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Bureau of Reclamation

Buffalo Bill Reservoir and State Park
Environmental Assessment and Resource Management Plan
Reclamation Project #WY-EA-24-01

PUBLIC DRAFT

April 2024

Bureau of Reclamation
Wyoming Area Office
705 Pendell Blvd.
Mills, WY 82644

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

The mission of Wyoming State Parks and Cultural Resources is to provide memorable recreational, cultural, and educational opportunities and experiences to improve communities and enrich lives.

Environmental Assessment for the Buffalo Bill Reservoir and State Park Resource Management Plan

Public Draft

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Partnering Agency

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LIST OF ACRONYMS AND ABBREVIATIONS

ABA	Architectural Barriers Act
AD	Anno domini
ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessible Guidelines
AIS	Aquatic invasive species
asl	Above sea level
BMP	Best Management Practice
BLM	Bureau of Land Management
BP	Before present
Reclamation	Bureau of Reclamation
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FTE	Full-time Equivalent
GIS	Geographic Information System
GPS	Global Positioning System
IPaC	Information for Planning and Consultation
kya	Thousand years ago
mya	Million years ago
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLCD	National Land Cover Database
NRCS	National Resources Conservation Service

NRHP	National Register of Historic Places
NSS	Native Species Status
P.L.	Public Law
PFYC	Potential Fossil Yield Classification
PRPA	Paleontological Resources Preservation Act
RCRA	Resource, Conservation, and Recovery Act
RIN	Regulation Identifier Number
RMP	Resource Management Plan
RV	Recreation vehicle
SHPO	State Historic Preservation Office
SPCR	Department of State Parks and Cultural Resources
SPHST	Division of State Parks, Historic Sites & Trails
State Park	Buffalo Bill State Park
TMDL	Total Maximum Daily Load
US	United States
USACE	US Army Corps of Engineers
U.S.C.	United States Code
USFS	United States Forest Service
USGS	US Geological Survey
WDEQ	Wyoming Department of Environmental Quality, Division of Water Quality
W.S.	Wyoming Statutes
WGFC	Wyoming Game and Fish Commission
WGFD	Wyoming Game and Fish Department
WYAO	Wyoming Area Office
WYNDD	Wyoming Natural Diversity Database

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CHAPTER 1. INTRODUCTION

The Bureau of Reclamation (Reclamation) and the Wyoming Department of State Parks and Cultural Resources (SPCR), Division of State Parks, Historic Sites & Trails (SPHST) are coordinating the preparation of an integrated Resource Management Plan/Environmental Assessment (RMP/EA) for Buffalo Bill Reservoir and State Park in northwest Wyoming.

The RMP/EA is an updated comprehensive planning and management document to guide managing, allocating, and appropriately using Buffalo Bill Reservoir land and water resources and to make decisions regarding the management of recreation resources. The Master Plan, embedded within the RMP, is a comprehensive plan for the development of outdoor recreation resources and infrastructure at Buffalo Bill State Park (State Park).

Reclamation is required to ensure the development, monitoring, and updating of RMPs for lands directly managed by Reclamation and for lands cooperatively managed with another federal or non-federal entity. Pursuant to a management agreement, SPHST and Reclamation are to develop a RMP for lands managed for recreation by SPHST.

1.1. GENERAL DESCRIPTION AND LOCATION

Buffalo Bill Dam and Reservoir are located approximately 8 miles west of Cody, Wyoming, on US Highway 14-16-20 to Yellowstone National Park (Appendix D, Figure 1) The Shoshone Project was authorized by the Secretary of the Interior on February 10, 1904, under the authority of the Reclamation Act of June 17, 1902. Buffalo Bill Dam was completed in 1910 and the reservoir provided conservation storage for 375,000 acre-feet of irrigation water. Buffalo Bill Dam was one of the first concrete arch dams in the world with a structural height of 325 feet, a crest length of 200 feet, a base width of 100 feet, and a top width of 10 feet. Named for famous Wild West showman, promoter, and developer Colonel William F. "Buffalo Bill" Cody, the dam is listed on the National Register of Historic Places (NRHP) and is also a National Historic Civil Engineering Landmark. The Shoshone Powerplant was placed on-line in 1922 with a capacity of 5.6 megawatts. Reclamation owns the dam, power plant, and reservoir lands and maintains primary jurisdiction of the lands and associated resources within the reservoir area. In 1957, most of the area was designated as a state park and is administered by SPHST through a 25-year Management Agreement.

The last Master Plan for the State Park was completed in 1988 in advance of a project to increase reservoir storage capacity. The joint federal/state project to modify Buffalo Bill Dam and Reservoir was completed in 1994. The crest of the dam was raised 25 feet and the spillway was enlarged and gated. The active conservation pool was increased to 646,565 acre-feet. Electrical generating capacity was increased to 30 megawatts with the addition of the Buffalo Bill Powerplant, Spirit Mountain Powerplant, and Heart Mountain Powerplant. Current authorized project purposes and benefits include water storage for irrigation, power generation, recreation, fish and wildlife, municipal water, and flood control.

At full capacity, referred to as the conservation/joint use pool elevation, the enlarged reservoir covers approximately 8,000 acres and is eight-miles-long along the North Fork arm and five-miles-long on the South Fork arm. Dust abatement dikes were constructed on each arm to reduce the amount of windblown silt which traditionally occurs during the winter months when the lake is drawn down. In the early 1990s, SPHST recreation facilities were relocated and enhanced as part of the reservoir enlargement program.

The State Park includes 8,215 surface acres of the reservoir and 3,544 acres of surrounding land for a total acreage of 11,759 acres. It offers fishing (year-round), camping, picnicking, and a variety of water sports in settings that range from remote and primitive to moderately developed. There are 42 miles of shoreline around the reservoir. Mountains dominate the scenery at the State Park. Shoshone Canyon, where the dam is located, is framed by Rattlesnake Mountain to the north and Cedar Mountain (also known as Spirit Mountain) to the south. Logan Mountain is further west along the north shoreline. The north and south forks of the Shoshone River are divided by Sheep Mountain and Carter Mountain is prominent on the southern skyline. These mountains are part of the Rocky Mountain Absaroka Range and the elevation varies from approximately 5,400 feet in the Park to more than 12,000 feet in the Absarokas.

1.2. STUDY AREA

For the purpose of this RMP/EA, the Study Area is defined as all Reclamation-owned lands at Buffalo Bill Reservoir, including portions of the land area and surface managed by SPHST as Buffalo Bill State Park. During the Buffalo Bill State Park Master Plan process, the desire for additional recreation opportunities on Reclamation-owned lands outside of the current State Park boundary was identified. This RMP/EA analyzes those additional lands. However, per Wyoming State Statute 36-4-106, SPHST must complete a Site Criteria Review process before managing additional property. This includes gathering data, consulting with an evaluation team and the State Parks and Cultural Resources Commission, seeking support from the Travel, Recreation, Wildlife, and Cultural Resources Committee of the Legislature, and drafting a bill for introduction and approval by the Legislature.

