landing or taking off in the park and parkway, they may be flown over the park from points outside and technological improvements may increase their capabilities and flight times. • Noise from audio devices broadcasting from hikers on backcountry trails. • Decreased night skies have the potential to alter wildlife migratory patterns, breeding and feeding habits, and star-gazing opportunities. <p>Opportunities</p> <ul style="list-style-type: none"> • Provide visitors the opportunity to understand and appreciate the importance of natural soundscapes and the acoustic resources of the park and parkway. • Collaborate with adjacent property owners; appropriate federal, state, and local agencies; and organizations to reduce noise. Continue working with the airport to reduce aircraft and related noise. • Reduce noise from park operations by timing activities to preserve quiet times, or purchasing quieter equipment. • Consider identifying and designating “quiet zone areas.” These areas would be identified on maps, signs, and through interpretation.

Fundamental Resource or Value	Natural Soundscapes and Night Skies
<p>Threats and Opportunities</p>	<p>Opportunities (continued)</p> <ul style="list-style-type: none"> • Continue the “Ride Respectfully” outreach campaign for motorcycles. • Provide outreach to visitors about reducing noise from sources such as electronics and idling vehicles. • Communicate with visitors about benefits of noise reduction to park experience and wildlife health. • Increase interpretation and education about the importance of night skies. • Limit and reduce where possible the amount of artificial lighting in the park and parkway. • Collaborate with local neighborhoods and communities on limiting and reducing artificial light sources. • Develop night sky monitoring reports in coordination with the NPS Night Skies Program.
<p>Data and/or GIS Needs</p>	<ul style="list-style-type: none"> • Analyze acoustic conditions over time. • Study negative acute and chronic impacts of noise on visitor experience and on wildlife. • Continue to collect acoustic data in recommended and potential wilderness areas to determine negative impacts on opportunities for solitude and undeveloped qualities. • Data on the economic value of ecological services. • Collect lightscape data using techniques provided by the NPS Night Skies Program.
<p>Planning Needs</p>	<ul style="list-style-type: none"> • Soundscape management plan.
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • National Parks Air Tour Management Act of 2000 • National Parks Overflight Act of 1987 (Public Law 100-91) • “Audio Disturbances” (36 CFR 2.12) • “What is the maximum noise level for the operation of a vessel?” (36 CFR 3.15) <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)</p> <ul style="list-style-type: none"> • Director’s Order 47: <i>Soundscape Preservation and Noise Management</i> • NPS <i>Management Policies 2006</i> (§1.4) “Park Management” • NPS <i>Management Policies 2006</i> (§1.6) “Cooperative Conservation Beyond Park Boundaries” • NPS <i>Management Policies 2006</i> (§4.9) “Soundscape Management” • NPS <i>Management Policies 2006</i> (§4.10) “Lightscape Management” • NPS <i>Management Policies 2006</i> (§5.3.1.7) “Cultural Soundscape Management” • NPS <i>Management Policies 2006</i> (§8.2.3) “Use of Motorized Equipment” • NPS <i>Management Policies 2006</i> (§8.4) “Overflights and Aviation Uses” • NPS <i>Natural Resource Management Reference Manual 77</i>



Analysis of Other Important Resources and Values

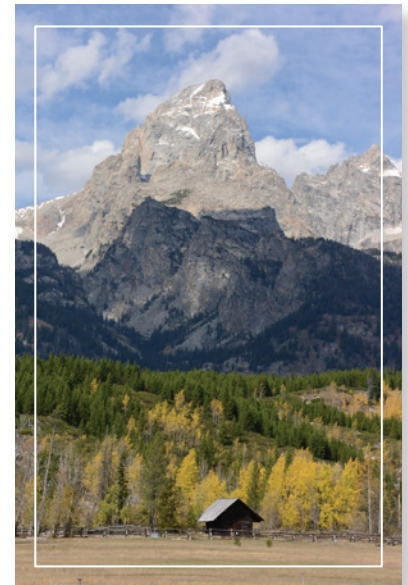
Other Important Resource or Value	Recommended, Potential, and Eligible Wilderness
<p>Current Conditions and Trends</p>	<p>Conditions</p> <ul style="list-style-type: none"> • The park has more than 122,000 acres recommended for wilderness designation, but Congress has not acted on that recommendation. The National Park Service manages those lands as if they were wilderness. The park has a backcountry management plan (1990) that guides use and management of the park's backcountry and recommended wilderness. • A wilderness eligibility assessment was completed in 2013 for lands within the John D. Rockefeller, Jr. Memorial Parkway. The assessment determined that 21,500 acres (about 91%) of the parkway is eligible for possible inclusion in the National Wilderness Preservation System. • The park completed the <i>Grand Teton Recommended and Potential Wilderness Building Blocks for Wilderness Stewardship</i> document in 2015. • Natural disturbance regimes such as fire, avalanches, landslides, and floods move through the landscape observed and respected, but rarely are affected by human hands. • The majority of trammeling actions in the Grand Teton wilderness are results of efforts to preserve the natural environment—applying anti-aggregation beetle pheromones to preserve century old whitebark pine, spraying of noxious weeds to prevent proliferation, or disposing of animal carcasses away from busy roads to safeguard sensitive predators and scavengers. • Research and monitoring take place throughout the wilderness to study plants, animals, climate processes, and other scientific pursuits, varying from wolf behavior monitoring and whitebark pine reseedling, to glacial recession studies that span multiple decades. • Fire suppression actions are only taken when deemed necessary—often to safeguard cultural resources and human lives. Fuels reduction projects are rare, but may be authorized in high-risk areas. • Extreme topography allows incredibly diverse biotic communities to thrive in four distinct biomes, from wetlands, sage meadows, and lush forests to the high alpine, all in the span of a couple miles. • Sixty-one species of mammals live in the four main biotic communities of the Grand Teton ecosystem, spreading from the alpine peaks of the Teton Range to the sage flats and forests of the Potholes and Two Ocean Lake areas. • Predator-prey interactions are displayed throughout the wilderness, reflecting the natural health of a largely intact and inherently wild ecosystem. • More than 1,200 species of vascular plants and 200 species of fungi have been documented within and adjacent to the Grand Teton wilderness. • Glaciers serve an integral purpose to the natural community, providing the headwaters for the Teton Range's pristine glacial streams and lakes. This function is doubly important in the late-summer months, when precipitation is scant. Teton Range glaciers also provide critical meltwater to Jackson Lake and the Snake River, cushioning the effects of drought far downstream. • By necessity of preservation, frequently-visited wilderness areas are developed with signage and high-capacity trails that require significant construction and maintenance, bridges, culverts, and other user-accommodating infrastructure. • Administrative motorized use in the form of chainsaws and rock drills are tools employed in wilderness areas by the park's trails crew to accomplish large-scale projects. • More than 15 miles of nonconforming road segments currently run through the Potholes potential wilderness. • Although the vast majority of the park remains an untamed and expansive wilderness, where primeval and undeveloped character reigns autonomously, a number of structures are also present in the Grand Teton wilderness, ranging from historic cabins and corrals, to scientific monitoring stations and ranger caches. • The same rugged terrain that makes the Grand Teton wilderness so enchanting complicates backcountry rescue operations, necessitating ranger caches near climbing routes where emergency evacuations are frequent, and along common backcountry patrol routes.

Other Important Resource or Value	Recommended, Potential, and Eligible Wilderness
<p>Current Conditions and Trends</p>	<p>Conditions (continued)</p> <ul style="list-style-type: none"> • The Grand Teton wilderness offers a wide range of wilderness experiences to suit visitors of all comfort levels and abilities. • Entire sections of Grand Teton wilderness are free from trails and development. • Natural factors of high elevation and dry air, combined with the Teton Range’s isolation from major population centers, allow the night sky to shine with uninhibited glory. The night-sky lightscape in the park and parkway is among the best in the country. • Grand Teton wilderness provides world class opportunities for adventure and recreation in both summer and winter seasons. Winter in the Grand Teton wilderness is the time to experience fundamental solitude, as park visitation declines substantially. <p>Trends</p> <ul style="list-style-type: none"> • With the exception of punctuated short-term growth periods, glaciers in the Teton Range have been in recession since the late 1850s, and melting at increased rates in recent decades. As glaciers recede, a decrease in summer stream flow occurs, sending cascading effects throughout the ecosystem and impacting plants, fish and wildlife downstream. • As more people visit wilderness and information about these pristine areas is discovered, the potential for increased use becomes higher. This is probably due in part to outdoor-oriented blogs and websites publishing location information about a number of these pristine wilderness sites. • The town of Jackson has doubled in size over the last 20 years, generating a push of weekend wilderness users who know the area intimately, pushing further into pristine areas, forming social trails and campsites in destinations previously undisturbed. Climbing, backcountry skiing and snowboarding, and other extreme outdoor activities continue to draw more enthusiasts and crowds who now develop popular climbing routes and ski runs.
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • Climate change poses a significant threat to many aspects of the natural quality of the Grand Teton wilderness. • Due to warmer temperatures, the over-winter mortality of the mountain pine beetle has been reduced, leading to a longer active season and an expansion of range into alpine areas. Invigorated beetle activity, compounded with the impacts of blister rust—a nonnative pathogen—has weakened and killed more than 50% of the Teton Range’s century-old whitebark pine trees. • As temperatures continue to increase, the range of many currently existing species is expected to be driven to higher elevations, the fragile alpine environment is expected to shrink, and new species may colonize the warmer, drier habitat. • Higher demand for energy, combined with innovations in extraction methods such as horizontal drilling and hydraulic fracturing, have hastened natural gas and geothermal energy development in the region. These developments have been documented to cause habitat fragmentation affecting migratory species that use the wilderness, increase regional air pollution, and alter the region’s active geothermal environment. • The use of motorized equipment for park administrative use and under an approved permit has significant impacts on the bioacoustic environment, potentially disturbing birds and wildlife, while detracting from a human sense of isolation and solitude. • Road segments in the Potholes potential wilderness area are affecting a visitor’s sense of solitude and isolation while leaving a hefty footprint bisecting the sagebrush steppe ecosystem. • Overcrowding, especially during peak season, poses a significant threat to visitor solitude and opportunities for unconfined recreation. • The impact of nonnatural sounds poses a threat to visitor opportunities for solitude. Sounds of aircraft are often audible, even in far reaches of the wilderness, originating from the Jackson Hole Airport just miles away.

Other Important Resource or Value	Recommended, Potential, and Eligible Wilderness
<p>Threats and Opportunities</p>	<p>Opportunities</p> <ul style="list-style-type: none"> • Continue research and monitoring to inform scientists of the wide-reaching impacts of climate change on wilderness areas in the park and parkway. • Implement the 31 wilderness character monitoring measures provided in the <i>Grand Teton Recommended and Potential Wilderness Building Blocks for Wilderness Stewardship</i> document. • Gain support for designation of the wilderness areas in Grand Teton National Park. • Partner with Aldo Leopold Wilderness Research Institute and the Arthur Carhart National Wilderness Training Center for appropriate wilderness research. • Continue collaboration with Teton Science Schools in developing and implementing wilderness and wildlife conservation programs at the Murie Center.
<p>Data and/or GIS Needs</p>	<ul style="list-style-type: none"> • Continue periodic recreational ecology and visitor use trends studies for frontcountry, backcountry, and wilderness areas of the park and parkway, and synthesize information from multiple sources. • Continue to collect data related to the 31 wilderness character monitoring measures provided in the Grand Teton Recommended and Potential Wilderness Building Blocks for Wilderness Stewardship document. • Climate change vulnerability assessment for select resources. • Visitor surveys related to visitor needs, expectations, technology use, and baseline knowledge from visitors of various cultures/backgrounds (related to programs like Leave No Trace, or NPS rules/policies, key park issues, perceptions of crowding, etc.). • Map frontcountry, backcountry, and wilderness areas based on the zone definitions from the master plan. • Data on day use in wilderness and backcountry areas.
<p>Planning Needs</p>	<ul style="list-style-type: none"> • Climate change scenario strategy. • Complete the <i>Building Blocks for Wilderness Stewardship</i> endeavor for the wilderness areas in the John D. Rockefeller, Jr. Memorial Parkway. • Complete a wilderness study, supported by appropriate National Environmental Policy Act and public involvement requirements, for the eligible wilderness areas in John D. Rockefeller, Jr. Memorial Parkway. • Wilderness stewardship and backcountry management plan for the park and parkway.
<p>Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the OIRV</p> <ul style="list-style-type: none"> • Wilderness Act of 1964 • Clean Air Act of 1977 (42 USC 7470(2)) • Clean Water Act of 1972 • Executive Order 11514, "Protection and Enhancement of Environmental Quality" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (chapter 4) "Natural Resource Management" • NPS <i>Management Policies 2006</i> (chapter 6) "Wilderness Preservation and Management" • NPS <i>Management Policies 2006</i> (chapter 8) "Use of the Parks" • Director's Order 41: <i>Wilderness Stewardship</i> • NPS <i>Reference Manual 41: Wilderness Stewardship</i> • <i>Keeping It Wild in the National Park Service: A User Guide to Integrating Wilderness Character into Park Planning, Management, and Monitoring (User Guide)</i> • <i>Wilderness Stewardship Plan Handbook: Planning to Preserve Wilderness Character</i> • <i>NPS-75 Natural Resources Inventory and Monitoring Guideline</i> • <i>NPS Natural Resource Management Reference Manual 77</i>

Other Important Resource or Value	Other Historic Properties
<p>Current Conditions and Trends</p>	<p>Conditions</p> <ul style="list-style-type: none"> • Historic properties range in condition from good to poor. • All historic structures in the park require some degree of deferred maintenance, and some require extensive repair and rehabilitation. • A high percentage of historic buildings are wood, which decays rapidly in the harsh Wyoming climate. • Many vacant structures have been colonized by pests, and some in-use structures have pest infestation issues that interfere with human use. • Several historic properties are in particularly poor condition and are managed as ruins. • Some archeological sites are eroding and material is being lost. • Most cultural landscapes are no longer used for their historic purposes. Associated structures (such as irrigation networks and fence lines) are deteriorating. • Vegetation communities in cultural landscapes are changing. <p>Trends</p> <ul style="list-style-type: none"> • Historic buildings in good to fair condition are typically occupied and used by the park or partners. • Historic buildings in fair to poor condition are typically vacant. • Historic buildings in poor condition continue to deteriorate, and historic buildings in use continue to be used and improved. • Historic buildings used for storage are typically in worse condition than those occupied for more daily uses. • Concessioners and partners are increasingly responsible for appropriate care of historic resources under more active park management. • There is increasing philanthropic interest in these resources. • There are increasing efforts to restore the hayfields of the Mormon Row Historic District to compatible native species. • There is increased interest in historic preservation from the public and volunteer groups.
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • Historic buildings are deteriorating due to exposure and lack of resources for deferred and regular maintenance. • Hydrologic changes in the Snake River channel threaten historic properties adjacent to the river, such as the 4 Lazy F Dude Ranch, the Bar BC Dude Ranch, and archeological sites. • Continued pest infestation makes the buildings undesirable for use and repair. • Installation of telecommunications and other nonhistoric infrastructure threatens the character of historic districts and cultural landscapes. <p>Opportunities</p> <ul style="list-style-type: none"> • Implement the historic properties management plan (when completed and approved). • Philanthropic interest and investment provides new opportunities to carry out cultural resources stewardship activities. • The completion of the White Grass Dude Ranch rehabilitation project and the presence of the Western Center for Historic Preservation in the park provide significant training opportunities to ensure historic structures are managed and treated appropriately.