1.3. PURPOSE AND NEED

The purpose is to establish a RMP that defines the management framework for the conservation, protection, and enhancement of Buffalo Bill Reservoir. The RMP would guide Reclamation and SPHST in managing, allocating, and appropriately using the federal land and other resources while protecting the authorized Buffalo Bill Dam and water operations. The RMP is needed to address changes since the last Master Plan in 1988 including: raising the dam level, increasing visitation and population growth, changing and diversifying recreational trends, and aging facilities within the State Park.

1.4. AUTHORITY

Reclamation's Wyoming Area Office (WYAO) in Mills, Wyoming, manages the Buffalo Bill Dam as part of the Shoshone Project and is responsible for managing Reclamation lands at Buffalo Bill Reservoir. Reclamation oversees areas such as National Environmental Policy Act (NEPA) and cultural resource compliance, minerals, dam operation and maintenance, safety, security, and water management. Reclamation partners with non-federal agencies to manage the recreation resources on its land (Public Law (P.L.) 89-72, as amended). No recreation facilities are to occur in the Operations Area as defined as areas directly surrounding powerplants, switchyards, dams, outlet works distribution works, and other associated infrastructure, wherein the United States retains direct management responsibility.

Authority to enter into a management agreement is given by the Act of Congress of June 17, 1902, (32 Stat. 3 88) and acts amendatory thereof and supplementary thereto, collectively known and referred to as the Federal Reclamation Laws; and the Federal Water Project Public Recreation Act of July 9, 1965, Public Law 89-72, Sec. 1 and 7(b), (79 Stat. 213) as amended. The 2017 Management Agreement outlines the responsibilities of the two agencies. Pursuant to the 2017 Management Agreement, the RMP/EA is prepared jointly by Reclamation and SPHST with Reclamation serving as the lead federal agency (Management Agreement No. 15-LM-60-2263). Other government agencies having resource management and administrative responsibilities within the Study Area include the SPHST, Wyoming Game and Fish Department (WGFD), US Army Corps of Engineers USACE, and Park County Weed and Pest.

1.5. ADMINISTRATION AND MANAGEMENT RESPONSIBILITIES

Reclamation, SPHST, and other entities with varying degrees of management responsibility coordinate administration of the land, water, and associated resources within the Study Area. This section describes the existing policies and management responsibilities that may influence any future development and the management framework of the State Park.

1.5.1. Bureau of Reclamation

Reclamation has been involved with the conservation and development of Wyoming's water resources for more than 100 years. The agency's WYAO administers several multipurpose projects that provide an important economic base to the region. Reclamation maintains primary jurisdiction over the entire Buffalo Bill Reservoir.

The Shoshone Project was one of the first federal water development projects undertaken by the newly formed Reclamation in the early 1900s. Construction of the dam began in 1905. When completed in 1910, the dam was the highest dam in the world at 325 feet. Because of its historical significance, Buffalo Bill Dam was added to the NRHP in 1973. It is also a National Historic Civil Engineering Landmark. The dam was raised 25 feet between 1985 and1993, inundating most of the then existing recreation resources. The Shoshone project provides

irrigation to over 93,000 acres of farmland in the Bighorn Basin, generates about 100 million kilowatt hours of power per year, and supplies six towns and several rural areas in Park and Bighorn counties with municipal water. Additional information about the dam and reservoir can be found at: https://www.usbr.gov/gp/multimedia/publications/buffalo_bill_brochure.pdf.

Varying water levels are expected, but Reclamation may not fluctuate water levels below the top of the dead pool or above the top of the conservation/joint use pool elevation.

1.5.2. Wyoming State Parks, Historic Sites & Trails

The mission of Wyoming SPCR is to provide memorable recreational, cultural, and educational opportunities and experiences to improve communities and enrich lives. SPCR provides the state's citizens and visitors a variety of opportunities to enjoy arts, parks, and history. SPHST is a division of SPCR that manages Wyoming's state parks, historic sites, and the Wyoming Trails Program and the Outdoor Recreation Office.

SPHST manages all recreation- and recreation-related responsibilities on the federal lands and water within Buffalo Bill Reservoir. It provides law enforcement, collects fees, and is responsible for all recreation facilities. Cost sharing can be negotiated and SPHST coordinates with Reclamation on improvements. SPHST established a user fee system in 1992 at all state parks. At the State Park, SPHST is responsible for collecting daily use fees and overnight camping fees. Per Wyoming Statute (W.S.) 36-4-121, the funds received by SPHST from the sale of permits are deposited in a capital construction account and may be expended by SPHST for capital construction projects, major maintenance, planning, and site interpretation such as exhibits, signage, and displays as approved by the legislature. Additionally, the 2017 Management Agreement allows SPHST to collect and retain fees from leases and contracts provided the revenue is used for the development, operation and maintenance, and replacement of recreation structures and facilities.

SPHST enforces federal, state, and local laws as well as park regulations. Certified state park staff provide the primary law enforcement within the park. The local county sheriff typically assumes the authority for major crime investigations and search and rescue operations. As discussed later, Stagecoach Road, around the southside of the reservoir, is owned and managed by Park County. The Wyoming Highway Patrol also has jurisdictional authority within the park and may patrol the park area. No federal law enforcement officers are staffed at Buffalo Bill Reservoir.

SPHST makes and enforces rules and regulations as necessary and desirable to protect visitor health and safety. Park regulations are posted at major park entrances. The design and operation of all new park projects emphasize visitor and staff safety and comply with all applicable federal and state regulations.

SPHST has the exclusive concession, licensing, and subleasing rights at Buffalo Bill Reservoir under authority of the current Management Agreement. However, all new licenses, leases,

permits, contracts, or changes to existing licenses, leases, permits, or contracts for other than day-to-day activities (such as fishing derbies and weekend group-use activities) must be submitted to Reclamation for approval prior to execution. In the event of the termination of the Management Agreement between Reclamation and the State of Wyoming, Reclamation shall be deemed to stand in the stead of said department as grantor for the remainder of the term of the (lease, license, permit, contract). Provided however, in the event of such termination, Reclamation, at any time within 90 days thereafter, may terminate this lease, license, permit, or contract by giving to the lessee, licensee, permittee, or contractor) with a 60-day written notice thereof.

SPHST is responsible for advertising upcoming available concession contracts. Development of concession facilities is limited to facilities necessary and appropriate for public use of federal land and water resources consistent with current planning processes. When planning concession operations, protection, preservation, and conservation of resources must be balanced with public-use interests.

Reclamation is required to comply with the provisions of federal laws to provide access to Federal buildings, programs, and activities. Federal programs and buildings must conform to the requirements of the Architectural Barriers Act (ABA) of 1968 (Public Law [P.L.] 90-480, 42 United States Code [U.S.C.] 4151 et seq.) as amended, Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112, 29 U.S.C. 701) as amended, and the Architectural and Transportation Barriers Compliance Board (Access Board) Accessibility Guidelines; Outdoor Developed Areas: Final Rule, of September 26, 2013, 36 Code of Federal Regulations (CFR) Part 1191, Regulation Identifier Number (RIN) 3014-AA22. Reclamation is committed to improving public environments for people with disabilities and to provide the highest level of accessibility possible consistent with its mission of managing water and related facilities. At Buffalo Bill Reservoir, Reclamation shares the accessibility responsibilities with SPHST. Outdoor recreational opportunities are considered public accommodation programs with associated services or activities in Wyoming. Therefore, SPHST complies with the Americans with Disabilities Act (ADA), Title II; Americans with Disabilities Act Accessibilities Guidelines (ADAAG); and the Rehabilitation Act, Title V, Section 504. Design and construction of new facilities and structures and alterations to existing facilities and structures must meet or exceed the requirements of the ABA, ADAAG, and ADA accessibility guidelines for recreational facilities and outdoor developed areas and all applicable state and local building codes and industry standards (P.L.101-336 and W.S. 27-9-105) (a) (1987).