Other Important Resource or Value	Other Historic Properties
<p>Data and/or GIS Needs</p>	<ul style="list-style-type: none"> • Visual resource inventory. • Comprehensive condition assessments for high-priority historic structures and districts. • Inventory and monitoring of natural resources that may be affected by management/maintenance of historic properties. • Visitor use studies at the high-priority historic districts to understand heritage tourism and visitation at these sensitive sites. • Archeological survey to identify and record additional resources that fall into this category. • Condition assessments that integrate historic character, desired condition, and FMSS requirements. • Transportation context and evaluation.
<p>Planning Needs</p>	<ul style="list-style-type: none"> • Visual resource management plan. • Cultural landscape reports.
<p>Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the OIRV</p> <ul style="list-style-type: none"> • Historic Sites Act of 1935 • National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) • National Environmental Policy Act of 1969 • Archeological and Historic Preservation Act of 1974 • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • "Protection of Historic Properties" (36 CFR 800) • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (chapter 5) "Cultural Resource Management" • Director's Order 28: <i>Cultural Resource Management</i> • <i>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i> • <i>The Secretary of the Interior's Standards for the Treatment of Historic Properties</i> • <i>The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes</i>



Other Important Resource or Value	Park Museum and Archive Collection
<p>Current Conditions and Trends</p>	<p>Conditions</p> <ul style="list-style-type: none"> • The park maintains extensive museum and archives collections that includes approximately 700 linear feet of archival materials; 91,485 archeological artifacts; 27,979 biological items including a herbarium; 95 geologic specimens; 3,484 historical objects; 1,419 ethnographic objects; and 105 pieces of fine art. • A portion of the park’s federal records have been cataloged and processed into the park’s archival collection. As of 2015, the archives were moved into a temporary storage space located in the park’s administrative area. The storage area does have proper fire suppression but lacks proper climate control and security measures to meet NPS museum standards. The park is continuing to process permanent federal records for inclusion into archives to be cataloged and processed according to NPS standards and retention schedule outlined in Director’s Order 11D: <i>Records and Electronic Information Management</i>. • The David T. Vernon Collection is a collection of ethnographic materials, which was donated by Laurance S. Rockefeller to the park in the 1970s. The Vernon Collection is fully cataloged and the majority of the collection is presently stored at the NPS Intermountain Regional Museum Services repository in Tucson, Arizona, the NPS Western Archeological and Conservation Center. Nearly 1,100 objects have been examined by professional conservators; examination includes digital photography of each object and the creation of customize storage mounts. Of those 1,100 objects, 502 have also undergone conservation treatment, with the remaining 594 objects not requiring any conservation treatment beyond the preventative care upgrades they received in the form of custom storage mounts. As of 2016, 89 items from the Vernon Collection are currently on exhibit in three facilities in the park. As of 2016, the curator is working to establish an exhibit rotation schedule. • The park’s museum collections, which include natural history and cultural resource objects, are stored in facilities that lack proper environmental control, proper security measures, and fire suppression systems. The collections are housed in numerous facilities within Grand Teton National Park and additional collections of natural history specimens are stored in three facilities in the United States. The bulk of the park’s archeological items are stored at the NPS Western Archeological and Conservation Center. As of 2015, the park’s archival collection is stored in a new storage space located in the administrative area. The archives storage space is already at capacity, and also lacks proper environmental controls and proper security as mandated by NPS policy. Stagecoaches and some other transportation related objects are stored near the banks of the Snake River, located in a “shed” that is exposed to the weather during the summer months, without proper environmental control, security, and fire suppression. The Colter Bay storage space also lacks environmental controls, fire suppression, and proper security measures. The museum collection as a whole needs additional storage as well as research space. <p>Trends</p> <ul style="list-style-type: none"> • The park archives continue to grow. • The majority of the Vernon Collection remains housed off-site due to lack of adequate facilities at the park. • Conditions for the museum collection housed in Grand Teton National Park continue to be substandard and do not meet NPS standards for museum storage areas. All museum collections are at risk due to lack of proper climate controls, fire suppression, and security for all facilities that house and exhibit museum collections.

Other Important Resource or Value	Park Museum and Archive Collection
<p>Threats and Opportunities</p>	<p>Threats</p> <ul style="list-style-type: none"> • The park has not adequately tracked research permit collections. • The park currently lacks facilities to properly care for the existing museum collection, which often results in local community members not donating objects that tell important cultural histories tied to the park and parkway. • Lack of an adequate storage facility for the museum and archival collection threatens the condition and security of all museum artifacts and objects, resulting in potential long-term irreversible damage due to climate fluctuations and the threat of permanent loss due to structural fire and/or wildland fires and the threat of theft linked to inadequate security. • Lack of funding and staff equates to an inability of the park to meet NPS museum management standards and properly adhere to NPS museum policies. <p>Opportunities</p> <ul style="list-style-type: none"> • Expand the collection to include significant recreational themes such as mountaineering legacy, skiing history, and river use history. • Develop exhibit themes that strive to educate visitors on underrepresented cultural and historical themes. • Provide increased access to archival resources for researchers. • Develop additional themes that incorporate modern expressions of tribes represented in the Vernon Collection that illustrate the living cultures associated with the collection, connecting the tribes to the Greater Yellowstone Ecosystem. • Track and catalog research permit collections, as per NPS regulations “Research Specimens” (36 CFR 2.5). • Update the scope of collections statement.
<p>Data and/or GIS Needs</p>	<ul style="list-style-type: none"> • Complete a collection condition survey for the museum and archives collections.
<p>Planning Needs</p>	<ul style="list-style-type: none"> • Plan for a new curation facility. • Collections management plan (update). • Develop core documents for the park’s museum program. • Historic furnishings plan for the Brinkerhoff.
<p>Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the OIRV</p> <ul style="list-style-type: none"> • Lacey Act of 1900 (18 USC 43-44) • Antiquities Act of 1906 • “Preservation of American Antiquities” (43 CFR Part 3) (implementing regulations for the Antiquities Act) • Migratory Bird Treaty Act of 1918 (16 USC 703-711) • Historic Sites Act of 1935 • Bald and Golden Eagle Protection Act of 1940, as amended • Museum Properties Management Act of 1955, as amended • Reservoir Salvage Act of 1960, as amended (16 USC 469 - 469C) • National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) • National Environmental Policy Act of 1969 • Marine Mammal Protection Act of 1972 (16 USC 1361-1407) • Endangered Species Act of 1973, as amended • Archeological and Historic Preservation Act of 1974

Other Important Resource or Value	Park Museum and Archive Collection
<p>Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the OIRV (continued)</p> <ul style="list-style-type: none"> • Indian Self-Determination and Education Assistance Act of 1975 (25 USC 450-451n, 455-458e) • American Indian Religious Freedom Act of 1978 • Archaeological Resources Protection Act of 1979 • Native American Graves Protection and Repatriation Act of 1990 • National Parks Omnibus Management Act of 1998 (16 USC 5937 Sec. 5937) • Paleontological Resources Preservation Act of 2009 • Executive Order 13007, "Indian Sacred Sites" • Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" • Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" • "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) • "Protection of Historic Properties" (36 CFR 800) • "Protection of Archeological Resources: Uniform Regulations" (43 CFR 7) • "Federal Property Management Regulations" (41 CFR 101) prescribes regulations, policies, procedures, and delegations of authority about the management of federal property • "Research Specimens" (36 CFR 2.59) • "Endangered and Threatened Wildlife" (50 CFR 17.11) • "Endangered and Threatened Plants" (50 CFR 17.12) <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (chapter 5) "Cultural Resource Management" • Director's Order 11D: <i>Records and Electronic Information Management</i> • Director's Order 24: <i>NPS Museum Collections Management</i> • Director's Order 28: <i>Cultural Resource Management</i> • Director's Order 28A: <i>Archeology</i> • NPS <i>Museum Handbook</i>, parts I, II, and III • <i>Department of the Interior Policy on Consultation with Indian Tribes</i> • <i>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i>



Identification of Key Issues and Associated Planning and Data Needs

This section considers key issues to be addressed in planning and management and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for a park. Key issues often raise questions regarding park purpose and significance and fundamental and other important resources and values. For example, a key issue may pertain to the potential for a fundamental or other important resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions that are not directly related to purpose and significance, but that still affect them indirectly. Usually, a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway and the associated planning and data needs to address them:

- **Climate Change.** The effects of climate change have been documented in the Greater Yellowstone Ecosystem, which includes the park and parkway. Documented effects include increased mean annual temperature, increased annual precipitation, increased aridity, increased winter temperatures, decreased snowpack, decreased snow to rain ratio, and earlier spring streamflow.

Changes in climate are expected to further alter fire regimes and increase invasive species in sagebrush steppe and low-elevation woodlands. Wetlands in the region may decrease due to warming temperatures, a decreasing snowpack, and less precipitation in the summer. Sedges, rushes, and other mesic plants may lose habitat, as well as amphibians and birds that rely on this habitat.

Climate change may affect the impact of nonnative species through direct effects on habitat suitability and indirect effects on nutrient availability and fire and other disturbances. Although invasive plants are also likely to continue to shift in range and competitiveness along with native species, they will differ in their response to climate change from native species insofar as they possess traits such as broad climatic tolerances and resilient dispersal mechanisms that enable them to better adapt to changing conditions. Depending on the species and geographic location, climate change may result in range movement, expansion, or contraction.

Climate change is also expected to affect wildlife in the area. In addition to changes in habitat and vegetation that species rely on, the following changes are expected to species in the Greater Yellowstone Ecosystem:

- Climate change is predicted to cause birds to shift their range, migratory patterns, and timing, and interfere with reproduction.
- The current trend of grizzly bear males to den later would continue.
- Impacts on amphibians could include earlier breeding, resulting in more frequent exposure to killing frosts and a longer larval period because water temperatures warm more slowly in early spring, leading to higher larval mortality.



In addition to a wide variety of potential effects on natural processes and natural communities, changes in climate conditions are anticipated to alter cultural resources. Archeological and ethnographic resources, particularly those along steep slopes or stream/river courses, could be at heightened risk of disturbance from erosion occurring during periods of more frequent and severe storm events. Archeological and ethnographic sites may become revealed or more visible, and therefore more vulnerable as a result of wildfires or reduction forest overstory. Increased intensity of spring runoff could also contribute to erosion and destabilization of archeological sites. Historic structures (primarily those of log and wood construction) and cultural landscape features may also be subject to damage or loss from severe storms as well as wildfires. Rising temperatures and decreasing precipitation have resulted in large areas of conifer forest die-off associated with insect infestations, increasing fuel loads, and the wildfire threat to historic structures and districts in proximity to forested areas.

- *Associated planning needs:* Climate change scenario strategy, climate friendly parks action plan
- *Associated data needs:* Climate change vulnerability assessment for select resources, continue monitoring park resources that are most susceptible to climate change, monitor weather parameters (temperature, precipitation, storm events) to document observed climate change and impacts on the park and parkway resources, and to validate projected climate change futures over time, maintaining metrological and climate reference stations
- **Park Visitation.** The overall numbers of visitors are increasing significantly, and the patterns and type of use are changing. From 2006 through 2015 park recreation visitation at Grand Teton National Park increased from 2.4 million to 3.1 million (31% increase) and at John D. Rockefeller, Jr. Memorial Parkway from 1.0 million to 1.4 million (38% increase). The average annual recreation visitation increase for this time period is 6.0% at the park and 6.8% at the parkway. Increased park visitation is affecting park resources and values and infrastructure, most notably roads and visitor facilities.

In addition to the numbers of visitors enjoying the park and parkway, people are using multiple modes of transportation to access them. The vast majority of visitors use the road systems in automobiles, recreational vehicles, and tour buses. Some visitors arrive into the park on commercial airline flights into Jackson Hole Airport. From there visitors rent automobiles or use taxis and public transportation options. A small number of visitors (<1%) enter the park and parkway using the multiuse pathway system.

The season of use is also changing. Changing demographics and year-round opportunities at the park and parkway have resulted in significant levels of use throughout the year. Due to this, there are less distinct “shoulder” seasons when visitation used to decline. There is an increase in winter use of all kinds, increasing the demand for plowing roads and grooming trails. Visitation during the shoulder seasons places pressure to have roads and park and concessioner facilities open for longer periods of time. These pressures impact staffing and budget levels.

- *Associated planning needs:* Comprehensive visitor use management plans for the most highly visited developed areas of the park and parkway, wilderness stewardship and backcountry management plan for the park and parkway
- *Associated data needs:* Continue periodic recreational ecology and visitor use trends studies for frontcountry, backcountry, and wilderness areas of the park and parkway; visitor surveys related to visitor needs, expectations, technology use, and baseline knowledge from visitors of various cultures/backgrounds (related to programs like Leave No Trace, or NPS rules/policies, key park issues, perceptions of crowding, etc.)

- **Aging Infrastructure.** Protection of resources at the park and parkway, including natural and cultural resources, visitor experiences, and scientific opportunities are the primary reason for designation as units of the national park system. Therefore, the preservation and maintenance of associated infrastructure, some of which is itself culturally significant, is critical to maintaining park purpose, significance, and fundamental resources and values. Park and parkway infrastructure is aging, with the average bridge 47 years old, the average paved road 64 years old, and the average building 60 years old. Age and limited funding has resulted in declining asset condition within the park and parkway. The current aggregate facility condition index for the park and parkway is 0.185, which is defined by the National Park Service as poor, and the level of deferred maintenance has reached \$222 million. Deferred maintenance is concentrated in asset types such as paved roads (\$92 million), buildings (\$43 million), and wastewater treatment plants (\$23 million). The failure of systems such as wastewater treatment plants has the potential to directly impact many fundamental resources and values, notably aquatic resources. Cultural resources such as historic buildings are under threat due to the lack of staffing and funding that can be dedicated to their maintenance. In addition to the deferred maintenance data associated with the built environment, there is a significant shortfall in facility related operational funding to support routine operations, preventative maintenance, corrective maintenance, and recurring maintenance activities. This shortfall has contributed to the creation of deferred maintenance over the course of time. If the park receives one-time project funding to address deferred maintenance, but does not receive additional operational funds to sustain those improvements, the deferred maintenance cycle will begin again and this park will be requesting deferred maintenance funding in the future when the life cycle of those improvements have been reached. Grand Teton National Park is a leader in sustainability within the service and within the State of Wyoming, and current operational constraints threaten the ability of the park to meet sustainability goals.

 - *Associated data needs:* Comprehensive condition assessments for high-priority historic structures and districts, condition assessments of high-priority assets
- **Workforce Management.** In order to continue a proud tradition of resource protection and provide the level of service expected by an ever-expanding and changing visitor demographic, the park and parkway must ensure a diverse and skilled workforce. A strategically trained, skilled, and positioned workforce is critical in the park's ability to achieve and enhance resource protection, visitor services, and operational interests. Therefore, workforce mentoring, training, and development would help to ensure that workplace outcomes are achieved in a safe, effective, and efficient manner. Of particular importance is the ability to meet critical and changing work demands while also safeguarding employee well-being and safety. Ever increasing workforce costs, project demands, resource protection, and evolving visitor interests will continue to influence budget, operational decisions, and outcomes.

 - *Associated planning needs:* Workforce transition strategy
- **Business of the National Park Service.** Many significant planning and decision-making processes have been completed recently at the park and parkway. In addition to projects that have been previously identified for implementation, the park and parkway often receive requests from external stakeholders or agencies that need to be weighed within the workload context. In order to both accomplish what the park and parkway have publicly agreed to and to be nimble in the face of changing environments and needs, Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway need to be strategic in how their workforce is designed, how it communicates to the public on the work it is undertaking, and how it prioritizes projects and proposals.

 - *Associated planning needs:* Workforce transition strategy
 - *Associated data needs:* Comprehensive list and analysis of committees, projects, and plans to which the park and parkway have committed; analysis of true cost of operations

Planning and Data Needs

To maintain connection to the core elements of the foundation and the importance of these core foundation elements, the planning and data needs listed here are directly related to protecting fundamental resources and values, park significance, and park purpose, as well as addressing key issues. To successfully undertake a planning effort, information from sources such as inventories, studies, research activities, and analyses may be required to provide adequate knowledge of park resources and visitor information. Such information sources have been identified as data needs. Geospatial mapping tasks and products are included in data needs.

Items considered of the utmost importance were identified as high priority, and other items identified, but not rising to the level of high priority, were listed as either medium- or low-priority needs. These priorities inform park management efforts to secure funding and support for planning projects.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
Scenery	Telecommunications plan (update)	H	Ensure the telecommunications plan addresses protection of scenic resources.
Ecological Communities and Natural Processes	Vegetation management plan including invasive plant management	H	
Ecological Communities and Natural Processes	Mountain goat management plan	H	
Ecological Communities and Natural Processes	Airport wildlife hazard mitigation plan	H	
Aquatic Resources and Processes	Develop plan to address aquatic invasive species, including removal of aquatic invasive species from Kelly Warm Spring	H	
Park Museum and Archive Collection	Plan for a new curation facility	H	A plan is needed to determine the future location and size of a facility needed to house museum and archive collections.
Park Museum and Archive Collection	Develop core documents for the park’s museum program	H	
Park Museum and Archive Collection	Develop a historic furnishings plan for the Brinkerhoff Lodge	H	There is a directive to complete this plan.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
Wilderness	Complete the Building Blocks for Wilderness Stewardship endeavor for the wilderness areas in the John D. Rockefeller, Jr. Memorial Parkway	H	This information is needed to inform the wilderness and backcountry management plan for the park and parkway.
Key Issue (Workforce Management, Business of NPS)	Workforce transition strategy	H	A thoughtful look at the park and parkway's workforce and position management is needed in order to prepare for the future of the two park units. This effort would also address diversity and inclusion initiatives.
Ecological Communities and Natural Processes; Visitor Experiences; Wilderness; Key Issue (Park Visitation)	Wilderness stewardship and backcountry management plan for the park and parkway	H	This plan would be based on management zoning developed in the 1976 master plan. A number of planning/data needs would need to be initially completed prior to beginning this effort, including the buildings blocks for wilderness stewardship for the parkway and visitor use information collected about day and overnight use in the wilderness area. This plan would have a robust focus on visitor use management. Topics to be covered within this plan might include climbing management, visitor-created trails, and day-use recreation.
Other Historic Properties	Transportation context and evaluation	H	
Scenery; Ecological Communities and Natural Processes	Fire management plan (update)	M	Update would include strategies for minimizing the effects of smoke during controlled burns.
Ecological Communities and Natural Processes; Cultural History and Resources	Resource stewardship strategy	M	
Ecological Communities and Natural Processes	Bear management plan	M	

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
Aquatic Resources and Processes	Fisheries management plan	M	This plan would be the most encompassing means of addressing the planning and action needs in the parks regarding the fishery, though it should be noted that fundamental data regarding the fisheries current status is compulsory for the development of a fisheries management plan.
Aquatic Resources and Processes	Water resources management plan, including water quality and quantity monitoring	M	This effort would include determining the appropriate target water flows for the Jackson Lake Dam that balance desired conditions for natural resources and recreational use, within constraints of law and policy. It would also develop management zoning for rivers, lakes, etc., that establishes desired conditions for resources and visitor experiences, including indicators and standards to be monitored. The plan would include a discussion of water rights.
Cultural History and Resources	Conduct long-term planning to streamline internal cultural compliance review	M	This planning would be completed in partnership with park concessioners, and would help determine the appropriateness of current contract language for preservation of cultural resources.
Cultural History and Resources	Complete an ethnographic assessment of the Enclosure Site and evaluate appropriateness of current recreational access and use	M	Information obtained from the assessment would help inform the wilderness stewardship plan.
Cultural History and Resources	Complete cultural landscape reports for all significant cultural landscapes and implement appropriate recommendations	M	
Visitor Experiences; Key Issue (Park Visitation)	Comprehensive visitor use management plans for the most highly visited developed areas of the park and parkway	M	This plan(s) could include, but is not limited to, the Mormon Row Historic District and Jenny Lake and String Lake areas. It would also provide special attention to water recreation areas, such as hot springs, rivers, and lakes. This plan would be tied closely with the wilderness stewardship and backcountry management plan. It might be completed as a combined effort, concurrently, or following completion of that plan.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
Wilderness; Key Issue (Climate Change)	Climate change scenario strategy	M	
Park Museum and Archive Collection	Collections management plan (update)	M	The collections management plan is a planning tool for the technical aspects of museum operations, including a review of museum documentation and guideline adherence. The collections management plan considers museum management within the overall context of the park's operations, focusing on how collections can reach their greatest potential in support of park goals. The current collections management plan was finalized in 2012, but drafted in 2005, so a revised plan is needed to provide up-to-date information.
Key Issue (Climate Change)	Climate friendly parks action plan	M	The park has made significant progress toward sustainability in the park. The completion of this plan could result in immediate benefits.
Scenery; Cultural History and Resources; Other Historic Properties	Visual resource management plan	L	This plan is needed to identify appropriate treatments when significant viewpoints and historic viewsheds within the park are obstructed. Appropriate recommendations from the plan would be implemented as needed. This plan would be informed by the visual resource inventory. The inventory would provide guidance for next steps for planning for visual resources, and could determine that a plan may not be necessary.
Scenery; Ecological Communities and Natural Processes	Land protection plan (update)	L	The purpose of this plan would be to help establish priorities for land acquisition as opportunities arise. The existing plan is somewhat outdated, and should be updated as appropriate.
Ecological Communities and Natural Processes	Livestock management plan	L	
Cultural History and Resources	Develop a parkwide transportation context for the evaluation of linear transportation features (especially roads and trails)	L	

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
Visitor Experiences	Comprehensive interpretive plan	L	There are a number of visitor use-related data needs relevant to informing preparation of the comprehensive interpretive plan. The park and parkway currently have a robust interpretive program, and a number of inputs to the comprehensive interpretive plan are already completed through area-specific planning efforts.
Natural Soundscapes and Night Skies	Soundscape management plan	L	This plan is to be completed, as described in the <i>Jackson Hole Airport Use Agreement Extension Environmental Impact Statement</i> . Soundscape management would also be addressed as part of other planning efforts, as natural soundscapes are important resources in the park.
Wilderness	Complete a wilderness study, supported by appropriate National Environmental Policy Act and public involvement requirements, for the eligible wilderness areas in John D. Rockefeller, Jr. Memorial Parkway	L	
Other Historic Properties	Cultural landscape reports	L	



Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Geologic Features and Processes	Identify areas of concentrated development and visitor use near known geologic hazards	H	
Geologic Features and Processes	Continue research on geologic processes to better identify hazards in high visitor use areas	H	
Geologic Features and Processes	Complete inventory of glaciers and permanent snow fields to support monitoring of decline/change	H	
Geologic Features and Processes; Aquatic Resources and Processes	Track trends in pathogens and visitor use of thermal features	H	
Ecological Communities and Natural Processes	Location of primary conservation area/secure habitat (bears), wolf dens, range of/critical habitat for elk, bison, moose, pronghorn, etc.	H	
Ecological Communities and Natural Processes	Study to determine which invasive species are the most threatening to ecological processes and/or most treatable	H	These data would help inform the invasive species management plan.
Ecological Communities and Natural Processes	Study movement, distribution, diets, disease, and productivity of nonnative mountain goats in Teton Range	H	
Ecological Communities and Natural Processes; Aquatic Resources and Processes	Ongoing in-park and nearby air quality monitoring (for deposition, ozone, visibility, particulate matter) to maintain a long-term record for understanding of threats from development	H	Grand Teton National Park is a Class I airshed. John D. Rockefeller, Jr. Memorial Parkway is a Class II airshed. Park involvement in cooperative monitoring efforts is important for data continuity and anticipating future changes in monitoring.
Aquatic Resources and Processes	Collect water flow data relative to recreation demands	H	
Aquatic Resources and Processes	Study trends in fish and amphibian populations (native vs. nonnative) as well as potential responses of these species to climatic drivers	H	

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Aquatic Resources and Processes	Collect data to address aquatic invasive species data needs within and surrounding (regional and national) the parks	H	
Aquatic Resources and Processes	Water quality monitoring on public beaches	H	These data would help address an important health and safety issue.
Cultural History and Resources	Clarify tribal consultation lists for the park and parkway	H	Grand Teton National Park currently consults with 24 tribes, and John D. Rockefeller, Jr. Memorial Parkway consults with 8. It is unclear why the units have different consultation lists, whether the consultation list for Grand Teton National Park has grown formally or informally, and whether the current consultation list is appropriate.
Cultural History and Resources	Complete near 100% archeological survey of the park and parkway, including ice patches, and update the Archeological Sites Management Information System (ASMIS) database	H	
Cultural History and Resources; Other Historic Properties; Key Issue (Aging Infrastructure)	Comprehensive condition assessments for high-priority historic structures and districts	H	
Visitor Experiences	Collect and analyze data documenting visitor use impacts	H	Visitor impacts such as social trails, littering, graffiti, etc.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Visitor Experiences; Wilderness; Key Issue (Park Visitation)	Continue periodic recreational ecology and visitor use trends studies for frontcountry, backcountry, and wilderness areas of the park and parkway, and synthesize information from multiple sources	H	More information is needed about how people are entering the park, experiencing the frontcountry developed areas, and experiencing the backcountry and wilderness areas. This information could include data related to trail counts, concession data, boat use, conflicts between users, extreme skiers, climbers, vehicles, and visitor use statistics at popular areas of the park. There is a high need to consolidate data collected from a number of sources (trails, Moose-Wilson Road, entrance stations, etc.) so that park management is better able to understand park users and uses.
Visitor Experience; Wilderness; Key Issue (Park Visitation)	Visitor surveys related to visitor needs, expectations, technology use, and baseline knowledge from visitors of various cultures/backgrounds (related to programs like Leave No Trace, or NPS rules/policies, key park issues, perceptions of crowding, etc.)	H	These data would help inform the wilderness and backcountry stewardship plan and/or a comprehensive visitor use management plan.
Wilderness	Map frontcountry, backcountry, and wilderness areas based on the zone definitions from the Master Plan	H	This information would help inform the wilderness and backcountry stewardship plan. Zones are currently described in the 1976 master plan; however, they need to be ground-truthed and defined.
Wilderness	Data on day use in wilderness and backcountry areas	H	There are currently few data about day use in wilderness and backcountry areas, though the NPS staff have fairly comprehensive data on overnight use due to the permitting system in place.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Wilderness; Key Issue (Climate Change)	Climate change vulnerability assessment for select resources	H	
Park Museum and Archive Collection	Complete a collection condition survey for the museum and archives collections	H	
Key Issue (Climate Change)	Maintaining metrological and climate reference stations	H	
Key Issue (Business of NPS)	Comprehensive list and analysis of committees, projects, and plans to which the park and parkway have committed	H	A comprehensive list would help inform park management decisions about how to manage its staff and budget.
Key Issue (Business of NPS)	Analysis of true cost of operations	H	
Scenery; Cultural History and Resources; Other Historic Properties	Visual resource inventory	M	The inventory would identify the scenic quality characteristics and NPS/visitor values of important scenic views (including historic viewsheds) to serve as the baseline for development of a visual resource management plan.
Scenery	Continue glacier photo monitoring	M	
Geologic Features and Processes	Expand inventorying and monitoring to better understand the role of climate change and to assess the effects of this change on glaciers, snowfields, and soils	M	
Geologic Features and Processes; Aquatic Resources and Processes	Water table/aquifer level monitoring	M	
Ecological Communities and Natural Processes	Continue to update and investigate fire history / vegetation disturbance regimes in the park and surrounding lands in order to plan treatments in line with a well understood disturbance history	M	

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Ecological Communities and Natural Processes	Understanding ecological role of bats and foxes and mitigating human-animal interactions and conflicts	M	
Ecological Communities and Natural Processes	Update existing locations of invasive nonnative plants	M	
Ecological Communities and Natural Processes	Continue to assess locations of agricultural disturbances and long-term monitoring of native vegetation restoration in these disturbed areas	M	
Ecological Communities and Natural Processes	Wildlife habitat connectivity and effects of infrastructure and development	M	
Ecological Communities and Natural Processes; Aquatic Resources and Processes	Continue research on resources sensitive to air pollution and critical loads of pollutant deposition to establish goals for ecosystem protection and recovery	M	Ongoing research is helping identify park resources sensitive to air pollution and respective critical loads for future use in establishing goals for ecosystem protection and recovery.
Ecological Communities and Natural Processes	Traditional ecological knowledge studies	M	Baseline information about potential resources to be collected is needed in order to provide guidelines for traditional gathering.
Ecological Communities and Natural Processes; Natural Soundscapes and Night Skies	Data on the economic value of ecological services	M	
Aquatic Resources and Processes	Update the hydrologic features of the park	M	Including major Snake River and other tributary channels, changes in flow and permanent and perennial stream locations.
Aquatic Resources and Processes	Collect data on life histories/ strategies of native fishes and their current status in the parks	M	These data would increase resource managers' ability to assess the fishery and facilitate scientifically based decisions regarding the fishery and impacts the current threats pose to it.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Aquatic Resources and Processes	Documentation and evaluation of irrigation networks within the park	M	Including LiDAR, cultural—national register eligibility, linking to water rights, fisheries (entrainment) within and adjacent to park.
Aquatic Resources and Processes	Quantify water rights for the Snake River Headwaters wild and scenic river segments	M	
Aquatic Resources and Processes	Collect water flow and temperature data relative to health of river ecosystem	M	
Aquatic Resources and Processes	Collect geothermal resources data	M	Including human pathogens, thermophilic organisms, hydrogeologic system, impacts from human use, effects of climate change on physical resource, etc.
Cultural History and Resources	Complete predictive modeling of ice patches to determine which may be more likely to contain cultural materials	M	
Cultural History and Resources	Survey and document culturally modified trees	M	
Cultural History and Resources	Complete determinations of national register eligibility for structures and features within the park and parkway that are 50 years old or older that have not yet been evaluated and update the List of Classified Structures database, as needed	M	
Cultural History and Resources	Complete mapping (GIS) and inventory of cultural landscapes and historic district boundaries	M	
Cultural History and Resources; Other Historic Properties	Inventory and monitoring of natural resources that may be affected by management/maintenance of historic properties	M	This information is particularly needed for those structures where work or future use of the structure is proposed.
Visitor Experiences	Evaluate night sky conditions in order to describe a trend	M	
Visitor Experiences	Evaluate effectiveness of visitor interpretive programs	M	

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Natural Soundscapes and Night Skies	Analyze acoustic conditions over time	M	These data would help inform the soundscape management plan.
Natural Soundscapes and Night Skies	Continue to collect acoustic data in recommended and potential wilderness areas to determine negative impacts on opportunities for solitude and undeveloped qualities	M	These data would help inform the soundscape management plan and the wilderness and backcountry stewardship plan.
Wilderness	Continue to collect data related to the 31 wilderness character monitoring measures provided in the <i>Grand Teton Recommended and Potential Wilderness Building Blocks for Wilderness Stewardship</i> document	M	
Other Historic Properties	Visitor use studies at the high-priority historic districts to understand heritage tourism and visitation at these sensitive sites	M	
Other Historic Properties	Archeological survey to identify and record additional resources that fall into this category	M	
Other Historic Properties	Condition assessments that integrate historic character, desired condition, and FMSS requirements	M	
Key Issue (Climate Change)	Continue monitoring park resources that are most susceptible to climate change	M	
Key Issue (Climate Change)	Monitor weather parameters (temperature, precipitation, storm events) to document observed climate change and impacts on the park and parkway resources, and to validate projected climate change futures over time	M	
Key Issue (Aging Infrastructure)	Condition assessments of high-priority assets	M	
Scenery	Collect data on visitor perception of human impacts on scenery (i.e., crowding, etc.)	L	

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To
Geologic Features and Processes	Map geologic and soil layers with greater accuracy than what is currently provided on a 1:24,000 scale	L	
Ecological Communities and Natural Processes	Monitoring of neotropical migratory birds	L	
Ecological Communities and Natural Processes	Rare plant inventory and management guidelines	L	
Ecological Communities and Natural Processes	Collect data on type, timing, duration, and intensity of winter recreational activities throughout the park as well as potential influences on wildlife	L	
Ecological Communities and Natural Processes	Effects of livestock grazing on native plant and animal communities (cattle, horses, and pack stock)	L	These data would help inform the livestock management plan.
Aquatic Resources and Processes	Understanding of acoustic resources underwater	L	
Cultural History and Resources	Reevaluate archeological sites and historic properties determined not eligible for listing in the National Register of Historic Places and update ASMIS and LCS databases	L	
Visitor Experiences	Determine estimates of pre-settlement era ambient air quality and regional haze	L	Estimates are needed of pre-settlement era ambient air quality and regional haze during summer months in order to assess conditions when the natural role of fire was more prevalent than today.
Natural Soundscapes and Night Skies	Study negative acute and chronic impacts of noise on visitor experience and on wildlife	L	
Ecological Communities and Natural Processes	Information on the ecosystem community energy flow	L	
Natural Soundscapes and Night Skies	Collect lightscape data using techniques provided by the NPS Night Skies Program	L	

Part 3: Contributors

Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway

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Appendixes

Appendix A: Enabling Legislation and Legislative Acts for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway

Act of February 26, 1929 (P.L. 70-817, 45 Stat. 1314), established Grand Teton National Park

1314 SEVENTIETH CONGRESS. Sess. II. CHS. 330, 331. 1929.

February 26, 1929.
[S. 5543.]
[Public, No. 817.]

CHAP. 331.—An Act To establish the Grand Teton National Park in the State of Wyoming, and for other purposes.

Grand Teton Na-
tional Park.
Area.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the tract of land in the State of Wyoming particularly described by metes and bounds as follows, to wit:

Description.

Beginning at the northwest corner of township 44 north, range 115 west, of the sixth principal meridian; thence southerly along the west line of said township to the northeast corner of section 12, township 44 north, range 116 west; thence westerly to the northwest corner of the northeast quarter northeast quarter section 12; thence southerly and westerly, respectively, on quarter-quarter section lines to the southwest corner of said section 12; thence southerly to the southwest corner of the northwest quarter northwest quarter section 13; thence easterly to the northeast corner of the southwest quarter northeast quarter section 13; thence southerly on the east quarter-quarter section lines of sections 13, 24, and 25, to the southwest corner of the northeast quarter northeast quarter section 25; thence westerly and southerly, respectively, on quarter-quarter section lines to the northwest corner of the southwest quarter southwest quarter section 25; thence westerly to the northwest corner of the southwest quarter southeast quarter section 26; thence southerly to the south-

west corner of the southeast quarter section 26; thence westerly to the southwest corner of the southeast quarter southwest quarter section 26; thence southerly to the southwest corner of the northeast quarter southwest quarter section 35; thence easterly to the northeast corner of the southwest quarter southeast quarter section 35; thence southerly to the southeast corner of the southwest quarter southeast quarter section 35, all in township 44 north, range 116 west; thence westerly to the northeast corner of the northwest quarter section 2, township 43 north, range 116 west; thence southerly on mid-section lines of sections 2, 11, and 14, to the northwest corner of the southeast quarter section 14; thence easterly to the northeast corner of the northwest quarter southeast quarter section 14; thence southerly on east quarter-quarter section lines of sections 14, 23, 26, and 35, all in township 43 north, range 116 west, to the right bank of South Fork Snake River; thence westerly along said bank to its intersection with the north line of township 42 north, range 116 west; thence westerly along said township line to the northwest corner of said township; thence southerly along the west line of said township to its intersection with the main hydrographic divide immediately south of Granite Canyon; thence southwesterly along said divide to its intersection with the main hydrographic divide formed by the crest of the Teton Mountains; thence northerly along said divide, between the headwaters of Moose Creek and Granite Canyon, Fox Creek, and Open Canyon, Dirby Creek and Death Canyon, Teton Creek and Taggart and Glacier Creeks, Leigh Creek and Leigh Canyon, Badger Creek and Moran Canyon, to a point where said divide intersects the main hydrographic divide immediately south and southeast of Webb (Moose) Canyon; thence northeasterly along the last-mentioned divide to its intersection with the projected east quarter-quarter section line of what will probably be when surveyed section 7, township 46 north, range 115 west; thence southerly along said line to the northwest corner of the southeast quarter southeast quarter section 7; thence westerly to the northwest corner of the southwest quarter southeast quarter section 7; thence southerly on projected mid-section lines of probable sections 7, 18, 19, and 30, to the southwest corner of the northeast quarter section 30; thence westerly to the southeast corner of the southwest quarter northwest quarter section 30; thence southerly to the southeast corner of the northwest quarter southwest quarter section 30; thence westerly to the southwest corner of the northwest quarter southwest quarter section 30, all of township 46 north, range 115 west; thence southerly on projected west line of said township and the west line of township 45 north, range 115 west, to the southwest corner of section 6, township 45 north, range 115 west; thence westerly on projected north line of what will probably be when surveyed, section 12, township 45 north, range 116 west, to the northeast corner of the northwest quarter northwest quarter section 12; thence southerly to the southeast corner of the southwest quarter northwest quarter section 12; thence westerly to the southeast corner of the southwest quarter northwest quarter probable section 11; thence southerly to the northeast corner of the southwest quarter southwest quarter section 11; thence westerly to the northwest corner of the southwest quarter southwest quarter section 11; thence southerly on projected west lines of probable sections 11 and 14 to the southwest corner of said section 14; thence easterly to the northeast corner of the northwest quarter northwest quarter probable section 23; thence southerly to the southeast corner of the northwest quarter northwest quarter section 23; thence easterly to the southwest corner of the northeast quarter of the northeast quarter section 23; then southerly to the southwest corner of the southeast quarter northeast quarter section 23; thence easterly to the southeast

Description.—Continued.