SPHST is responsible for developing and maintaining roads, including appropriate informational signs within the State Park. SPHST uses Reclamation's guidelines for signs to present a consistent message and cultivate a safe visitor experience. SPHST also regulates vehicle use within the park. SPHST regulations specify that all vehicles are confined to established roads and parking areas unless otherwise designated.

Qualified full-time park rangers, superintendents, and assistant superintendents are considered peace officers for the State of Wyoming within the boundaries of the State Park (Wyoming State Statutes 9-1-701 through 9-1-707, 7-2-101(G)). Furthermore, Section 9 of the Management Agreement gives authority for SPHST law enforcement to operate on Reclamation lands.

Big Horn Basin Boat Club (Club) is located on the east side of Buffalo Bill Reservoir adjacent to Bartlett Lane. The Club is administered through a sub-lease with Wyoming State Parks as allowed through Management Agreement 15-LM-60-2363. Rent is paid by the Club annually and divided between Reclamation and State Parks. The Club offers public access other than the leased mobile homes. This existing private exclusive use is administered pursuant to 43 CFR Part 429 (Use of Bureau of Reclamation Land, Facilities, and Waterbodies); and 43 CFR Part 21 (Occupancy of Cabin Sites on Public Conservation and Recreation Areas); and, Office of Management and Budget, Circular No. A-25 Revised, as applicable. Reclamation prohibits any use that would result in new private exclusive recreational or residential use of Reclamation land, facilities, or waterbodies pursuant to 43 CFR 429.31 (b).

1.5.3. Wyoming Game and Fish Department

The Wyoming Game and Fish Commission (WGFC) was established in 1921 to provide citizen oversight to the WGFD, which is responsible for conserving and propagating fish and wildlife and managing wildlife for the benefit of the people of Wyoming (W.S. 23-1-301-303, W.S. 23-1-401). The WGFD's responsibilities center on wildlife management, access to hunting and angling opportunities, and boating safety. The WGFD provides technical assistance to plan and develop areas that provide public access and improve wildlife habitat. Special hunt areas, wildlife preserves, fish hatcheries, boat-launching facilities, and habitat improvement projects are examples of areas the WGFD has developed to enhance the outdoor recreation experience and improve wildlife habitat.

Control and protection of wildlife species and the fishery in the Study Area are under the authority of the WGFD and its powers and duties as directed in W.S. 23-1-302. This statute includes powers to designate seasons and bag limits, trap and remove, plant wildlife, regulate and designate the status of any species not already classified by law, promulgate orders to carry out the intent of the WGFC, as well as supervise the protection, management, and propagation of fish and all fish culture. The WGFD is authorized in W.S. 36-8-104 to designate hunting areas and seasons in state parks. The park is open to hunting and fishing based on WGFD-prescribed laws, rules, and regulations. Hunting is subject to any additional closed/posted area actions as determined by SPHST and Reclamation.

W.S. 41-13-215 regulates watercraft use in Wyoming and specifies that WGFD law enforcement officers enforce the boating laws in addition to the rules and regulations of the WGFC. Public programs on water safety and recommended methods to prevent accidents on

and around the water are the primary responsibility of the WGFD, which receives federal funds from the Coast Guard for its boating safety program. SPHST collaborates in the distribution of boating safety information.

WGFD law enforcement officers and any other peace officers of the state or any of its political subdivisions otherwise authorized by law may enforce the rules and regulations of the WGFC.

In an effort to keep Wyoming waters free from harmful aquatic invasive species (AIS), such as zebra mussels (*Dreissena polymorpha*) and quagga mussels (*Dreissena bugensis*), WGFD has regulations to prevent these species from entering the state on watercraft. The 2014 regulations require that any watercraft transported into Wyoming from March 1 through November 30 must undergo a mandatory inspection by an authorized inspector prior to launching in any water of the state. Any watercraft that has been in a water infested with zebra or quagga mussels within 30 days is required to undergo a mandatory inspection by an authorized inspector prior to launching year-round. Inspections are conducted at lakes, reservoirs, and Wyoming ports-of-entry.

Chapter 1, Section 12 of the Wyoming State Parks Rules and Regulations addresses Fishing, Hunting, and Trapping on properties owned and managed by Wyoming State Parks, Historic Sites, and Trails. Subsection (e) states that "Unless otherwise posted, park lands or portions thereof are open to hunting subject to general hunting regulations prescribed by the Wyoming Game and Fish Commission. While engaged in lawful hunting, the use of firearms or other projectile devices are prohibited within 400 yards of any public use facility or activity area, including picnic areas, campgrounds, private cabin and concession areas, boat ramps, hard surfaced roads, designated trails, and parking lots." Subsection (f) adds that "Trapping on park lands is authorized only by regulation of the Wyoming Game and Fish Commission. Written permission to trap on park lands must be granted by the superintendent, upon approval of the Wyoming Game and Fish Commission." Trapping regulations for the Wyoming Game and Fish are available on their website at https://wgfd.wyo.gov/Regulations/Trapping/Furbearing-Animal-Trapping.

1.5.4. US Army Corps of Engineers

Reclamation consults with USACE on project proposals below the high-water mark and obtains any necessary permits from USACE prior to implementing any such projects.

The USACE Wyoming Regulatory Office Regulatory Program, is one of the oldest in the Federal Government. Initially it served a fairly simple, straightforward purpose: to protect and maintain the navigable capacity of the nation's waters. Time, changing public needs, evolving policy, case law and new statutory mandates have changed the complexion of the program, adding to its breadth, complexity, and authority.

The USACE Wyoming Regulatory Office, through the Regulatory Program, administers and enforces Section 404 of the Clean Water Act (CWA) in Wyoming for the Omaha District.

Under CWA Section 404, a permit is required for the discharge of dredged or fill material into waters of the US. Many waterbodies and wetlands in the nation are waters of the US and are subject to the USACE' regulatory authority.

The Regulatory Program is committed to protecting the Nation's aquatic resources, while allowing reasonable development through fair, flexible, and balanced permit decisions. The USACE evaluates permit applications for essentially all construction activities in the Nation's waters, including wetlands (USACE 2024).

1.5.5. Park County Weed and Pest District

Reclamation is responsible for the identification and proper management of pests on Reclamation lands and at Reclamation-owned facilities in accordance with the national policies of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Noxious Weed Act (FNWA); Carlson-Foley Act; and applicable state and local laws and standards. SPHST is responsible for controlling all noxious weeds within the park. Reclamation controls all noxious weeds within the operations area and on Reclamation land outside the park. Park County Weed and Pest District manages noxious weeds under agreements with SPHST and Reclamation. Pesticide application on Reclamation lands requires licensed applicators following an approved Integrated Pest Management Plan.