Set apart as Grand Teton National Park, Wyo.

Proviso.
Restriction on new roads and hotels.

National Park Service provisions applicable.
Vol. 39, p. 535.

Proviso.
Grazing permitted adjacent owners, upon lands of.

Use of dead and down timber.

Water Power Act not applicable.
Vol. 41, p. 1063.

Valid claims, etc., not affected.

Appropriations for Yellowstone Park available for purposes hereof.

corner of the northeast quarter section 23; thence southerly on projected east lines of probable sections 23 and 26 to the northeast corner of the southeast quarter southeast quarter section 26; thence eastward to the northeast corner of the southeast quarter southeast quarter section 25, all in township 45 north, range 116 west; thence easterly to the northeast corner of the southeast quarter southwest quarter section 30, township 45 north, range 115 west; thence southerly on mid-section lines of sections 30 and 31, to the south line of section 31, said township; thence easterly to place of beginning, is hereby reserved and withdrawn from settlement, occupancy, or disposal under the laws of the United States, and dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people of the United States under the name of the Grand Teton National Park of Wyoming: *Provided*, That no new roads shall be constructed and no hotels or permanent camps shall be established on such lands except under authority of appropriations specifically made therefor by Congress, but nothing herein shall be held to restrict the establishment and construction of trails on said lands.

SEC. 2. That the provisions of the Act of August 25, 1916, entitled "An Act to establish a National Park Service, and for other purposes," and all Acts supplementary to and amendatory of said Act, are made applicable to and extended over the lands hereby included in said Grand Teton National Park: *Provided*, That under rules and regulations to be prescribed by the Secretary of the Interior any bona fide claimant or entryman claiming or owning land reasonably adjacent to the land in said park shall have the right to graze upon land in said park reasonably adjacent to the lands claimed or owned by him such number of livestock as he has been accustomed to so graze in the past or as may be reasonably necessary to the conduct of his business, and shall also have the right subject to such rules and regulations to secure dead or down timber from park lands for use in the conduct of such business.

SEC. 3. That the provisions of the Act of June 10, 1920, entitled "An Act to create a Federal Power Commission, to provide for the improvement of navigation, the development of water power, the use of the public lands in relation thereto, and to repeal section 18 of the River and Harbor Appropriation Act, approved August 8, 1917, and for other purposes," shall not apply to or extend over the land hereby reserved and dedicated as the Grand Teton National Park.

SEC. 4. That nothing herein contained shall affect any valid existing claim, location, or entry under the land laws of the United States, whether for homestead, mineral, right of way, or any other purposes whatsoever, or shall affect the right of any such claimant, locator, or entryman to the full use and enjoyment of his land.

SEC. 5. That the appropriations heretofore and hereafter made available for the administration, protection, and maintenance of the Yellowstone National Park shall also be available for these purposes for the Grand Teton National Park of Wyoming unless said park is otherwise provided for by Act of Congress.

Approved, February 26, 1929.

Presidential Proclamation of March 12, 1943 (No. 2578), Established Jackson Hole National Monument

ESTABLISHING THE JACKSON HOLE NATIONAL MONUMENT—WYOMING

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

WHEREAS the area in the State of Wyoming known as the Jackson Hole country, including that portion thereof which is located in the Teton National Forest, contains historic landmarks and other objects of historic and scientific interest that are situated upon lands owned or controlled by the United States; and

WHEREAS it appears that the public interest would be promoted by establishing the aforesaid area as a national monument to be known as the Jackson Hole National Monument:

NOW, THEREFORE, I, FRANKLIN D. ROOSEVELT, President of the United States of America, under and by virtue of the authority vested in me by the act of June 4, 1897 (30 Stat. 11, 36; U. S. C., title 16, sec. 473), and the act of June 8, 1906 (34 Stat. 225; U. S. C., title 16, sec. 431), do proclaim that the Teton National Forest lands within the aforesaid area are hereby excluded from the said national forest and that, subject to all valid existing rights, the lands excluded from the said national forest together with all other lands within the following-described area are reserved from all forms of appropriation under the public land laws and set apart as a national monument, which shall hereafter be known as the Jackson Hole National Monument:

Beginning on the present western boundary line of the Grand Teton National Park at a point where the hydrographic divide between Webb Canyon and Snowshoe Canyon intersects the hydrographic divide of the Teton Mountains (within what will probably be when surveyed section 1, township 45 north, range 117 west, sixth principal meridian); thence northerly and northeasterly along the divide formed by the crest of the Teton Range to the projected position of what will be when surveyed the line between sections 4 and 5, township 47 north, range 116 west; thence south along the section line between sections 4 and 5, 8 and 9, to the point for the corner of sections 8, 9, 16, and 17; thence east along the line between sections 9 and 16, 10 and 15, 11 and 14, 12 and 13, township 47 north, range 116 west, sections 7 and 18, 8 and 17, 9 and 16, to the point for the corner of sections 9, 10, 15, and 16, township 47 north, range 115 west; thence south along the line between sections 15 and 16, 21 and 22, 27 and 28, to the point for the corner of sections 27, 28, 33, and 34; thence east along the line between sections 27 and 34, 26 and 35, to the point for the corner of sections 25, 26, 35, and 36; thence south along the line between sections 35 and 36, township 47 north, range 115 west, sections 1 and 2, 11 and 12, 13 and 14, 23 and 24, to the section corner common to sections 23, 24, 25, and 26; thence east along the line between sections 24 and 25, township 46 north, range 115 west, sections 19 and 30, 20 and 29, 21 and 28, 22 and 27, 23 and 26, 24 and 25, township 46 north, range 114 west, sections 19 and 30, township 46 north, range 113 west, to the point for the quarter section corner of sections 19 and 30; thence south along the meridional quarter section line of unsurveyed sections 30 and 31, township 46 north, range 113 west, and surveyed sections 6, 7, 18, 19 and 30, township 45 north, range 113 west, to the present boundary of the Teton National Forest; thence easterly, southerly, and southwesterly along the Teton National Forest boundary to the corner of sections 25 and 36 on the east boundary of township 44 north, range 115 west; thence west three-fourths mile to the west one-sixteenth section corner of sections 25 and 36; thence south one-half mile to the west center one-sixteenth section corner of section 36; thence east one-fourth mile to the present boundary of the Teton National Forest; thence southerly along the Teton National Forest boundary to the south bank of the Gros Ventre River; thence westerly along the south bank of the Gros Ventre River to the line between sections 10 and 11, township 42 north, range

115 west; thence south to the section corner common to sections 10, 11, 14 and 15; thence west to the section corner common to sections 8, 9, 16, and 17; thence south to the section corner common to sections 20, 21, 28, and 29, thence west one-half mile to the quarter section corner between sections 20 and 29; thence south one-half mile to the center quarter section corner of section 29, township 42 north, range 115 west; thence west to the quarter section corner of sections 25 and 30 on the line between township 42 north, range 115 west, and township 42 north, range 116 west; thence south to the corner of sections 25, 30, 31 and 36; thence west to the corner of sections 25, 26, 35 and 36; thence south along the line between sections 35 and 36, township 42 north, range 116 west, sections 1 and 2, township 41 north, range 116 west, to the south and east bank of Flat Creek; thence southerly and westerly along the south and east bank of Flat Creek to the line between sections 27 and 28, township 41 north, range 116 west; thence along the section line between sections 27 and 28 to the quarter section corner between sections 27 and 28; thence west one-fourth mile; thence north one-half mile to the east sixteenth section corner between sections 21 and 28; thence north three-fourths mile; thence east one-fourth mile to the north sixteenth section corner between sections 21 and 22; thence north on the line between sections 21 and 22, 15 and 16 to the section corner common to sections 9, 10, 15 and 16; thence east between sections 10 and 15 to the quarter section corner between sections 10 and 15; thence north one-fourth mile; thence east one-fourth mile; thence north one-half mile; thence east one-fourth mile to the north sixteenth section corner between sections 10 and 11; thence north on the line between sections 10 and 11, 2 and 3, to the corner common to sections 34 and 35, township 42 north, range 116 west, and sections 2 and 3, township 41 north, range 116 west; thence west along the township line between townships 41 and 42 north to the quarter section corner between section 3, township 41 north, range 116 west, and section 34, township 42 north, range 116 west; thence northerly on the meridional quarter section line of section 34 to the north bank of the Gros Ventre River; thence northeasterly along the north bank of the Gros Ventre River to the line between sections 34 and 35; thence north on the line between sections 34 and 35, 26 and 27, 22 and 23, 14 and 15, to the quarter section corner between said sections 14 and 15; thence west one-fourth mile; thence north one-fourth mile; thence west one-fourth mile; thence north one-fourth mile to the quarter section corner between sections 10 and 15; thence east one-fourth mile; thence north one-fourth mile; thence east one-fourth mile to the south sixteenth section corner between sections 10 and 11; thence northerly on the line between said sections 10 and 11 to the north sixteenth section corner between said sections 10 and 11; thence east one-fourth mile; thence north one-fourth mile to the west sixteenth section corner of sections 2 and 11; thence in a straight line to the northwest corner of section 1, township 42 north, range 116 west; thence west on the line between townships 42 and 43 north to the present boundary of the Grand Teton National Park; thence northerly along the east boundary and southwesterly along the north boundary of the Grand Teton National Park to the place of beginning; also a tract embracing the following lands: sections 5, 6, 7, 8, and 18, and those parts of sections 3, 4, 9, 10, 16 and 17, township 42 north, range 116 west, sixth principal meridian, lying west of the center line of the main channel of Snake River.

The reservation made by this proclamation supersedes, as to any of the above-described lands affected thereby, the withdrawals made for classification and other purposes by Executive Orders No. 3394 of January 28, 1921; No. 4685 of July 7, 1927; No. 4857 of April 16, 1928; No. 5040 of February 4, 1929; No. 5436 of September 2, 1930; No. 5480 of November 13, 1930; and No. 7680 of July 30, 1937.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of the monument as provided in the act of Congress entitled "An Act to establish a National Park Service, and for other purposes," approved August 25, 1916 (39 Stat. 535, U. S. C., title 16, secs. 1 and 2), and acts supplementary thereto or amendatory thereof, except that the administration of the monument shall be subject to the reclamation withdrawal heretofore made under the authority of the act of June 17, 1902, 32 Stat. 388.

IN WITNESS WHEREOF I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this 15th day of March in the year of our Lord nineteen hundred and forty-three, and of [SEAL] the Independence of the United States of America the one hundred and sixty-seventh.

FRANKLIN D ROOSEVELT

By the President:
CORDELL HULL
Secretary of State.

Act of September 14, 1950 (P.L. 81-787, 64 Stat. 849), established a new Grand Teton National Park, combining Grand Teton National Park and Jackson Hole National Monument into one unit

[CHAPTER 950]

AN ACT

To establish a new Grand Teton National Park in the State of Wyoming, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, for the purpose of including in one national park, for public benefit and enjoyment, the lands within the present Grand Teton National Park and a portion of the lands within the Jackson Hole National Monument, there is hereby established a new "Grand Teton National Park". The park shall comprise, subject to valid existing rights, all of the present Grand Teton National Park and all lands of the Jackson Hole National Monument that are not otherwise expressly provided for in this Act, and an order setting forth the boundaries of the park shall be prepared by the Secretary of the Interior and published in the Federal Register. The national park so established shall, so far as consistent with the provisions of this Act, be administered in accordance with the general statutes governing national parks, and shall supersede the present Grand Teton National Park and the Jackson Hole National Monument. The Act of February 26, 1929 (45 Stat. 1314), and any other provisions of law heretofore specifically applicable to such present park or monument, are hereby repealed: *Provided*, That no further extension or establishment of national parks or monuments in Wyoming may be undertaken except by express authorization of the Congress.*

SEC. 2. The following-described lands of the Jackson Hole National Monument are hereby made a part of the National Elk Refuge and

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shall be administered hereafter in accordance with the laws applicable to said refuge:

SIXTH PRINCIPAL MERIDIAN

Township 42 north, range 116 west: Those portions of sections 24, 25, 26, and 35 lying east of the east right-of-way line of United States Highway Numbered 187, and lying south and east of the north and west bank of the Gros Ventre River.

Township 42 north, range 115 west: Those portions of sections 8, 9, 10, 17, 18, and 19 lying south and east of the north and west bank of the Gros Ventre River; section 20; section 29, northwest quarter; section 30, north half.

Township 41 north, range 116 west: Entire portion now in Jackson Hole National Monument except that portion in section 2 lying west of the east right-of-way line of United States Highway Numbered 187.

Containing in all six thousand three hundred and seventy-six acres, more or less.

SEC. 3. The following-described lands of the Jackson Hole National Monument are hereby made a part of the Teton National Forest and shall be administered hereafter in accordance with the laws applicable to said forest:

SIXTH PRINCIPAL MERIDIAN

Township 45 north, range 113 west: Section 21, lot 5; section 22, lots 2 and 6; section 23, lot 3; section 26, lots 2, 3, 6, 7, southwest quarter northwest quarter, southwest quarter and southwest quarter southeast quarter; section 27, lots 1, 2, 4, 6, 7, 8, 9, southeast quarter northeast quarter and south half; section 28, lot 1, southeast quarter northeast quarter and east half southeast quarter; section 29, lots 2, 4, 5, 6, 8, southwest quarter northeast quarter, northwest quarter southeast quarter, south half northwest quarter, and north half southwest quarter; section 30, lot 7, south half northeast quarter, north half southeast quarter and southeast quarter southeast quarter; section 31, lots 1 and 2; section 32, lots 2 and 5; section 33, east half northeast quarter and northeast quarter southeast quarter; section 34, north half and north half south half; section 35, north half, containing in all two thousand eight hundred six and thirty-four one-hundredths acres, more or less.

SEC. 4. With respect to those lands that are included by this Act within the Grand Teton National Park—

(a) the Secretary of the Interior shall designate and open rights-of-way, including stock driveways, over and across Federal lands within the exterior boundary of the park for the movement of persons and property to or from State and private lands within the exterior boundary of the park and to or from national forest, State, and private lands adjacent to the park. The location and use of such rights-of-way shall be subject to such regulations as may be prescribed by the Secretary of the Interior;

(b) all leases, permits, and licenses issued or authorized by any department, establishment, or agency of the United States with respect to the Federal lands within the exterior boundary of the park which are in effect on the date of approval of this Act shall continue in effect, subject to compliance with the terms and conditions therein set forth, until terminated in accordance with the provisions thereof;

(c) where any Federal lands included within the park by this Act were legally occupied or utilized on the date of approval of this Act for residence or grazing purposes, or for other pur-

poses not inconsistent with the Act of August 25, 1916 (39 Stat. 535), pursuant to a lease, permit, or license issued or authorized by any department, establishment, or agency of the United States, the person so occupying or utilizing such lands, and the heirs, successors, or assigns of such person, shall, upon the termination of such lease, permit, or license, be entitled to have the privileges so possessed or enjoyed by him renewed from time to time, subject to such terms and conditions as the Secretary of the Interior shall prescribe, for a period of twenty-five years from the date of approval of this Act, and thereafter during the lifetime of such person and the lifetime of his heirs, successors, or assigns but only if they were members of his immediate family on such date, as determined by the Secretary of the Interior: *Provided*, That grazing privileges appurtenant to privately owned lands located within the Grand Teton National Park established by this Act shall not be withdrawn until title to lands to which such privileges are appurtenant shall have vested in the United States, except for failure to comply with the regulations applicable thereto after reasonable notice of default: *Provided further*, That nothing in this subsection shall apply to any lease, permit, or license for mining purposes or for public accommodations and services or to any occupancy or utilization of lands for purely temporary purposes. Nothing contained in this Act shall be construed as creating any vested right, title, interest, or estate in or to any Federal lands.

SEC. 5. (a) In order to provide compensation for tax losses sustained as a result of any acquisition by the United States, subsequent to March 15, 1943, of privately owned lands, together with any improvements thereon, located within the exterior boundary of the Grand Teton National Park established by this Act, payments shall be made to the State of Wyoming for distribution to the county in which such lands are located in accordance with the following schedule of payments: For the fiscal year in which the land has been or may be acquired and nine years thereafter there shall be paid an amount equal to the full amount of annual taxes last assessed and levied on the land, together with any improvements thereon, by public taxing units in such county, less any amount, to be determined by the Secretary of the Interior, which may have been paid on account of taxes for any period falling within such fiscal year. For each succeeding fiscal year, until twenty years elapse, there shall be paid on account of such land an amount equal to the full amount of taxes referred to in the preceding sentence, less 5 per centum of such full amount for each fiscal year, including the year for which the payment is to be made: *Provided*, That the amount payable under the foregoing schedule for any fiscal year preceding the first full fiscal year following the approval of this Act shall not become payable until the end of such first full fiscal year.

(b) As soon as practicable after the end of each fiscal year, the amount then due for such fiscal year shall be computed and certified by the Secretary of the Interior, and shall be paid by the Secretary of the Treasury: *Provided*, That such amount shall not exceed 25 per centum of the fees collected during such fiscal year from visitors to the Grand Teton National Park established by this Act and the Yellowstone National Park. Payments made to the State of Wyoming under this section shall be distributed to the county where the lands acquired from private landowners are located and in such manner as the State of Wyoming may prescribe.

SEC. 6. (a) The Wyoming Game and Fish Commission and the National Park Service shall devise, from technical information and

other pertinent data assembled or produced by necessary field studies or investigations conducted jointly by the technical and administrative personnel of the agencies involved, and recommend to the Secretary of the Interior and the Governor of Wyoming for their joint approval, a program to insure the permanent conservation of the elk within the Grand Teton National Park established by this Act. Such program shall include the controlled reduction of elk in such park, by hunters licensed by the State of Wyoming and deputized as rangers by the Secretary of the Interior, when it is found necessary for the purpose of proper management and protection of the elk.

(b) At least once a year between February 1 and April 1, the Wyoming Game and Fish Commission and the National Park Service shall submit to the Secretary of the Interior and to the Governor of Wyoming, for their joint approval, their joint recommendations for the management, protection, and control of the elk for that year. The yearly plan recommended by the Wyoming Game and Fish Commission and the National Park Service shall become effective when approved by the Secretary of the Interior and the Governor of Wyoming, and thereupon the Wyoming Game and Fish Commission and the Secretary of the Interior shall issue separately, but simultaneously such appropriate orders and regulations as are necessary to carry out those portions of the approved plan that fall within their respective jurisdictions. Such orders and regulations, to be issued by the Secretary of the Interior and the Wyoming Game and Fish Commission, shall include provision for controlled and managed reduction by qualified and experienced hunters licensed by the State of Wyoming and deputized as rangers by the Secretary of the Interior, if and when a reduction in the number of elk by this method within the Grand Teton National Park established by this Act is required as a part of the approved plan for the year, provided that one elk only may be killed by each such licensed and deputized ranger. Such orders and regulations of the Secretary of the Interior for controlled reduction shall apply only to the lands within the park which lie east of the Snake River and those lands west of Jackson Lake and the Snake River which lie north of the present north boundaries of Grand Teton National Park, but shall not be applicable to lands within the Jackson Hole Wildlife Park. After the Wyoming Game and Fish Commission and the National Park Service shall have recommended to the Secretary of the Interior and the Governor of Wyoming in any specified year a plan, which has received the joint approval of the Secretary of the Interior and the Governor of Wyoming, calling for the controlled and managed reduction by the method prescribed herein of the number of elk within the Grand Teton National Park established by this Act, and after the Wyoming Game and Fish Commission shall have transmitted to the Secretary of the Interior a list of persons who have elk hunting licenses issued by the State of Wyoming and who are qualified and experienced hunters, on or before July 1 of that year the Secretary of the Interior, without charge, shall cause to be issued orders deputizing the persons whose names appear on such list, in the number specified by the plan, as rangers for the purpose of entering the park and assisting in the controlled reduction plan. Each such qualified hunter, deputized as a ranger, participating in the controlled reduction plan shall be permitted to remove from the park the carcass of the elk he has killed as a part of the plan.

SEC. 7. The Secretary of the Interior is authorized to accept the donation of the following-described lands, which lands, upon acceptance by the United States, shall become a part of the national park:

Township 41 north, range 116 west: Section 3, lots 1 and 2.
Containing seventy-eight and ninety-three one-hundredths acres,
more or less.

Sec. 8. All temporary withdrawals of public lands made by Executive order in aid of legislation pertaining to parks, monuments, or recreational areas, adjacent to the Grand Teton National Park as established by this Act are hereby revoked.

Sec. 9. Nothing in this Act shall affect the use for reclamation purposes, in accordance with the Act of June 17, 1902 (32 Stat. 388), and Acts amendatory thereof or supplementary thereto, of the lands within the exterior boundary of the park as prescribed by this Act which have been withdrawn or acquired for reclamation purposes, or the operation, maintenance, rehabilitation, and improvement of the reservoir and other reclamation facilities located on such withdrawn or acquired lands. All provisions of law inconsistent with the provisions of this Act are hereby repealed to the extent of such inconsistency. The remaining unexpended balance of any funds appropriated for the present Grand Teton National Park and the Jackson Hole National Monument shall be available for expenditure in connection with the administration of the Grand Teton National Park established by this Act.

Approved September 14, 1950.

Act of August 25, 1972 (P.L. 92-404, 86 Stat. 620), established John D. Rockefeller, Jr. Memorial Parkway

Public Law 92-404

AN ACT

To authorize the Secretary of the Interior to establish the John D. Rockefeller, Junior, Memorial Parkway, and for other purposes.

August 25, 1972
[S. 3159]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, (a) That for the purpose of commemorating the many significant contributions to the cause of conservation in the United States, which have been made by John D. Rockefeller, Junior, and to provide both a symbolic and desirable physical connection between the world's first national park, Yellowstone, and the Grand Teton National Park, which was made possible through the efforts and generosity of this distinguished citizen, the Secretary of the Interior (hereinafter referred to as the Secretary) is authorized to establish the John D. Rockefeller, Junior, Memorial Parkway (hereinafter referred to as the "parkway") to

John D. Rockefeller, Jr., Memorial Parkway, Wyo. Establishment.

consist of those lands and interests in lands, in Teton County, Wyoming, as generally depicted on a drawing entitled "Boundary Map, John D. Rockefeller, Junior, Memorial Parkway, Wyoming", numbered PKY-JDRM-20,000, and dated August 1971, a copy of which shall be on file and available for inspection in the Offices of the National Park Service, Department of the Interior. The Secretary shall establish the parkway by publication of a notice to that effect in the Federal Register, at such times as he deems advisable. The Secretary may make minor revisions in the boundary of the parkway from time to time, with the concurrence of the Secretary of Agriculture where national forest lands are involved, by publication of a revised drawing or other boundary description in the Federal Register.

Notice and boundary revisions, publication in Federal Register.

(b) The Secretary shall also take such action as he may deem necessary and appropriate to designate and identify as "Rockefeller Parkway" the existing and future connecting roadways within the parkway, and between West Thumb in Yellowstone National Park, and the south entrance of Grand Teton National Park: *Provided*, That any sections of the parkway located within Yellowstone National Park or Grand Teton National Park shall be administered and managed in the same manner and in accordance with the same regulations and policies as the other portions of such parks.

Land acquisition.

SEC. 2. Within the boundaries of the parkway, the Secretary may acquire lands and interests in lands by donation, purchase, exchange, or transfer from another Federal agency. Lands and interests in lands owned by the State of Wyoming or a political subdivision thereof may be acquired only by donation. Lands under the jurisdiction of another Federal agency shall, upon request of the Secretary, be transferred without consideration to the jurisdiction of the Secretary for the purposes of the parkway.

Administration.

SEC. 3. (a) The Secretary shall administer the parkway as a unit of the national park system in accordance with the authority contained in the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1, 2-4), as amended and supplemented.

Hunting and fishing regulations.

(b) The Secretary shall permit hunting and fishing within the area described by section 1(a) of this Act in accordance with applicable laws of the United States and the State of Wyoming, except that the Secretary may designate zones where, and periods when, no hunting or fishing shall be permitted for reasons of public safety, administration, or public use and enjoyment. Except in emergencies, any regulations of the Secretary pursuant to this section shall be put into effect only after consultation with the appropriate State fish and game department.

(c) The lands within the parkway, subject to valid existing rights, are hereby withdrawn from location, entry and patent under the United States mining laws.

Appropriation.

SEC. 4. For the purposes of this Act, there are authorized to be appropriated not more than \$25,000 for the acquisition of lands and interests in lands and not more than \$3,092,000 for development.

Approved August 25, 1972.

Act of March 30, 2009 (P.L. 111-11, 123 Stat. 1147), designated the Snake River Headwaters Wild and Scenic River

TITLE V—RIVERS AND TRAILS

Subtitle A—Additions to the National Wild and Scenic Rivers System

SEC. 5001. FOSSIL CREEK, ARIZONA.

Section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) (as amended by section 1852) is amended by adding at the end the following:

“(205) FOSSIL CREEK, ARIZONA.—Approximately 16.8 miles of Fossil Creek from the confluence of Sand Rock and Calf Pen Canyons to the confluence with the Verde River, to be administered by the Secretary of Agriculture in the following classes:

“(A) The approximately 2.7-mile segment from the confluence of Sand Rock and Calf Pen Canyons to the point where the segment exits the Fossil Spring Wilderness, as a wild river.

“(B) The approximately 7.5-mile segment from where the segment exits the Fossil Creek Wilderness to the boundary of the Mazatzal Wilderness, as a recreational river.

“(C) The 6.6-mile segment from the boundary of the Mazatzal Wilderness downstream to the confluence with the Verde River, as a wild river.”.

SEC. 5002. SNAKE RIVER HEADWATERS, WYOMING.

(a) SHORT TITLE.—This section may be cited as the “Craig Thomas Snake Headwaters Legacy Act of 2008”.

(b) FINDINGS; PURPOSES.—

(1) FINDINGS.—Congress finds that—

(A) the headwaters of the Snake River System in northwest Wyoming feature some of the cleanest sources of

Craig Thomas
Snake
Headwaters
Legacy Act
of 2008,
16 USC 1271
note.

freshwater, healthiest native trout fisheries, and most intact rivers and streams in the lower 48 States;

(B) the rivers and streams of the headwaters of the Snake River System—

(i) provide unparalleled fishing, hunting, boating, and other recreational activities for—

(I) local residents; and

(II) millions of visitors from around the world;

and

(ii) are national treasures;

(C) each year, recreational activities on the rivers and streams of the headwaters of the Snake River System generate millions of dollars for the economies of—

(i) Teton County, Wyoming; and

(ii) Lincoln County, Wyoming;

(D) to ensure that future generations of citizens of the United States enjoy the benefits of the rivers and streams of the headwaters of the Snake River System, Congress should apply the protections provided by the Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.) to those rivers and streams; and

(E) the designation of the rivers and streams of the headwaters of the Snake River System under the Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.) will signify to the citizens of the United States the importance of maintaining the outstanding and remarkable qualities of the Snake River System while—

(i) preserving public access to those rivers and streams;

(ii) respecting private property rights (including existing water rights); and

(iii) continuing to allow historic uses of the rivers and streams.

(2) PURPOSES.—The purposes of this section are—

(A) to protect for current and future generations of citizens of the United States the outstandingly remarkable scenic, natural, wildlife, fishery, recreational, scientific, historic, and ecological values of the rivers and streams of the headwaters of the Snake River System, while continuing to deliver water and operate and maintain valuable irrigation water infrastructure; and

(B) to designate approximately 387.7 miles of the rivers and streams of the headwaters of the Snake River System as additions to the National Wild and Scenic Rivers System.

(c) DEFINITIONS.—In this section:

(1) SECRETARY CONCERNED.—The term “Secretary concerned” means—

(A) the Secretary of Agriculture (acting through the Chief of the Forest Service), with respect to each river segment described in paragraph (205) of section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) (as added by subsection (d)) that is not located in—

(i) Grand Teton National Park;

(ii) Yellowstone National Park;

(iii) the John D. Rockefeller, Jr. Memorial Parkway; or

(iv) the National Elk Refuge; and

16 USC 1274
note.

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(B) the Secretary of the Interior, with respect to each river segment described in paragraph (205) of section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) (as added by subsection (d)) that is located in—

- (i) Grand Teton National Park;
- (ii) Yellowstone National Park;
- (iii) the John D. Rockefeller, Jr. Memorial Parkway; or
- (iv) the National Elk Refuge.

(2) STATE.—The term “State” means the State of Wyoming.

(d) WILD AND SCENIC RIVER DESIGNATIONS, SNAKE RIVER HEADWATERS, WYOMING.—Section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) (as amended by section 5001) is amended by adding at the end the following:

“(206) SNAKE RIVER HEADWATERS, WYOMING.—The following segments of the Snake River System, in the State of Wyoming:

“(A) BAILEY CREEK.—The 7-mile segment of Bailey Creek, from the divide with the Little Greys River north to its confluence with the Snake River, as a wild river.

“(B) BLACKROCK CREEK.—The 22-mile segment from its source to the Bridger-Teton National Forest boundary, as a scenic river.

“(C) BUFFALO FORK OF THE SNAKE RIVER.—The portions of the Buffalo Fork of the Snake River, consisting of—

“(i) the 55-mile segment consisting of the North Fork, the Soda Fork, and the South Fork, upstream from Turpin Meadows, as a wild river;

“(ii) the 14-mile segment from Turpin Meadows to the upstream boundary of Grand Teton National Park, as a scenic river; and

“(iii) the 7.7-mile segment from the upstream boundary of Grand Teton National Park to its confluence with the Snake River, as a scenic river.

“(D) CRYSTAL CREEK.—The portions of Crystal Creek, consisting of—

“(i) the 14-mile segment from its source to the Gros Ventre Wilderness boundary, as a wild river; and

“(ii) the 5-mile segment from the Gros Ventre Wilderness boundary to its confluence with the Gros Ventre River, as a scenic river.

“(E) GRANITE CREEK.—The portions of Granite Creek, consisting of—

“(i) the 12-mile segment from its source to the end of Granite Creek Road, as a wild river; and

“(ii) the 9.5-mile segment from Granite Hot Springs to the point 1 mile upstream from its confluence with the Hoback River, as a scenic river.

“(F) GROS VENTRE RIVER.—The portions of the Gros Ventre River, consisting of—

“(i) the 16.5-mile segment from its source to Darwin Ranch, as a wild river;

“(ii) the 39-mile segment from Darwin Ranch to the upstream boundary of Grand Teton National Park, excluding the section along Lower Slide Lake, as a scenic river; and

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“(iii) the 3.3-mile segment flowing across the southern boundary of Grand Teton National Park to the Highlands Drive Loop Bridge, as a scenic river.

“(G) HOBACK RIVER.—The 10-mile segment from the point 10 miles upstream from its confluence with the Snake River to its confluence with the Snake River, as a recreational river.

“(H) LEWIS RIVER.—The portions of the Lewis River, consisting of—

“(i) the 5-mile segment from Shoshone Lake to Lewis Lake, as a wild river; and

“(ii) the 12-mile segment from the outlet of Lewis Lake to its confluence with the Snake River, as a scenic river.

“(I) PACIFIC CREEK.—The portions of Pacific Creek, consisting of—

“(i) the 22.5-mile segment from its source to the Teton Wilderness boundary, as a wild river; and

“(ii) the 11-mile segment from the Wilderness boundary to its confluence with the Snake River, as a scenic river.

“(J) SHOAL CREEK.—The 8-mile segment from its source to the point 8 miles downstream from its source, as a wild river.

“(K) SNAKE RIVER.—The portions of the Snake River, consisting of—

“(i) the 47-mile segment from its source to Jackson Lake, as a wild river;

“(ii) the 24.8-mile segment from 1 mile downstream of Jackson Lake Dam to 1 mile downstream of the Teton Park Road bridge at Moose, Wyoming, as a scenic river; and

“(iii) the 19-mile segment from the mouth of the Hoback River to the point 1 mile upstream from the Highway 89 bridge at Alpine Junction, as a recreational river, the boundary of the western edge of the corridor for the portion of the segment extending from the point 3.3 miles downstream of the mouth of the Hoback River to the point 4 miles downstream of the mouth of the Hoback River being the ordinary high water mark.

“(L) WILLOW CREEK.—The 16.2-mile segment from the point 16.2 miles upstream from its confluence with the Hoback River to its confluence with the Hoback River, as a wild river.

“(M) WOLF CREEK.—The 7-mile segment from its source to its confluence with the Snake River, as a wild river.”.