1.6. POLICIES AND GUIDELINES

The EA is prepared in compliance with the NEPA (Public Law 91-190) and under current guidelines established by the Council on Environmental Quality (CEQ), the United States (US) Department of the Interior, and Reclamation. If the environmental effects of the Proposed Action disclosed in the EA are determined to be insignificant, Reclamation can issue a Finding of No Significant Impacts FONSI and an environmental impact statement would not be required.

Management and development of this area, including development of the RMP, is subject to the following Federal acts, laws, and regulations as amended:

- ABA Accessibility Standards
- American Indian Religious Freedom Act
- Archaeological Resource Protection Act
- Clean Water Act (CWA)
- Clean Air Act
- Comprehensive Environmental Response, Compensation, and Liability Act
- Endangered Species Act of 1973, as amended
- Federal Water Project Recreation Act of 1965, as amended
- FIFRA
- Fish and Wildlife Coordination Act, as amended
- Hazardous and Solid Waste Amendment to RCRA 1984
- Migratory Bird Treaty Act of 1918

- National Historic Preservation Act (NHPA)
- Native American Graves Protection and Repatriation Act
- National Environmental Policy Act (NEPA)
- Paleontological Resources Preservation Act (PRPA)
- Rehabilitation Act of 1973
- Reclamation Recreation Management Act of 1992
- Resource, Conservation, and Recovery Act (RCRA)
- Safe Drinking Water Act
- Superfund Amendments and Reauthorization Act of 1986

CHAPTER 2. ALTERNATIVES

The alternatives described in this RMP/EA include Alternative A, the No Action Alternative, and an Alternative B, the Proposed Action. Given the public and internal scoping, it was determined that one action alternative meets the purpose and need for the RMP and addresses SPHST's mission. This chapter describes the management action and proposed facility and management improvements for the alternatives. During the alternatives development process, the planning team complied with NEPA and CEQ regulations to implement procedural provisions of NEPA (40 CFR 1500–1508), including seeking public input. Throughout the development of the Master Plan, Reclamation considered public comments received during the scoping process to identify major issues deserving of detailed study to develop alternatives (Reclamation 2024). Reclamation and SPHST also met with stakeholders and county, state, and federal agencies and considered their comments and recommendations.

2.1. ALTERNATIVE A – NO ACTION ALTERNATIVE

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill Reservoir would not be revised. SPHST would continue to manage the park as Reclamation's managing partner. No new facilities would be provided to meet existing and future public needs or demands. Under Alternative A, current resource management practices and operations would continue and management actions would occur on a case-by-case basis to meet federal, state, and local laws and regulations. Reclamation and SPHST would continue to comply with all applicable federal, state, and county laws, rules, and regulations. Finally, maintenance and in-kind replacement of the existing facilities would occur as needed.

2.2. ALTERNATIVE B – PROPOSED ACTION

Under the Proposed Action, Reclamation would establish a RMP. The Proposed Action includes a full range of activities and improvements that could be implemented in the Study Area to meet current and future demand. The Proposed Action provides for a moderate level of new recreation facility development, most of which would occur within existing developed project areas. Overall, improvements and upgrades would be made to maintain the current service level. One new area, currently outside of the State Park boundary but on Reclamation-managed land, is proposed for new improvements. In addition to facility development, the RMP would provide a new management framework for the reservoir.

The RMP is intended to be as area-specific as possible and a working document that would ensure there is an adequate number of properly designed facilities in appropriate areas that respond to the current and future expected use levels. Improvements anticipated include ground-disturbance activities for the implementation of new facilities, which would involve developing detailed site plans to illustrate constructability and an estimate of costs. Site-specific

plans would need NEPA and NHPA compliance review by Reclamation before construction can begin.

For the purposes of this RMP, a trail is defined according to the ABA Standards Chapter 10 Standards, as a pedestrian route developed primarily for outdoor recreational purposes. Pedestrian routes that are developed primarily to connect accessible elements, spaces, and buildings within a site are not a trail. New pedestrian trails should be built to ABAS standards, but there are conditions for exceptions. If a condition for exception does apply, the trail beyond that barrier needs to continue to meet ABA Standards (i.e. a boulder impeding trail width would be a condition for exception for that small portion of a trail).

Table 1 presents a summary, in acres, of the extent of potential new developments and site enhancements across the Study Area. The following sections outline key projects at each of the developed facility areas under the Proposed Action. See Appendix C, Master Plan for maps showing the location and extent of each proposed improvement area.

Table 1. Summary of improvement areas and extent of potential new developments and site enhancements within Buffalo Bill Reservoir and State Park

Improvement Area	Proposed Trails (Miles)	Extent of Potential Improvements (Acres)**	General Improvement Type
Diamond Creek	7.9*	755.0	New
Bartlett Lane	NA	19.0	Updates to and expansion of existing infrastructure
Shirley's Pond	NA	7.7	Updates to and expansion of existing infrastructure
South Fork	NA	20.0	New
Central Shores	NA	305.0	New
Stagecoach	NA	45.0	Updates to and expansion of existing infrastructure
Sheep Mountain	NA	37.2	Updates to and expansion of existing infrastructure
North Fork	NA	7.7	Updates to and expansion of existing infrastructure
North Shore West	NA	23.4	New
Shreve Lodge	NA	25.2	Updates to and expansion of existing infrastructure
Eagle Point	NA	0.0	Only improvements associated with the North Fork Trail
Headquarters	NA	54.0	Updates to and expansion of existing infrastructure
Lake Shore East	NA	0.0	Only improvements associated with the North Fork Trail

Improvement Area	Proposed Trails (Miles)	Extent of Potential Improvements (Acres)**	General Improvement Type
Marquette	NA	0.0	Only improvements associated with the North Fork Trail
North Fork Trail	4.0	0.0	New
Totals:	**11.9**	**1,299.2**	

Acronyms: NA – Not applicable
* Trail miles are within the extent of the potential improvements.
** Acres represent the area within which proposed facility improvements would occur. The actual area of disturbance will be much smaller than the number of acres shown and this area will be refined following the design and site clearance phases of the project

2.2.1. Diamond Creek

Potential improvements include:

- Parking
- Non-motorized trails
- Fishing access
- Primitive camping

Transference of recreation management responsibilities from Reclamation to State Park.

2.2.2. Bartlett Lane

Potential improvements include:

- Expanded parking
- Allow grazing in the irrigated area east of the Boat Club/Public Boat Launch for United States Forest Service (USFS) pack horses.

2.2.3. Shirley's Pond

Potential improvements include:

- Fishing access
- Formalize parking area
- Restroom

2.2.4. South Fork

Potential improvements include:

- Parking area
- Fishing access
- Picnic area
- Restroom

2.2.5. Central Shores

Potential improvements include:

- Parking area
- Walk-through archery range
- Non-motorized trails
- Restroom

2.2.6. Stagecoach

Potential improvements include:

- Water and power infrastructure
- Restroom
- Shower house
- Host site
- Fee booth
- Drinking water
- Playground
- Water access
- Shaded picnic area
- Irrigated landscape improvements for shading and screening

2.2.7. Sheep Mountain

Potential improvements include:

- Water and power infrastructure
- Restroom
- Drinking water
- Shower house
- Shaded picnic area
- Playground
- Water access
- Group campsite
- Irrigated landscape improvements for shading and screening
- Dog park

2.2.8. North Fork

Potential improvements include:

- Dog park
- Landscape improvements
- Monument sign
- Improve dump station infrastructure

2.2.9. North Shore West

Potential improvements include:

- Restroom
- Picnic access
- Water and fishing access
- Parking area

2.2.10. Shreve Lodge

Potential improvements include:

- Future staff housing needs (both permanent and seasonal)
- General lodge upgrades
- Playground
- Restroom
- Connection to proposed North Fork Trail detailed in Section 2.2.15

2.2.11. Eagle Point

Potential improvements include:

- Connection to proposed North Fork Trail detailed in Section 2.2.15

2.2.12. Headquarters

Potential improvements include:

- Connection to proposed North Fork Trail detailed in Section 2.2.15
- Headquarters expansion
- Campground expansion
- Monument sign

2.2.13. Lake Shore East

Potential improvements include:

- Connection to proposed North Fork Trail detailed in Section 2.2.15

2.2.14. Marquette

Potential improvements include:

- Connection to proposed North Fork Trail detailed in Section 2.2.15

2.2.15. North Fork Trail

This non-motorized trail would link many of the existing amenities along the north shore of the reservoir and would provide needed walking trails and access points on this side of the park.

Potential improvements include:

- Approximately four miles of soft-surface trail connecting the Shreve Lodge Area and Marquette
- Trailhead improvements at Shreve Lodge and Marquette

2.3. PAST, PRESENT, AND FORESEEABLE ACTIONS

Cumulative effects are effects on the environment that result from the impact of implementing any one of the alternatives in combination with other actions outside the scope of this RMP/EA either within or adjacent to the Study Area. Reclamation defines cumulative impacts as:

> The impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Past, present, and reasonably foreseeable future actions are analyzed to determine the extent that the environment has been or would be disturbed, maintained, or enhanced. The availability and extent of data on resource locations within the planning area vary across resource types and locales. As knowledge improves, management measures, including adaptive strategies, would be considered to mitigate potential cumulative effects in compliance with applicable laws, regulations, and existing RMPs for the planning area. It is important to note that unforeseen changes in factors such as economics, demand, and laws and policies could lead to different outcomes.

These reasonably foreseeable future actions, when combined with the past/present actions and the alternatives evaluated in the RMP process, may result in cumulative effects. Projects and activities considered in the cumulative effects analysis include:

- Stagecoach Trail: An unimproved, gravel road that has access and safety issues when wet. As a county-managed road, improvements to the Stagecoach Trail need to be coordinated, considered, and timed to support park improvements along the south edge of the reservoir to ensure that reasonable access is available to any new improvements. Additional signage, grading, and potential paving would be beneficial along the south shore of the reservoir to better support visitors not familiar with the area.
- Actions on adjacent federal lands: Both the BLM and USFS have property adjacent to Reclamation land. Actions on federal lands should be coordinated and considered and may impact the Reservoir and State Park. Coordination will help to ensure that there is

access to public lands, that conflicts are reduced, and that an overall visitor experience supports activities on public lands.

- New roads and changing traffic patterns: New roads and changing traffic patterns on both the well-traveled highways, smaller arterial roads, and neighborhood streets surrounding Buffalo Bill Reservoir and State Park could impact access. Improvements to these roads and the subdivisions they serve should be followed closely. Additional signage may alleviate use conflicts.

The effects discussion in this affected environment and environmental consequences section addresses direct, indirect, and cumulative long-term effects resulting from the implementation of the alternatives during the 10-year RMP planning period. Any short-term effects from new projects would be related primarily to construction activities and would be temporary and minor. Short-term effects from construction would include noise, dust, and use area or facility closures. These activities would result in minor disturbance to humans, recreational use, and wildlife.

2.4. ALTERNATIVES CONSIDERED BUT DISMISSED

Public outreach was completed to gather information on the Master Plan in November 2022, June 2023, and during the scoping period (September – October 2023). The planning team received comments on potential improvements, including the desire for additional recreational opportunities identified on Reclamation-owned lands outside of the current State Park boundary. The following alternatives have been dismissed because of legal, operational, or scope concerns and impacts, identified below:

- Developed camping at Cedar Mountain: Access crosses multiple ownership boundaries, impacts existing infrastructure, greater need for primitive camping, and would be cost-prohibitive. Alternative B provides for primitive camping with less adverse impacts to the recreation setting and natural resource conditions.
- Gun Range: Safety considerations.
- Camping at Bartlett Lane: Increases traffic on Bartlett Lane and impacts surrounding residential areas.
- Park expansion east of the Dam/along Hayden Arch Road: Limited public access due to security requirements around the dam, power plants, and associated infrastructure.
- Improvements beyond Reclamation's jurisdiction (e.g., on Bureau of Land Management [BLM] or private land): Addressing assets outside of Reclamation's boundary is outside of the scope of this RMP.
- Improvements to county-managed Stagecoach Trail: Addressing assets outside of Reclamation's boundary is outside of the scope of this plan.

- Dredging the Reservoir: This would involve additional agency and operations management through a separate process.
- Facilities/trailheads accessed by Shiloh Road: Limited developable public lands and water fluctuations reduce the viable area for additional facilities/trailheads. However, trail improvements through this area from adjacent trailheads may be investigated in the future.

CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1. INTRODUCTION

This chapter describes the existing environment that would potentially be affected by the proposed RMP alternatives within the Study Area. The resources in this chapter were identified by the public, various groups, and various agencies with interest in Buffalo Bill Reservoir and the State Park. The resource conditions described in this chapter existed in 2022 and 2023, unless otherwise noted. These conditions establish the present condition for analysis of effects. Resource conditions were determined by onsite inspections, best available scientific data and mapping, literature searches, and through coordination with local, state, and federal agency personnel.

3.1.1. Resource Topics Considered and Analyzed

The following resource topics identified during public scoping are being carried forward for further analysis in this RMP/EA.

- Recreation
- Land Use and Management
- Cultural Resources, Tribal Interests, and Paleontological Resources
- Visual Resources
- Soils and Geology
- Water Resources
- Wildlife Resources
- Fish Resources and Aquatic Invasive Species
- Threatened and Endangered Species
- Vegetation
- Socioeconomics and Environmental Justice

3.1.2. Resource Topics Considered but Not Further Analyzed

The following resource topics are not being carried forward for further analysis in the RMP/EA.