16 USC 1274 note.

(e) MANAGEMENT.—

(1) IN GENERAL.—Each river segment described in paragraph (205) of section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) (as added by subsection (d)) shall be managed by the Secretary concerned.

(2) MANAGEMENT PLAN.—

Deadline.

(A) IN GENERAL.—In accordance with subparagraph (A), not later than 3 years after the date of enactment of this Act, the Secretary concerned shall develop a management plan for each river segment described in paragraph

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(205) of section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) (as added by subsection (d)) that is located in an area under the jurisdiction of the Secretary concerned.

(B) **REQUIRED COMPONENT.**—Each management plan developed by the Secretary concerned under subparagraph (A) shall contain, with respect to the river segment that is the subject of the plan, a section that contains an analysis and description of the availability and compatibility of future development with the wild and scenic character of the river segment (with particular emphasis on each river segment that contains 1 or more parcels of private land).

(3) **QUANTIFICATION OF WATER RIGHTS RESERVED BY RIVER SEGMENTS.**—

(A) The Secretary concerned shall apply for the quantification of the water rights reserved by each river segment designated by this section in accordance with the procedural requirements of the laws of the State of Wyoming.

(B) For the purpose of the quantification of water rights under this subsection, with respect to each Wild and Scenic River segment designated by this section—

(i) the purposes for which the segments are designated, as set forth in this section, are declared to be beneficial uses; and

(ii) the priority date of such right shall be the date of enactment of this Act.

(4) **STREAM GAUGES.**—Consistent with the Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.), the Secretary may carry out activities at United States Geological Survey stream gauges that are located on the Snake River (including tributaries of the Snake River), including flow measurements and operation, maintenance, and replacement.

(5) **CONSENT OF PROPERTY OWNER.**—No property or interest in property located within the boundaries of any river segment described in paragraph (205) of section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) (as added by subsection (d)) may be acquired by the Secretary without the consent of the owner of the property or interest in property.

(6) **EFFECT OF DESIGNATIONS.**—

(A) **IN GENERAL.**—Nothing in this section affects valid existing rights, including—

(i) all interstate water compacts in existence on the date of enactment of this Act (including full development of any apportionment made in accordance with the compacts);

(ii) water rights in the States of Idaho and Wyoming; and

(iii) water rights held by the United States.

(B) **JACKSON LAKE; JACKSON LAKE DAM.**—Nothing in this section shall affect the management and operation of Jackson Lake or Jackson Lake Dam, including the storage, management, and release of water.

(f) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated such sums as are necessary to carry out this section.

Appendix B: Inventory of Special Mandates and Administrative Commitments

Special Mandates

Program to ensure the permanent conservation of elk (Public Law 81-787, September 14, 1950).

- **Grand Teton National Park.** The act that established Grand Teton National Park in 1950 directed that the National Park Service and the Wyoming Game and Fish Department devise a program for the permanent conservation of elk within the park. The legislation specified that when it is found necessary for the proper management and protection of elk, the program shall include a controlled reduction of the herd conducted by hunters licensed by the State of Wyoming and deputized as park rangers. The act further specifies that the controlled reduction of elk shall only occur on lands that lie east of the Snake River, and on lands to the west of Jackson Lake and the Snake River but north of the 1929 north boundary of the park. In addition, the act provides specific direction on how the State of Wyoming and the National Park Service are to jointly work together on the management, protection, and control of elk each year.

Grazing of livestock (Public Law 81-787, September 14, 1950; Public Law 105-81).

- **Grand Teton National Park.** The park's enabling legislation provided for the renewal of livestock grazing permits that existed prior to the date of enactment, thereby allowing the continuation of grazing in the park for a period of 25 years, and thereafter for the lifetime of the permittee and any heirs that were members of their immediate family. In addition, grazing privileges appurtenant to privately owned lands within the park may not be withdrawn until such time as the lands might be acquired by the United States. The Moosehead and Pinto Ranches, both of which are inholdings, are the only remaining beneficiaries of the latter provision.

During the decades that followed the park's establishment, the number of grazing permits within the park gradually declined for a variety of reasons, including the expiration of permits under the terms of the enabling legislation. By the early 1990s, only a few permits remained and it was believed that their expiration could jeopardize the financial viability of the ranches to which they belonged, all of which were located outside of the park, but nearby. If this were the case, then the sale and subdivision of the ranches could result in a loss of the highly valued pastoral open space that frames the park.

Based on the concerns about the loss of grazing privileges and open space, Congress passed Public Law 105-81 in 1997. The legislation requires the National Park Service to evaluate the relationship between grazing privileges within the park and preservation of open space outside the boundaries, and to make recommendations to Congress on how the issue should be addressed. In the meantime, the act specified that grazing privileges that remained after January 1, 1990, would be reinstated and extended until any such recommendation is implemented.

Access to private and public lands (Public Law 81-787, September 14, 1950).

- **Grand Teton National Park.** The act that established Grand Teton National Park requires that rights-of-way be designated and opened across federal lands within the park boundary to provide access to or from state or private lands within the exterior boundaries, or to and from national forest, state, or private lands adjacent to the boundary. On a practical level, this provision requires the National Park Service provide access to nonfederal lands within the park and adjacent to its boundary.

Continuation of leases and permits (Public Law 81-787, September 14, 1950).

- **Grand Teton National Park.** The act that established Grand Teton National Park requires that any valid leases, permits, or licenses that were in effect at the time the park was established remain in effect in accordance with their provisions.

Water rights – operational guidelines for Jackson Lake (Public Law 81-787, September 14, 1950).

- **Grand Teton National Park.** When Congress established Grand Teton National Park in 1950, section 9 of the enabling legislation articulated the intent that nothing in the act shall affect the Bureau of Reclamation operations or the rights of space holders in Jackson Lake reservoir. The Bureau of Reclamation has jurisdiction of all land below the maximum reservoir elevation and a withdrawn area immediately surrounding the lakeshore to ensure proper operation and protection of the reservoir. This does not preclude NPS development within the operational zone and all public use of the withdrawn area is under the jurisdiction and administration of the National Park Service.

Under the legislation, and a memorandum of understanding between the Bureau of Reclamation and the National Park Service dated November 23, 1956 (see “Administrative Commitments”), the Bureau of Reclamation retains complete and exclusive control of the flow and utilization of water in the reservoir, including the right to raise and lower the water level at will; however, the Bureau of Reclamation will fully consider maintaining a constant level from June through September. Any permits or licenses issued by the National Park Service for use of lands covered by the memorandum of understanding (within the reclamation withdrawal), or that might affect the operation zone must have Bureau of Reclamation concurrence. The Bureau of Reclamation must consult with the National Park Service before developing anything in the operation zone that might affect recreational facilities or use. Occupancy or use of federal lands other than in the operation zone for the reservoir must be authorized by the National Park Service, but the Bureau of Reclamation has access rights over all such lands. The Bureau of Reclamation, its contractors, lessees, and water users cannot be held liable for damage to lands covered by this agreement or structures thereon due to operation of the reservoir. Approximately 100 acres of the John D. Rockefeller, Jr. Memorial Parkway have also been withdrawn by the Bureau of Reclamation to ensure the operation and protection of the reservoir.

Water rights – Snake River Compact (Public Law 80-580, 62 Stat. 294, June 3, 1948).

- **Grand Teton National Park.** By the act of June 3, 1948, Congress gave consent to the States of Idaho and Wyoming to enter into a compact to equitably divide and apportion the waters of the Snake River and its tributaries originating in either of the two states and flowing into the other. The act included a provision that made clear that it did not apply to any waters within Grand Teton National Park or establish any right or interest in or to any lands within the boundaries of the park or in subsequent additions to the park. Subsequently, the act of March 21, 1950 (64 Stat. 29, 34) provided congressional consent of the agreement known as the Snake River Compact that was entered into by the two states.

The Snake River Compact is the basis for the division of waters from the Snake and Salt Rivers (including the portion of the Snake within Grand Teton National Park) between Idaho and Wyoming. In October 1990, a contract was signed between the State of Wyoming and the Bureau of Reclamation to maintain minimum acceptable flow levels of 280 cubic feet per second during the winter to protect the trout fishery.

The National Park Service holds 281 water rights within the park (262 adjudicated, 19 unadjudicated). Most were acquired as appurtenances to lands purchased by or donated to the park.

Structures appurtenant to valid water rights that existed when the park was enlarged in 1950, including ditches and canals and other irrigation structures on federal land, are protected by enabling legislation for the park (64 Stat. 849).

Irrigation in the park which is required to fulfill terms of valid leases or grazing commitments will continue until the leases expire or are relinquished by the lessee or grazing rights are terminated.

- **John D. Rockefeller, Jr. Memorial Parkway.** There have been no adjudicated water rights in the John D. Rockefeller, Jr. Memorial Parkway.

Monitoring of geothermal features authority (Geothermal Steam Act of 1970 (30 USC § 1001-1028, amended 1988).

- **Grand Teton National Park and the John D. Rockefeller, Jr. Memorial Parkway.** This act requires the Secretary of the Interior to maintain a list of significant thermal features within the National Park Service and to undertake a system of monitoring and researching such features. The act directs the Secretary to maintain a list of significant thermal features within specific national park system units, including Grand Teton National Park. If the Secretary determines that exploration, development, or utilization of lands subject to a lease application is reasonably likely to have a significant adverse effect on a significant thermal feature within a national park system unit, the Secretary is prohibited from issuing the lease. If these activities are reasonably likely to have an adverse effect, the Secretary must include specified stipulations in leases or drilling permits to protect the significant thermal features.

Jackson Hole Airport (Airports in the Parks Act of 1950 [64 Stat. 27]).

- **Grand Teton National Park.** The Airports in Parks Act established that the Secretary of the Interior may plan, acquire, establish, construct, enlarge, improve, maintain, equip, operate, regulate, and protect airports located in or in close proximity to units of the national park system when such airports are determined by the Secretary to be necessary to the proper performance of the functions of the Department of Interior.

Wilderness management (Wilderness Act of 1964 [Public Law 88-577; 16 USC 1131-1136]).

- **Grand Teton National Park.** Pursuant to the Wilderness Act of 1964, the National Park Service evaluated lands within Grand Teton National Park for possible designation by Congress as wilderness. In 1978, a wilderness recommendation was provided to Congress that included 122,604 acres as recommended wilderness and an additional 20,850 acres as potential wilderness. Over the years, the park has reviewed and revised its wilderness maps on numerous occasions; however, the actual recommendation that was sent to Congress in 1978 has never been superseded. Under current NPS management policies, the park manages all of the lands that were included in the 1978 recommendation, as well as all other lands that have been identified as potential wilderness or suitable for wilderness designation as if they had, in fact, been designated by Congress as wilderness.
- **John D. Rockefeller, Jr. Memorial Parkway.** Lands of the John D. Rockefeller, Jr. Memorial Parkway were studied for wilderness eligibility in 2013 and 21,500 acres were considered eligible.

Hunting (establishment of the John D. Rockefeller, Jr. Memorial Parkway, 1972 [86 Stat. 619]).

- **John D. Rockefeller, Jr. Memorial Parkway.** The legislation establishing the John D. Rockefeller, Jr. Memorial Parkway states that “The Secretary shall permit hunting and fishing within the area described in section 1 (a) of this Act in accordance with applicable laws of the United States and the State of Wyoming, except that the Secretary may designate zones where, and periods when, no hunting or fishing shall be permitted for reasons of public safety, administration, or public use and enjoyment. Except in emergencies, any regulations of the Secretary pursuant to this section shall be put forth into effect only after consultation with the appropriate State fish and game department.”

Designation of the Snake River Headwaters Wild and Scenic River (Craig Thomas Snake River Headwaters Legacy Act of 2008 [Public Law 111-11])

- **Grand Teton National Parks and the John D. Rockefeller, Jr. Memorial Parkway.** The purposes of the Craig Thomas Snake River Headwaters Legacy Act of 2008 are (a) to protect for current and future generations of citizens of the United States the outstandingly remarkable scenic, natural, wild life, fishery, recreational, scientific, historic, and ecological values of the rivers and streams of the headwaters of the Snake River System, while continuing to deliver water and operate and maintain valuable irrigation water infrastructure; and (b) to designate approximately 387.7 miles of the rivers and streams of the headwaters of the Snake River System as additions to the National Wild and Scenic Rivers System. Approximately 99 miles of the rivers and streams of the Snake River Headwaters are located within Grand Teton National Park, John D. Rockefeller, Jr. Memorial Parkway, and Yellowstone National Park. The act requires the development of a management plan that contains an analysis and description of the availability and compatibility of future development with the wild and scenic river character for each river segment. The act also requires the quantification of water rights for each river segment. The act also states that valid existing water rights and the management and operation of Jackson Lake and the dam by the Bureau of Reclamation will not be affected.

Designation of Grand Teton National Park as a Mandatory Class I Area (Clean Air Act Amendments of 1977 [Public Law 95-95])

- **Grand Teton National Park.** Grand Teton National Park is designated a Class I area under the Clean Air Act Amendments of 1977 (42 USC 7401 et seq.) which provides special protection for air quality, sensitive ecosystems, and clean, clear views. Under section 169A, “Congress declares as a national goal the prevention of any existing impairment of visibility in mandatory Class I federal areas which impairment results from manmade air pollution.” State and federal permitting authorities must consult with the National Park Service regarding new sources of air pollution and impacts on park air quality related values must be considered in the permitting process. Further, the act requires NPS involvement in natural regulatory efforts aimed at eliminating human-caused visibility impairment in all Class I areas. This designation bestows an “affirmative responsibility” on federal land managers to integrating air resource management into NPS operations and planning for the protection of air quality and related values, including visibility, plants, animals, soils, water quality, cultural resources, and public health, from adverse air pollution impacts.



Administrative Commitments - Memorandums of Understanding

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Greater Yellowstone Coordinating Committee memorandum of understanding between the National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, and Bureau of Land Management	The memorandum of understanding provides for mutual cooperation and coordination in the management of core federal lands in the Greater Yellowstone area.	March 31, 2017	National Park Service; U.S. Forest Service; U.S. Fish and Wildlife Service; and Bureau of Land Management
Memorandum of Understanding between the Department of the Interior National Park Service and the Wyoming Department of Environmental Quality	The purpose of this memorandum of understanding is to provide for the continued collection of wet mercury deposition data by Yellowstone National Park and continued air quality monitoring (including measurement of ozone, scattering of fine particles, wet deposition, and a web camera) by Grand Teton National Park.	June 30, 2021	National Park Service; Wyoming Department of Environmental Quality

Administrative Commitments - Memorandums of Agreement

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Participating agreement for the cooperative management and operations of the Jackson Hole and Greater Yellowstone Visitor Center	This agreement is between the National Elk Refuge, Bridger-Teton National Forest, Grand Teton National Park, Wyoming Game and Fish Department, and the Grand Teton Association for participation in the cooperative management and operation of the Jackson Hole and Greater Yellowstone Visitor Center. The agreement provides the framework for the establishment of policies, plans, and procedures governing the cooperative organization and management of the jointly operated visitor center.	First agreement expired February 9, 2011; an agreement has been drafted and is awaiting signatures, as of January 2017	National Elk Refuge; Bridger-Teton National Forest; Grand Teton National Park; Wyoming Game and Fish Department; Grand Teton Association

Administrative Commitments - General Agreements

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Use agreement between the Department of the Interior and the Jackson Hole Airport Board, April 4, 1983	The Jackson Hole Airport is located within Grand Teton National Park on 533 acres of land under the administrative jurisdiction of the National Park Service. The airport operates under the terms of a use agreement between the Jackson Hole Airport Board (Board) and the Department of the Interior dated April 4, 1983. The 1983 agreement became effective April 27, 1983, for a primary term of 30 years, with the Board having options to renew the 1983 agreement for a two additional 10-year terms. The Board exercised the two 10-year renewal options, and as a result the term of the 1983 agreement currently runs through April 26, 2033. On May 18, 2011, the Board and the Department of the Interior entered into a third amendment to the 1983 agreement, under which the authorized term of the 1983 agreement was extended to April 27, 2053, through the addition of two additional 10-year options. The agreement specifies a variety of terms and conditions, including the parameters of the development subzone, a noise abatement plan, and limitations on future development (i.e., runway length, etc.). The agreement also requires the parties to negotiate in good faith on a mutually satisfactory extension of the agreement upon its expiration.	April 27, 2053	Jackson Hole Airport Board; Department of the Interior
General agreement between the National Park Service and the University of Wyoming for Operation of the UW-NPS Grand Teton Research Center	Purpose is to establish the general framework terms under which Grand Teton National Park and the University of Wyoming will cooperate in maintaining a long-term and proactive cooperative research program and associated support facilities within Grand Teton National Park.	July 20, 2020	National Park Service; University of Wyoming
General agreement between the National Park Service and the Teton Science Schools	Purpose is to establish the general framework under which the Teton Science Schools will use NPS buildings, land, and other assets to partner with the National Park Service to provide a high-quality, in-depth educational program in Grand Teton National Park. This agreement covers the operations and programming at both the Kelly Campus and The Murie Ranch.	November 30, 2025	National Park Service; Teton Science Schools
General agreement between the National Park Service and the Grand Teton National Park Foundation	Purpose is to establish a basis for donation assistance benefiting Grand Teton National Park. This general agreement is supplemented by a comprehensive fundraising agreement, capital campaign agreement, donor recognition policy, and partnership construction agreement. Director's Order 21 has been revised and is out in draft form as of September 2016. Once finalized, this general agreement needs to be replaced with the new philanthropic partner agreement that will be provided from the national partnership's office.	Originally signed May 17, 2005, renewed in five-year increments per the language in the agreement; current renewal expires May 14, 2020	National Park Service; Grand Teton National Park Foundation