- Air Quality and Greenhouse Gases: Air quality levels are not expected to change measurably. While measures are taken to limit dust, Reclamation or SPHST only considers management actions that would impact air quality.
- Noise: Management actions would maintain a similar level of service and would have negligible impacts on noise.
- Special and Administrative Designations: Through this planning effort, Reclamation or SPHST does not consider any management actions or allocations that would prevent

managing for Wilderness or Wilderness Study Areas on adjacent lands. The RMP is intended to maintain and enhance recreation at Buffalo Bill Reservoir and State Park. Therefore, it is unlikely that actions would have a negative effect on administrative designations, such as National Scenic and Historic Trails, Wild and Scenic Rivers, Scenic Byways, National Historic Landmarks, and/or National Heritage Areas.

3.2. RECREATION

3.2.1. Affected Environment

The types of outdoor recreation available at the State Park include boating, camping (tent, RV, and camp shacks), fishing, hunting, picnicking, leisure driving, and wildlife viewing. The top five most popular recreation activities in the park according to the Buffalo Bill Summer 2019 Visitor Survey Report include recreation vehicle (RV)/trailer camping (18 percent), nature/wildlife viewing (18 percent), hiking/walking trails (12 percent), picnicking (8 percent), and fishing (8 percent). The State Park contains a limited amount of related recreational infrastructure for recreationalists engaging in these activities. It has three campgrounds (including the newly added Camp Shacks at Stagecoach) and nine developed day-use areas. The State Park includes 8,215 surface acres of the reservoir and 3,544 acres of surrounding land for a total acreage of 11,759 acres (SPHST 2024).

The largest share of this recreational infrastructure is geared toward the State Park's primary use: RV camping. The park has three campgrounds, North Fork, Lake Shore, and a new campground at Stagecoach with camp shacks. Lake Shore generally has more visitor traffic and is better suited for campers who are planning on boating or spending part of the day in town or touring the area (SPHST 2024). Alternatively, North Fork boasts a playground, shower facility with flush toilets, a large riparian area, abundant wildlife, and a large irrigated turf area. North Fork generally has less visitor traffic and is better suited for shore fishing and visitors who want more solitude (SPHST 2024). Coronavirus Aid, Relief, and Economic Security Act (CARES Act) funding was utilized at the State Park to address the need for additional camping opportunities. A variety of funding options may be considered for future development, including federal dollars. In 2020, 8 camp shacks were installed at Stagecoach, which was previously just a day-use site. All included there are 89 total RV sites (40 with electric), 11 tent sites, 8 camp shacks, and 1 group camp area. Campers with tents are allowed to camp at any campsite, including electrical sites (SPHST 2024). See Appendix D, Figure 2 for facility locations.

Lake Shore and Stagecoach Campgrounds are open year-round, but North Fork Campground is only open May 1 through September 30. Between May 1 and September 30, reservations are required for most campsites. From October 1 through April 30, all campsites are first come first served. Wyoming residents may begin booking campsites up to 120 days prior to arrival. Non-residents may begin booking up to 113 days prior to arrival. Day use and camping fees are charged per vehicle and a reservation pays for only one vehicle. Any additional vehicles must

pay an additional fee on arrival at a booth or self-pay station. Additionally, residents can purchase annual day-use passes for $48 and camping passes for $89.60 for one vehicle. Non-residents have the opportunity to purchase an annual day pass for $96 for one vehicle. The holder may add additional vehicles to each pass for half the price. Day passes are available for residents for $7 and non-residents for $12 as of the calendar year 2024.

Picnic areas are available at the following day-use areas: Eagle Point, Marquette, Bartlett Lane, Sheep Mountain, and Stagecoach. The historic Shreve Lodge is an indoor structure for group functions. There are three boat ramps at Lake Shore, Stagecoach, and Bartlett Lane areas. Anglers can fish for lake trout (*Salvelinus namaycush*), rainbow trout (*Oncorhynchus mykiss*), Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri*), walleye (*Sander vitreus*), yellow perch (*Perca flavescens*), multiple species of sucker fish, and common carp (Cyprinus carpio) year-round. With permission from the park superintendent, hunters can hunt for elk (*Cervus canadensis*), deer (*Cervidae*), birds, antelope, and coyotes (*Canis latrans*) 400 yards from designated facilities. Guests can also tour the visitor center adjacent to the Buffalo Bill Dam at no cost. Buffalo Bill Dam Visitor Center, Inc., a non-profit board of Park County, operates the visitor center under an agreement with Reclamation. Lastly, although hiking/walking was the third most popular activity at the State Park, no designated hiking trails exist. Trails can be found in the nearby vicinity of Sheep and Cedar mountains. Horseback riding also occurs on trails adjacent to the State Park.

Considering long-term trends in the industry, outdoor recreation has seen unprecedented growth. Outdoor recreation has increased in popularity across the country due in part to the sociological effects of the COVID-19 pandemic. Park managers have made a conscious effort to pivot and adapt to this increase in demand. While visitation levels have leveled off nationally, the levels of visitation are only predictive of future visitation growth. On a national level, outdoor recreation gained a net total of 3.5 million more participants in 2021. 6.8 million Americans, a record number, tried outdoor recreation for the first time in 2021. Outdoor activities ranked highly on a survey where outdoor participants and non-participants selected activities from a list of 122 team, individual, and outdoor activities they intended to participation in over the next 12 months (OIA 2022; McCoy 2024).

This increase in outdoor recreation was reflected by a record number of guests at all SPHST facilities. SPHST hosted 5,755,184 visitors in 2021. This is a 2 percent decrease from 2020, yet still a substantial 25 percent above the five-year average (SPHST 2022), proving sustained high-visitor use. Stakeholders in the outdoor recreation sphere should prepare for a new normal where these activities are in high demand. The increased visitation has put added pressure on infrastructure at the state parks as well as the natural and cultural resources that are valued for physical and ecological health. This further shows the importance of an in-depth analysis of existing state park recreational resources and a comprehensive plan to address increased demand.

The State Park occupies a prime location between Cody, Wyoming and the outdoor recreation hotspot Yellowstone National Park, one of America's busiest national parks. This location has always attracted visitors to the State Park. This, combined with the previously discussed trends in outdoor recreation, led to a more than 90 percent rise from the average in visitation to the State Park in 2021. The five-year average for visitation between 2016 and 2020 was 92,391 while the total visitation in 2021 was to 178,608. A correlated rise in park income can be expected. According to the 2019 Wyoming Parks Annual Report, the State Park generated $322,092 in revenue. The State Park accounted for a substantial 10 percent of all income for Wyoming State Parks and is the third-highest revenue-generating park. This income is solely from concessions, reservations, and fees paid by State Park guests. The value that the state has returned from the recreational amenities it supplies at the State Park cannot be understated.

The State Park caters to visitors from all over—most visitors travel from outside of Wyoming. According to the Buffalo Bill Summer 2019 Visitor Survey Report, 57 percent of visitors are from other states within the United States (US), while only 40 percent of visitors are from Wyoming. The additional 3 percent is from international visitors. This data showcases the State Park's prominence and is most likely due to its location in the Yellowstone region. The Buffalo Bill Summer 2019 Visitor Survey Report also records data on age distribution and duration of visitors' stays. It can be noted that a large majority of the visitors to the park are over the age of 51, with a specific popularity amongst individuals between the ages of 61 and 70. The average visitor's stay is approximately 67 hours long (Buffalo Bill State Park 2019).