Administrative Commitments - Interagency Agreements

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Interagency agreement between National Park Service, Grand Teton National Park and Bureau of Reclamation Pacific Northwest Region, Snake River Area Office for the Management of Bureau of Reclamation lands associated with Jackson Lake, Wyoming	Purpose of this agreement is to define specific roles and responsibilities of the Bureau of Reclamation (BOR) and the National Park Service, pertaining to BOR lands, the BOR operation zone, BOR required access to or through NPS lands, and NPS lands; allowing the Bureau of Reclamation to effectively operate and maintain Jackson Lake Dam to fulfill contractual obligations, while allowing the National Park Service to meet legislated mandates, management objectives and jurisdictional responsibilities for Grand Teton National Park.	December 31, 2036	Bureau of Reclamation; National Park Service
Interagency agreement between Grand Teton National Park and the Bridger-Teton National Forest	Purpose of the agreement is to document the cooperation between the parties to facilitate an efficient cross-boundary fire and aviation management organization and provide efficient exchange of resources in support of fire and aviation management activities.	December 31, 2017	U.S. Forest Service; National Park Service
Interagency agreement between Grand Teton National Park and the Bridger-Teton National Forest	Purpose of the agreement is to document the cooperation between the parties to define the primary roles and responsibilities of Teton Dispatch Interagency Center, which functions as the local coordination center for the U.S. Forest Service and Grand Teton National Park.	December 31, 2017	U.S. Forest Service; National Park Service
Interagency agreement between Grand Teton National Park and the National Elk Refuge	To outline dispatching duties of the Wyoming Cooperative Fire Management Agreement as they pertain to the Teton Interagency Dispatch Center support to the National Elk Refuge.	December 31, 2016	National Park Service; U.S. Fish and Wildlife Service
Interagency agreement between Grand Teton National Park and the Wyoming State Forestry Division	To outline dispatching duties of the Wyoming Cooperative Fire Management Agreement as they pertain to the Teton Interagency Dispatch Center support to Lincoln, Sublette, and Teton (WY) Counties.	December 31, 2016	National Park Service; State of Wyoming

Administrative Commitments - Interagency Agreements

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Interpark agreement between Grand Teton National Park and Bighorn Canyon National Recreation Area	The purpose of this agreement is to define the mutual responsibilities of Grand Teton National Park Fire Management Office and Bighorn Canyon National Recreation Area staff, in terms of wildland fire, prescribed fire, fuels management, and aviation management activities.	July 28, 2021	National Park Service
Interpark agreement between Grand Teton National Park and Fort Laramie National Historic Site	The purpose of this agreement is to define the mutual responsibilities of Grand Teton National Park Fire Management Office and Fort Laramie National Historic Site staff, in terms of wildland fire, prescribed fire, fuels management, and aviation management activities.	June 1, 2021	National Park Service
Interpark agreement between Grand Teton National Park and Fossil Butte National Monument	The purpose of this agreement is to define the mutual responsibilities of Grand Teton National Park Fire Management Office and Fossil Butte National Monument staff, in terms of wildland fire, prescribed fire, fuels management, and aviation management activities.	June 1, 2021	National Park Service

Administrative Commitments - Conservation Easements

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Laurance S. Rockefeller Preserve	In 2007, the Estate of Laurance S. Rockefeller signed a conservation easement for the Laurance S. Rockefeller (LSR) Preserve within the boundaries of Grand Teton National Park, containing approximately 1,106 acres of land. Per the easement, the LSR Preserve was to become a place of physical and spiritual renewal, to serve as a model for achieving balance between preservation of natural values and public use, and to demonstrate that citizens working in partnership with their government can achieve important goals. The LSR Preserve is intended to inspire appreciation and reverence for the beauty and diversity of the natural world, to demonstrate the importance of protecting the land and providing public access, and to foster individual responsibility for conservation stewardship.	No expiration date	Estate of Laurance S. Rockefeller; National Park Service

Administrative Commitments - Conservation Easements

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Cooperating association agreement between the National Park Service and Grand Teton Association	Purpose is to establish the general framework under which the National Park Service and Grand Teton Association will work together to provide park visitors with interpretive and educational materials to facilitate and expanded appreciation of the national park system. This agreement also defines the park facilities that the Grand Teton Association operates within as well as the role of aid-to-NPS in supporting education, interpretation, and research projects in Grand Teton National Park.	December 1, 2020	National Park Service; Grand Teton Association

Administrative Commitments - Special Park Uses

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Special use permits by category during fiscal year 2015	Commercial filming – 52 Educational courses – 3 First amendment activities – 3 Military training – 1 Public assembly – 1 Scattering of ashes – 20 Special events – 8 Wedding ceremonies – 112	Varies by permit	Varies by permit
Access to private property	In Grand Teton National Park there are 130 unacquired tracts (including public and private ownership) and 6 remaining life estates. There are no unacquired tracts or life estates in John D. Rockefeller, Jr. Memorial Parkway.	N/A	Varies by in-holding

Administrative Commitments - Special Park Uses (continued)

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Union Telephone right-of-way	Telecommunication facility at Signal Mountain. RW-1460-09-004.	March 1, 2019	Union Telephone
Verizon right-of-way	Telecommunication facility at Signal Mountain. RW-1460-09-005.	March 1, 2019	Verizon
Sprint right-of-way	Telecommunication facility at Signal Mountain. RW-1460-09-003.	March 1, 2019	Sprint
AT&T right-of-way	Telecommunication facility at Signal Mountain. RW-1460-09-006.	March 1, 2019	AT&T
AT&T right-of-way	Telecommunication facility at Jackson Hole Airport. RW-1460-09-007.	March 1, 2019	AT&T
Lower Valley Energy right-of-way	Electric power line. The special use permit for this power line has expired, and the park should implement a right-of-way.	Park working to develop right-of-way permit	Lower Valley Energy
CenturyLink right-of-way	Telephone line. The special use permit for this telephone line has expired, and the park should implement a right-of-way. The special use permit was originally issued to Mountain States Telephone, though the company has been taken over by Qwest and now CenturyLink.	Park working to develop right-of-way permit	CenturyLink
Silver Star right-of-way	Fiber-optic conduit(s). RW-1460-11-064.	2021	Silver Star
Wyoming Department of Transportation right-of-way	Telecommunication facility at Signal Mountain. RW-1460-14-027.	January 28, 2025	Wyoming Department of Transportation

Administrative Commitments - Commercial Services

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Concession contracts as of fiscal year 2015	As of fiscal year 2015, the park and parkway manage 25 concession contracts. These contracts are reviewed and updated based upon specific terms within each contract.	Varies by contract	Varies by contract
Commercial use authorizations (CUA) issued in calendar year 2016	All CUAs listed were issued for a service length of two years, unless otherwise noted. Auto shuttles – 1 Bicycle tours – 5 Hunt outfitters – 3 Photography and painting workshops – 39 Road-based tours – 38 Towing services – 3 Transit services – 0 Youth group day hiking – 3	Varies by commercial use authorization	Varies by commercial use authorization

Appendix C: Traditionally Associated Tribes

Apache Tribe of Oklahoma

Apache Business Committee
PO Box 1330
Anadarko, OK 73005

Arapaho Tribe of the Wind River Reservation, Wyoming

Northern Arapaho Business Council
PO Box 396
Fort Washakie, WY 82514

Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana

Fort Peck Tribal Executive Board
501 Medicine Bear Road
Poplar, MT 59255

Blackfeet Tribe of the Blackfeet Indian Reservation of Montana

Blackfeet Tribal Business Council
PO Box 850
Browning, MT 59417

Burns Paiute Tribe

Burns Paiute Tribal Council
100 Pasigo Street
Burns, OR 97720

Cheyenne and Arapaho Tribes, Oklahoma

Cheyenne & Arapaho Business Committee
PO Box 167
Concho, OK 73022

Coeur D'Alene Tribe

Coeur D'Alene Tribal Council
PO Box 408
Plummer, ID 83851

Comanche Nation, Oklahoma

Comanche Tribal Business Committee
PO Box 908
Lawton, OK 73507

Confederated Salish and Kootenai Tribes of the Flathead Reservation

Confederated Salish & Kootenai Tribal Council
PO Box 278
Pablo, MT 59855

Confederated Tribes and Bands of the Yakama Nation

Yakama National Tribal Council
PO Box 151
Toppenish, WA 98948

Confederated Tribes of the Colville Reservation

Colville Business Council
PO Box 150
Nespelem, WA 99155

Confederated Tribes of the Umatilla Indian Reservation

Nixyáawii Governance Center - CTUIR
46411 Timine Way
Pendleton, OR 97801

Crow Tribe of Montana

Crow Nation Executive Branch
PO Box 159
Crow Agency, MT 59022

Fort Belknap Indian Community of the Fort Belknap Reservation of Montana

Fort Belknap Community Council
656 Agency Main Street
Harlem, MT 59526

Kiowa Indian Tribe of Oklahoma

Kiowa Business Committee
PO Box 369
Carnegie, OK 73015

Kootenai Tribe of Idaho

Kootenai Tribal Council
PO Box 1269
Bonners Ferry, ID 83805

Nez Perce Tribe

Nez Perce Executive Committee
PO Box 305
Lapwai, ID 83540

Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana

Northern Cheyenne Tribal Council
PO Box 128
Lame Deer, MT 59043

Oglala Sioux Tribe

Oglala Sioux Tribal Council
PO Box 2070
Pine Ridge, SD 57770

Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota

Rosebud Sioux Tribal Council
PO Box 430
Rosebud, SD 57570

Shoshone Tribe of the Wind River Reservation, Wyoming

Eastern Shoshone Business Council
PO Box 538
Fort Washakie, WY 82514

Shoshone-Bannock Tribes of the Fort Hall Reservation

Fort Hall Business Council
PO Box 306
Fort Hall, ID 83203

Standing Rock Sioux Tribe of North & South Dakota

Standing Rock Sioux Tribal Council
PO Box D
Fort Yates, ND 58538

Yankton Sioux Tribe of South Dakota

Yankton Lakota Tribal Business & Claims Committee
PO Box 1153
Wagner, SD 57380

Appendix D: Foundation for Wild and Scenic River Planning and Management

(Excerpted from Snake River Headwaters Comprehensive River Management Plan / Environmental Assessment [2013])

The foundation for preparing a comprehensive river management plan is to clearly articulate free-flowing condition, water quality, and outstandingly remarkable values of designated rivers, so that these values can be protected and enhanced in accordance with the mandate of the Wild and Scenic Rivers Act.

Free-Flowing Condition

According to the Wild and Scenic Rivers Act, free flowing is defined as “flowing in a natural condition without impoundment, diversion, straightening, riprapping, or other modification of the waterway.” However, the act states that “the existence of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion provided that this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the National Wild and Scenic Rivers System.”

The Snake River Headwaters is a high quality snowmelt-dominated watershed. The headwaters contain diverse, abundant native species and natural communities; extensive, intact, and interconnected habitats; high water quality; and natural unconfined channel morphology. The headwaters contain a number of U.S. Geological Survey (USGS) stream gauges that provide flow data for monitoring its free-flowing condition. Peak flows generally occur in late May and early June. Low flows generally begin in October below Jackson Lake and in September above the dam and on tributary streams.

The Snake River below Jackson Lake is influenced by Jackson Lake Dam operations. Jackson Lake is a natural lake augmented by the dam, which was originally constructed in 1907 and raised in 1917. The dam is operated by the Bureau of Reclamation (BOR) and provides water to Idaho in order to meet obligations for the Snake River Compact between Idaho and Wyoming. The Bureau of Reclamation cooperatively works with the National Park Service to provide spring-release flushing flows in May/June. Constant flows between 1,500–2,100 cubic feet per second (cfs) are released from July to September. Recent studies show that tributaries below the dam mitigate the dam’s effects related to hydrology and geomorphology on the Snake River.

Within Grand Teton National Park, John D. Rockefeller, Jr. Memorial Parkway, and the National Elk Refuge, the Snake River and its tributaries contain a number of minor channel modifications (such as boat ramps, streambank stabilizations, bridges, and culverts). These human-made features generally do not impede the free-flowing character of the river system. The Lewis and Snake rivers within Yellowstone National Park have no channel modifications, with the exception of a single bridge over the Lewis River. Any new modifications can only be approved if they would not adversely affect the river system’s free-flowing condition, water quality, or outstandingly remarkable values.

Water Quality

All of the rivers and streams within the Snake River Headwaters have been designated by the U.S. Environmental Protection Agency (EPA) and the State of Wyoming as outstanding natural resource waters, where no water quality degradation is allowed. A review of available chemical and biotic data and additional USGS studies confirmed that water quality is excellent. Yellowstone National Park began geothermal monitoring in the mid-1980s, and this program yielded long-term baseline water quality data. The NPS Inventory and Monitoring (I&M) Network established several additional long-term water quality monitoring stations in the Snake River Headwaters in 2006, which indicate that water quality remains excellent and continues to meet or exceed EPA and state standards.

Natural geologic and geothermal forces, as well as artificial changes in stream flow caused by Jackson Lake Dam operations, can affect water quality of the Snake River Headwaters. These and other natural and human influences can cause changes in temperature, dissolved oxygen, and other water quality characteristics. Ongoing monitoring provides opportunities to study these influences on the natural features, systems, and processes of the Snake River Headwaters.

Outstandingly Remarkable Values

Outstandingly remarkable values are defined by the Wild and Scenic Rivers Act as the characteristics that make a river worthy of special protection. The Interagency Wild and

Scenic Rivers Coordinating Council has issued criteria for identifying and defining these values—the values must be river-related and they must be rare, unique, or exemplary in a regional or national context. Staff from the National Park Service, in collaboration with the U.S. Forest Service, U.S. Fish and Wildlife Service, and Wyoming Game and Fish Department, used these criteria to develop the following set of broad ORV statements for the entire Snake River Headwaters and for individually designated river segments within or along the boundary of Grand Teton and Yellowstone national parks, John D. Rockefeller, Jr. Memorial Parkway, and the National Elk Refuge.

The National Park Service and U.S. Fish and Wildlife Service concluded that the Snake River Headwaters contains the following set of outstandingly remarkable values: scenic, recreational, cultural, ecological/wildlife, fish, and geologic. An evaluation process based on criteria for each outstandingly remarkable value was used to determine which river segments contain these different outstandingly remarkable values. In cases where outstandingly remarkable values were not identified for particular river segments, their associated river-related values are considered similar to the many other rivers in the Greater Yellowstone Ecosystem, and therefore, they are not considered rare, unique, or exemplary in a regional context.

The broad ORV statements that follow were developed in collaboration with the U.S. Forest Service for the entire Snake River Headwaters; however, the statements vary slightly between the two plans in order to highlight the resource values contained within the administrative boundaries of each agency.

The following matrix (table 1) summarizes the evaluation results and provides organization to the statements that follow.

Table 1. ORV Categories by River Segment

River Segment (from north to south)	ORV Category Scenic	ORV Category Recreational	ORV Category Cultural	ORV Category Ecological/Wildlife	ORV Category Fish	ORV Category Geologic
Lewis River (wild segment)	No	Yes	Yes	No	No	Yes
Lewis River (scenic segment)	Yes	Yes	Yes	Yes	Yes	Yes
Snake River (wild segment)	Yes	Yes	Yes	Yes	Yes	Yes
Snake River (scenic segment)	Yes	Yes	Yes	Yes	Yes	Yes
Pacific Creek (scenic segment)	Yes	No	No	Yes	Yes	No
Buffalo Fork (scenic segment)	Yes	No	No	Yes	Yes	No
Gros Ventre River (scenic segment)	No	No	Yes	Yes	Yes	No



Scenic Values

The Snake River Headwaters flow through an iconic landscape dominated by Yellowstone Plateau and Teton Range. These landscapes create a sense of place that provides spectacular settings undeveloped by humans. The river and its tributaries create unparalleled scenery with diverse opportunities for viewing the river that can be dramatic and subtle. Seasonal and climatic variations of vegetation, combined with water features, clean air, and landforms, create diverse and ever-changing landscapes. These elements combine to offer a landscape character that is unique and unforgettable on a scale that draws visitors from all over the world.

Lewis River (scenic segment). The dramatic Lewis Canyon is the result of two different lava flows converging near the edge of the Yellowstone Caldera to create a unique sweeping view of the edge of the plateau. A thousand feet of relief draws the eye to a continuous cascade in a narrow gorge that empties into the braided channel at the bottom. Aspens, willows, and lodgepole pines create a kaleidoscope that changes with the seasons. Lewis River Falls is an easily accessible example of the waterfalls found in the region.

Snake River (wild segment). The natural condition and wild character of the area is a vestige of primitive North America. It includes hot springs along the banks that create unique vistas. The river travels through sheer canyon walls carved by cataclysmic volcanic flows to the protected inlet of Jackson Lake, which harbors abundant wildlife and waterfowl.