3.2.2. Environmental Consequences

3.2.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill Reservoir would not be revised. This would result in no additional facilities being added to meet recreation demand and a continuation of current management practices. Therefore, this alternative would not improve the overall recreation experience.

3.2.2.2. Proposed Action

The Proposed Action aims to meet current and future demand, decrease future conflicts, minimize resource impacts, and provide a safe visitor experience.

All recreational activities (boating, camping, fishing, hunting, picnicking, leisure driving, and wildlife viewing) would still be allowed throughout the Study Area. However, the types of recreational experiences may be altered in some areas (i.e., opportunity to be isolated from other groups or the convenience of more recreation sites).

A number of recreation facilities and amenities would be added and/or upgraded, as described in Chapter 2 and detailed in the Master Plan. Overall recreation use would likely increase at

more locations around Buffalo Bill Reservoir. Some of these new opportunities include primitive camping improvements at Diamond Creek, walk-through archery range at Central Shores, and the dog park at Sheep Mountain. The quality of the recreation experience would likely increase given improved facilities and opportunities. However, other visitors might experience a decrease in recreation experience with changes from existing conditions.

An upward trend in visitation would be expected as a result of constructing additional recreation facilities. Some historic users of Buffalo Bill State Park would possibly seek recreation opportunities in other locations while other visitors would likely be attracted by the addition of new accommodation and facilities.

The demand for developed recreation sites is increasing as outdoor recreation continues to increase on public lands. Increased recreation has potential to result in crowding recreation areas, incompatibility of uses, increased competition related to campground reservations, and additional pressure on natural and cultural resources that are valued for physical and ecological health.

New infrastructure construction may create noise, dust, and use area/facility closures in the short term and only during construction periods. These activities would result in minor and temporary disturbance to recreational use.

3.2.3. Cumulative Impacts

Under the Proposed Action, recreation opportunities would be cumulatively impacted if Stagecoach Trail (a County Road) is improved. If improved, this road would increase accessibility to the south end of the reservoir. These improvements would provide for increased visitor safety and more developed recreation opportunities in this area but would decrease the opportunity for isolated recreation opportunities. If Stagecoach Trail is improved, there would be improved access for the subsequent improvement of recreation infrastructure along the south end of the reservoir.

The availability of new opportunities, combined with improvements resulting from implementation of the Proposed Action, could reduce crowding and provide a beneficial effect on recreational use and experience at the reservoir.

3.3. LAND USE AND MANAGEMENT

3.3.1. Affected Environment

Buffalo Bill Dam was constructed between 1905-1910 for irrigation and flood control and was a part of the Greater Shoshone Project (Buffalo Bill State Park Master Plan 1988). Primary use of the dam shifted to producing power in the 1920s and 1930s when hydroelectric powerplants were constructed to generate electricity from the river (Buffalo Bill State Park Master Plan

1988). In 1993, construction on the dam raised the height by 25 feet to total 350 feet (Buffalo Bill State Park Master Plan 1988).

In 1957, Buffalo Bill State Park was officially established (Buffalo Bill State Park Master Plan 1988). Buffalo Bill Reservoir and State Park are jointly owned and managed by Reclamation and the State Park, with the majority of land owned by Reclamation (Table 2; Appendix D, Figure 3 Reclamation manages lands east of the State Park including the Buffalo Bill Dam, Shoshone Canyon, and the Diamond Creek tributary area (Appendix D, Figure 3).

Reclamation controls and operates the dam system. While the reservoir occupies an average of 8,000 acres, surface water levels fluctuate from seasonal precipitation events and/or agricultural needs (Buffalo Bill State Park Master Plan 1988). The maximum water level is approximately 5,393.50 feet, while low water ranges between 5,259 to 5,158 feet related to inactive pool levels and dead storage pools, respectively (Buffalo Bill State Park Master Plan 1988). The State Park's boat ramps minimum water level is 5,350 feet, limiting boater access and recreation to when surface water meets or exceeds this level (Buffalo Bill State Park Master Plan 1988).

Since its construction, the reservoir's main use has remained as irrigation for agricultural production and flood control, as well as electricity generation downstream of the dam on Reclamation land. There are 646,565 acre-feet of water.

Table 2. Ownership and land management within the Study Area

Ownership	Management	Acres
Bureau of Reclamation	Bureau of Reclamation	1,019
Bureau of Reclamation	Joint Management	1,311
Bureau of Reclamation	State Parks	1,180
State Parks	State Parks	34
Total		3,544

Source: SPHST 2023, WYAO 2023

Areas surrounding Reclamation and State Park lands are owned and managed either by the BLM, the Wyoming State Board of Land Commissioners, or private entities (Appendix D, Figure 3). Wyoming State Board of Land Commissioners property is held in trust to produce income for state institutions. While the National Park Service previously owned land in the area (formerly known as Shoshone Caverns National Monument), this area is now BLM property. BLM land can be accessed through trailheads within the State Park. Adjacent BLM lands can be accessed from the State Park.

Land use in the State Park is primarily for recreation and conservation. The State Park has nine developed day-use areas with recreational infrastructure including campgrounds, boat ramps, picnic areas, and trailheads (see Section 3.2 for additional information on Recreation).

3.3.2. Environmental Consequences

3.3.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill State Park would not be revised, existing management practices would continue, and no changes to land use and management would occur.

3.3.2.2. Proposed Action

Under the Proposed Action, Reclamation would establish a RMP detailing new recreation developments, improvements to existing infrastructure for specific areas, and improved management practices and standards. The total area managed by SPHST would increase if recreational improvements were made at Diamond Creek. While Reclamation would still own the Diamond Creek area, the State Park would be responsible for managing any future recreation facilities developed in the area. This would be the only change to management under the Proposed Action and no changes to ownership would occur.

3.3.3. Cumulative Impacts

Under the Proposed Action, cumulative impacts from changes to management authority are expected to be negligible. With the Diamond Creek area managed by the State Park, more resources could be available to maintain infrastructure and natural resources.

3.4. CULTURAL RESOURCES, TRIBAL INTERESTS, AND PALEONTOLOGICAL RESOURCES

3.4.1. Affected Environment

Some proposed actions within the Master Plan may be defined undertakings under Section 106 (54 U.S.C. 306108) of the NHPA and thus an analysis of potential impacts of the alternatives in the EA. The State Park is on the traditional lands of Apsáalooke (Crow), Newe Sogobia (Eastern Shoshone), Tséstho'e (Cheyenne), Očhéthi Šakówiŋ (Lakota and Dakota), and the Cayuse, Umatilla, and Walla Walla (Native Land 2023). Other indigenous peoples that may hold cultural and spiritual interest in the area include, but are not limited to, the Shoshone-Bannock, Nez Perce, and the Blackfeet. Reclamation conducts consultations based on the tribes that are listed in the relevant treaties between the US government and tribal nations. This list may include additional tribal nations.

The reservoir is located on the east edge of Absaroka Range bordering the northwestern corner of the Big Horn Basin. In the far west end of the State Park, the North Fork of the Shoshone River flows through a floodplain that includes Holocene terraces. Rattlesnake Creek

and its associated floodplain enter the reservoir from the north. There is another floodplain along the Eastern boundary and off the South Fork of the river around Diamond Creek containing a high Pleistocene terrace. Both areas contain lower-angle slopes and therefore are more suitable for indigenous and historic site locations.