Snake River (scenic segment). The Snake River below Jackson Lake Dam provides a number of exemplary and unique scenic features including braided river channels, diverse wildlife, and vegetation at Oxbow Bend, numerous side channels, and the river in the foreground of the Teton Range. This segment of the river contains the historically iconic view from the Snake River overlook, which was popularized by Ansel Adams, the renowned American photographer and environmentalist; distinct views recognized around the world at Oxbow Bend; Schwabacher Landing where beaver ponds reflect views of the Grand Teton framed by cottonwood stands; and views of historic Menor's Ferry with the Teton Range looming in the background.

Pacific Creek (scenic segment). Pacific Creek offers unique framed views of the Snake River and Teton Range through groves of cottonwood trees that are many shades of green in spring; gold, amber, and red in autumn; and frost-coated during the winter— interspersed with stands of conifers. **Buffalo Fork (scenic segment).** As it flows through current and former ranchlands to its confluence with the main channel of the Snake River, Buffalo Fork offers unique views of the Teton Range framed between low-lying hills and unparalleled views of American bison, elk, moose, pronghorn, wolves, and waterfowl.



Recreational Values

The majority of the Snake River Headwaters offers world-class recreational opportunities and visitor experiences within a largely pristine ecosystem of clean air, clean water, natural soundscapes, spectacular landscapes, and high quality wildlife and fish habitat. This setting provides visitors with exceptional opportunities to participate in recreational activities within the largest intact ecosystem in the contiguous United States. The river offers activities such as boating, fishing, wildlife viewing, photography, and camping—opportunities for recreation and experiencing solitude in a setting that provides a connection to the natural landscape for a broad variety of users. The river and its tributaries are set within one of the most dramatic landscapes within the United States—from stunning canyons, open meadows, and broad vistas to striking mountains, glacial lakes, and sage flats.

Lewis River (wild segment). The Lewis River provides unique access to Shoshone Lake, the largest natural lake in the contiguous United States without road access. Hikers and horseback riders enjoy traveling the backcountry route along the river. The fishing in the channel can be exemplary, particularly during the fall run of brown trout, which attracts anglers from the region and beyond. This segment is unique in that it is the only river within Yellowstone National Park where boats are allowed. This activity has occurred historically without interruption to allow visitors to transport their boats to Shoshone Lake.

Lewis River (scenic segment). Lewis River Falls is a prominent feature along this segment, easily accessed by the main park road. It is popular for sightseeing and photography, while the river below is enjoyed by anglers. The Lewis River Canyon provides an awe-inspiring experience for thousands of road-bound visitors. The opportunity to view a truly wild river that is substantially free from the effects of modern human activities is a quality integral to visitor enjoyment of the river. The canyon also presents a dramatic view of erosion of the volcanic Yellowstone Plateau by the Lewis River.

Snake River (wild segment). From the headwaters of the Snake River northeast of Fox Park in Yellowstone National Park to the South Entrance of Yellowstone, this river corridor offers exemplary opportunities for extended backcountry hiking, horse pack trips, and trout fishing. The Snake River Hot Springs is along the river and provides an opportunity to soak in waters warmed by these natural hot springs. As one of the most remote areas in the contiguous United States, wilderness character is one of the most notable characteristics of the upper Snake River. Below the South Entrance, the Snake River enters a narrow canyon that offers, for a short season, some of the only whitewater boating available in John D. Rockefeller, Jr. Memorial Parkway and Grand Teton National Park. The segment of the river between the bridge at Flag Ranch and Jackson Lake offers a unique opportunity to camp and boat in a wilderness setting.

Snake River (scenic segment). This segment is enjoyed by arguably the most visitors of any segment of the Snake River Headwaters within the parks and parkway. Different segments of the river, accessed by four developed access points, offer boating for a wide variety of skill levels and boat types. These boating trips offer a unique opportunity to view the majestic Teton Range, as well as the varieties of wildlife that frequent the river corridor. Fishing for the Snake River fine-spotted cutthroat trout is a unique opportunity and offers the same views of the landscape. Since the days of Ansel Adams, photographers have been drawn to this river segment to capture the juxtaposition of the Snake River flowing below the Teton Range. Easy access provides exceptional opportunities for wildlife viewing and photography, which is one of Grand Teton National Park's signature activities.



Cultural Values

The continuum of human use along the Snake River Headwaters encompasses thousands of years of diverse people, cultures, and uses. Throughout the centuries, cultures flourished along these rivers because they provided a corridor for travel through rugged terrain and sustenance for travelers. American Indian use included travel routes, resource procurement, and seasonal camps; early European American use included exploration, fur trapping, and settlement; historical and ongoing activities include tourism, dude ranching, public lands management, and conservation activities. This continuum of human use is reflected in archeological sites, historic buildings, and cultural landscapes along the river corridors. The abundant natural and cultural resources of these rivers continue to carry cultural significance to American Indian tribes and others to this day.

Lewis River (wild segment). The Lewis River may have served as a major transportation corridor for the many nomadic native peoples who traveled the corridor for more than 12,000 years. Archeological sites along Lewis River and other tributaries of the Snake River are known to represent the Birch Creek culture, identified along the Salmon River in Idaho. These sites indicate considerable human use from 10,000–7,000 years ago. Obsidian from Yellowstone was identified in sites outside the park, indicating these people traveled to the region using the Lewis River and its resources. Archeological evidence on this portion of the Lewis River is regionally significant and possibly nationally significant.

Lewis River (scenic segment). Regionally significant and possibly nationally significant archeological sites along this segment of the Lewis River represent 12,000 years of use as a travel route. Early trails are associated with trappers (e.g., Osborne Russell and Jim Bridger), U.S. cavalry who first administered the park, and tourists from late 19th century through today.

Snake River (wild segment). Archeological sites that may be found along this segment would likely indicate that seasonal hunting, fishing, and camping by native peoples occurred for the past 12,000 years. Captain Barlow, exploring after the 1871 Hayden Survey, traced the river to its source and left behind several place names, including Mount Hancock and Barlow Peak—features visible from various spots along the river corridor. The Fox Creek cabin, a national register-eligible backcountry patrol cabin in Yellowstone National Park, is within the river corridor and is associated with early historic (as well as current) park administration. Patrol cabins were constructed along early trails and in proximity to rivers to facilitate U.S. Army or ranger forays into the park wilderness to conduct various resource surveys and protection patrols. Near the Snake River / Lewis River confluence is the regionally significant South Entrance Historic District, which contains several national register-listed buildings associated with early and present park administration. These facilities were positioned approximately 0.25 mile west of the Snake River to assure its protection and provide easy access to water.

Snake River (scenic segment). Prehistoric archeological campsites along the banks of the river below Jackson Lake indicate seasonal use, especially near the confluence of tributaries (Pacific Creek and Buffalo Fork). As with the upstream segment, the Snake River was a major travel route used by American Indian tribes. Archeological resources on this portion of the Snake River are considered nationally significant. Beginning in the first quarter of the 19th century, fur traders gained access to the valley via former game trails along the river, which were used previously by seasonal American Indian occupants of the area. Twentieth-century homesteaders, dude ranchers, and conservationists took advantage of the river's scenic and recreational attributes, as well as a strategic location to establish ranches and homesteads. National register-listed sites, such as Bar BC Dude Ranch, Menor's Ferry river crossing, 4 Lazy F Dude Ranch, and Murie Ranch, sprang up along the Snake River and now stand as vestiges of the historic development along the river.

Gros Ventre River (scenic segment). Nationally significant archeological sites representing prehistoric human use—believed to be for seasonal hunting, fishing, and trapping areas, and travel routes to the Snake River and Yellowstone headwaters—can be found along the Gros Ventre River. This river served as a travel corridor connecting Jackson Hole Valley to the Wind River Mountains and the Upper Green River Valley via Trapper's Point, a national register-listed archeological site dating back more than 6,000 years.

Ecological/Wildlife Values

The Snake River Headwaters occurs within the largest intact ecosystem in the contiguous United States where natural processes such as fire, flooding, plant succession, wildlife migration, and predator-prey dynamics shape the landscape and its biota. A full complement of native plant and wildlife species is exhibited, significant at a regional and national scale. Plant species diversity is high with numerous distinct riparian plant communities, including species assemblages that are unique to the region. Several nationally important wildlife populations depend on these riparian environments, including the Jackson elk herd (the largest in the world), grizzly bear and gray wolf populations of the Yellowstone ecosystem (the southernmost populations in North America), the tri-state trumpeter swan population (the largest in the contiguous United States), and recovered bald eagle and peregrine falcon populations. No nonnative mammals, reptiles, or amphibians are known to use the river corridors. Four of North America's largest carnivores (grizzly and black bears, wolves, and cougars) freely interact with seven native ungulates (mule and white-tailed deer, moose, bison, elk, pronghorn, and bighorn sheep) in a dynamic system rivaled by few places on earth. The diversity and abundance of wildlife in this assemblage is recognized worldwide and is the primary reason people visit these parks. All of the native wildlife is part of self-sustaining populations, and the river courses and associated habitats are critical to this sustainability.

Lewis River (scenic segment). This segment flows through the Lewis River Canyon—a remote, rugged, and undeveloped stretch of river that is rarely used by visitors. River characteristics and processes are unaltered and support healthy wildlife and fish populations. As a result of long-standing limitations and visitor use management, the canyon acts as a refugia for a diverse assemblage of species as well as important habitat connectivity with the Snake River downstream.

Snake River (wild segment). The upper Snake River is one of the most remote areas in the contiguous United States and the most pristine of the Snake River Headwaters because of limited human use. With elevations ranging between 6,000 and 10,000 feet, the diversity of plant communities and wildlife within this river corridor is high. This remote river segment provides a migration pathway key to ecosystem connectivity and wildlife refugia. Megafauna, such as bears and wolves seeking habitat security, are abundant in this segment, enhancing an already world-class assemblage of wildlife. A number of thermal features are also present, which influence the assemblage of plants and invertebrates in the immediate area. This remote, pristine environment offers exceptional opportunities for scientific research.

Snake River (scenic segment). This segment of the Snake River is unique in the Greater Yellowstone Ecosystem due to its low topography, broad floodplain forest, numerous small wetlands, and for much of its length, sagebrush grassland. A blue spruce/narrowleaf cottonwood riparian forest finds its best expression in this reach. These plant communities in turn provide distinct habitat characteristics not found in other areas in the intermountain west, supporting an exceptionally high diversity of wildlife. The area is designated by the state as crucial moose winter range, and is highly productive spring, summer, and fall habitat for deer, elk, bison, and moose. The corridor provides a regionally important travel corridor for riparian-dependent species and those preferring cover. While the river's natural flows have been altered by the Jackson Lake Dam operations, fluvial and ecological processes quickly recover downstream. This provides an exceptional opportunity to study these processes and their influence on vegetation succession in this braided river corridor.

Pacific Creek (scenic segment). This segment of Pacific Creek represents an intact ecological community with an uncommonly rich assemblage of plant and wildlife communities. The riparian corridor abounds with a diversity of wildlife, especially elk, grizzlies, and wolves. In winter, moose are relatively abundant in the area. The wildlife trails along the shore of the creek attest to its importance as a movement corridor linking the Teton Wilderness and the Snake River Headwaters with the lower Snake River drainage.

Buffalo Fork (scenic segment). The ecological and wildlife values of this segment are similar to the lower Snake River and are therefore regionally significant. This significance is especially evident near the Buffalo Fork confluence with the Snake River, where moose, beaver, osprey, and other species are common.

Gros Ventre River (scenic segment). This segment traverses a narrow canyon. The steep cliffs carved by the river and adjacent steep south-facing slopes provide unique plant communities and wildlife values. The riparian habitats serve as important winter and transitional ranges for ungulates and the slow-moving river segments provide habitat for a diversity of bird species. Because of the concentration of ungulates, carnivores are also attracted to the river corridor. The river is an important wildlife migration corridor linking the upper Gros Ventre River and adjacent highlands with the Snake River drainage.

Fish Values

The Snake River Headwaters provide a unique fishery for the Yellowstone and Snake River fine-spotted cutthroat trout, which are both nationally significant. The headwaters also contain a diverse community of other native aquatic species including regionally significant populations of northern leatherside chub, bluehead sucker, and western pearlshell mussel. Spawning, rearing, and adult habitats are characterized by excellent water quality, high connectivity between the mainstem of the Snake River and its tributaries, few natural or human-made barriers, and a diverse and abundant macroinvertebrate community supporting naturally reproducing and genetically pure populations of native fish.

Lewis River (scenic segment). The lower reach of the Lewis River below the waterfalls contains the nationally significant Yellowstone and Snake River fine-spotted cutthroat trout.

Snake River (wild segment). This segment contains the Yellowstone and Snake River fine-spotted cutthroat trout and western pearlshell mussel—all nationally significant species of concern. It contains nine native species of the Snake River Headwaters and nine historically present species of the Greater Yellowstone Ecosystem. There is a variety of high quality habitat types typical of the ecosystem. Fish constitute an outstandingly remarkable value due to the presence of cutthroat trout and other native species, high species diversity, and natural reproduction of native species.

Snake River (scenic segment). This segment contains the Snake River fine-spotted cutthroat trout, a nationally significant species, and the bluehead sucker, a regionally significant species. It contains 10 native species of the Snake River Headwaters. Below Pacific Creek, there is excellent habitat that is regionally and nationally significant. The reach above Pacific Creek contains a variety of high quality habitat types typical of the ecosystem. Fish constitute an outstandingly remarkable value due to the presence of cutthroat trout and other native species, high species diversity, and natural reproduction of native species.

Pacific Creek (scenic segment). This segment contains the Snake River fine-spotted cutthroat trout, a nationally significant species of concern, and the northern leatherside chub, a regionally significant species. It contains 10 native species of the Snake River Headwaters. There is a variety of high quality habitat types typical of the ecosystem. Fish constitute an outstandingly remarkable value due to the presence of the cutthroat trout, high species diversity, natural reproduction of native species, and high quality habitat.

Buffalo Fork (scenic segment). This segment contains the Snake River fine-spotted cutthroat trout, a nationally significant species, and the bluehead sucker, a regionally significant species. It contains eight native species of the Snake River Headwaters. There is a variety of high quality habitat types typical of the ecosystem. Fish constitute an outstandingly remarkable value due to the presence of the cutthroat trout and high species diversity.

Gros Ventre River (scenic segment). This segment contains the Snake River fine-spotted cutthroat trout, a nationally significant species, and the bluehead sucker, a regionally significant species. It contains seven native species of the Snake River Headwaters. Natural reproduction exists, and there is a variety of high quality habitat types typical of this ecosystem. Fish constitute an outstandingly remarkable value due to the presence of the cutthroat trout and high species diversity.

Geologic Values

Snake River Headwaters lies within a seismically and geomorphically active zone where dynamic geologic processes continue to shape the landscape—unique features include geothermal springs, landslides, debris flows, and exposed geologic layering. In addition, Snake River is a textbook example of a naturally braided river system that transports high sediment loads. This action creates a diverse landscape and supports vegetation communities critical to the ecological health of the river.

Lewis River (wild segment). This segment contains a regionally unique, low-gradient reach between Shoshone and Lewis lakes. Shoshone Lake reduces the intensity of peak flows, resulting in the transport of smaller-sized gravels. Most of the pools on the channel are formed by woody debris. Geology is considered an outstandingly remarkable value due to the unique geomorphology between Shoshone and Lewis lakes that includes lava flows and tuffs.

Lewis River (scenic segment). This segment contains a regionally significant example of the convergence of two different volcanic tuff and lava flows, which form Lewis Canyon. Geology is considered an outstandingly remarkable value due to the presence of exemplary lava flows, volcanic tuff, and the dramatic canyon.

Snake River (wild segment). This segment contains a diversity of channel types that transport substantial amounts of sediment, which is considered to be regionally significant. The segment contains four hydrothermal systems (Huckleberry, Snake River, Heart River, and one unnamed hot spring) that are considered nationally significant. This segment contains a number of debris flows that are regionally significant. Geology is considered an outstandingly remarkable value due to the diversity of channel types, sediment transport, the number of hydrothermal systems, and debris flows resulting from an active fault system.

Snake River (scenic segment). This segment contains a textbook example of one of the longest continuous and naturally braided river systems in the contiguous United States. This dynamic system transports a high bed load (gravels) and has a diversity of fluvial features including side channels and floodplains, which create correspondingly diverse landscapes and habitats within the river corridor. These geomorphically active surfaces support vegetation communities critical to the ecological health of the river. There are a few landslides and debris flows typical of the Greater Yellowstone Ecosystem. Geology is considered an outstandingly remarkable value due to the presence of naturally braided, geomorphically active river channels.



**Intermountain Region Foundation Document Recommendation
Grand Teton National Park | John D. Rockefeller, Jr. Memorial Parkway**

April 2017

This Foundation Document has been prepared as a collaborative effort between park and regional staff and is recommended for approval by the Intermountain Regional Director.



4-21-17

RECOMMENDED

David Vela, Superintendent, Grand Teton National Park | John D. Rockefeller, Jr. Memorial Parkway

Date



5/31/17

APPROVED

Sue E. Masica, Regional Director, Intermountain Region

Date



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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