The indigenous history of the area extends back in time from sometime before 11,500 before present (BP). The chronology of the archaeological sites left by indigenous peoples is divided into several periods based on stone tool types, subsistence practices, and variations in the radiocarbon record (Kornfeld et al. 2010). The periods include the Paleoindian from pre-11,500 BP to 7500 BP, Archaic from 7500 BP to 1500 BP, the Late Prehistoric from 1500 BP until 500 to 400 BP, and the Protohistoric from 500 BP to 400 BP until the 1800s.

The Paleoindian period includes a number of technological complexes including the Clovis, Goshen/Plainview, and Folsom fluted points early in the Paleoindian and a variety of mid-to-late Paleoindian lanceolate and stemmed projectile point styles late in the Paleoindian sequence. An earlier pre-Clovis occupation has been documented elsewhere in the western US, but not in northwestern Wyoming (Meltzer 2009, Kornfeld et al. 2010). However, the recently excavated Cooper's Ferry site (Davis et al. 2019) on the Salmon River in Idaho suggests a pre-Clovis is possible in northwest Wyoming. Paleoindian people were quite nomadic and relied to a large degree on hunting large game animals. The variability of late Paleoindian projectile points suggests possible development of territories and some broadening of the subsistence base (Pitblado 2003). In northwest Wyoming this shift has been labeled the Foothill-Mountain tradition (Kornfeld et al. 2010) that reflects occupation of the mountainous areas as well as the continued occupation of northwestern plains environments.

The Archaic—which is divided into the Early, Middle, and Late Archaic periods—witnesses a shift in subsistence activities into a broad-based pattern that includes large game, small game, birds, fish (Lubinski 2000), and a wide variety of plants (Smith 1988). Archaic subsistence activities exploited all environmental zones from low elevation plains to the highest mountains. Projectile point styles in the Archaic are reduced in size from the Paleoindian Period and initially shift to side-notched and smaller stemmed styles. Later in the Archaic, point styles shift to corner-notched varieties (Kornfeld et al. 2010). Ground stone implements are common in Archaic sites as well as features interpreted as house pits (Kornfeld et al. 2010, Shields 1998).

The Late Prehistoric Period is similar to the Archaic in that the subsistence base was very wide and all exploitable environments were used (Kornfeld et al. 2010). The main difference from the Archaic subsistence is that lower ranked resources, such as small seeds, were used (Smith 1988). Two technological developments occurred in the Late Prehistoric. Small side and corner-notched projectile points came into use along with the bow and arrow and ceramic vessels began to be manufactured.

The Protohistoric period begins immediately prior to the entry of Euroamericans into the area. Subsistence patterns shifted substantially in this period when local indigenous peoples acquired

the horse, likely from the Comanche and/or the Ute around 1700 Anno Domini (AD) (Ewers 1980). The horse allowed people to travel further, sometimes far out onto the plains, to hunt buffalo. This is also a time period when indigenous peoples across North America began to migrate, mostly in response to European occupation of eastern North America. The Great Plains, including the northwestern Plains in Wyoming, became the home and hunting grounds of many peoples including the Cheyenne, Crow, Lakota and Dakota, Shoshone, Blackfeet, Nez Perce, Kiowa, Comanche, and Apache. The continued westward expansion of European peoples introduced a different material culture and disease into the area, along with increased warfare. At the end of the Protohistoric, the indigenous peoples were decimated by warfare, disease, malnutrition, and other problems brought about by the contact with an overwhelming foreign culture. In the late 1800s, indigenous peoples ceded lands to the US government and were placed on reservations.

The Historic Period, or Colonial Period from an indigenous point-of-view, began with the Lewis and Clark Expedition up the Missouri River in 1805-1806 (Moulton 2004). This expedition was followed by fur trappers, scientific expeditions, and later a rush of settlers following the routes established by indigenous peoples and later used by Lewis and Clark along the Missouri and along the Oregon Trail in southern Wyoming (Wyoming SHPO 2014). Many white settlers were pushing west along these routes heading to the gold fields of California or the agricultural fields of California and Oregon. Along the way, many stopped in the intermountain states to establish farms and ranches. Once the indigenous people were moved to reservations, cross-country railroads were established, and cities and towns began to grow quickly.

John Colter, a member of the Lewis and Clark expedition, explored the region of the North Fork of the Shoshone River and may have been the first white person to enter Wyoming. Colter was followed by fur traders and the US government expeditions. One of these expeditions explored the Yellowstone area in 1870 and in 1872 Yellowstone was designated the first US national park (National Park Service 2023). This established a basis for tourism in the area. However, the Big Horn Basin to the east was sparsely populated at this time. Over the next couple of decades Irish, German, and English settlers arrived in the basin to farm and ranch (Jordan and DeBoer 1996). It was not until the 1890s that towns began to be established in the Big Horn Basin.

William F. "Buffalo Bill" Cody became interested in the area that was to become Cody Wyoming in the mid-1890s (WyoHistory.org 2023). He recognized that Yellowstone was attracting tourists and the area contained available land for ranching and farming. He also recognized that to make a living from farming, water was needed in the arid basin. In 1895, Cody and partners formed the Shoshone Land and Irrigation Company to take water out of the Shoshone River for farming. They also laid out a town site near DeMaris Hot Springs, two miles west of present-day Cody. This town site did not work out and Cody, Wyoming, was laid out a couple of miles away in 1896 (WyoHistory.org 2023).

Cody recognized the value of tourism in the region and lobbied for a spur of the Chicago, Burlington, and Quincy Railroad to be built from Toluca, Montana, to Cody. To make sure the railroad was built all the way to Cody, the Shoshone Land and Irrigation Company sold the majority of the town lots to the railroad company. The railroad line to Cody opened on November 11, 1901. This established Cody as a major community in the Big Horn Basin and as a gateway to Yellowstone National Park.

From the time Buffalo Bill Cody arrived in the Big Horn Basin, he envisioned a dam on the Shoshone River to promote and support agricultural settlement and investment in the area. However, funds were not available for such an undertaking. In 1902, the Newlands Reclamation Act created the US Reclamation Service, which provided money for large water reclamation projects. Cody assigned his water rights to the Reclamation Service in 1904 and a dam site was selected in Shoshone Canyon approximately eight miles upstream from the town. Work began on building and improving the road between the town and the dam site that spring (WyomingHistory.org 2023). With the arrival of the railroad, and with federal money pouring in for construction of the dam, the town of Cody began to grow and to prosper.

In 1909, the Wyoming Legislature created Park County from Big Horn County and made Cody the county seat. Since this time Cody has prospered as a commercial center in the Big Horn Basin. Tourism, recreation, and agriculture are the economic mainstays of the region made possible through the creation of Yellowstone National Park in 1872, the arrival of the railroad in 1901, and the completion of the Buffalo Bill Dam on the Shoshone River in 1910.

Cultural resource investigations have been conducted at Buffalo Bill Reservoir and State Park since 1967, one year after the passage of the NHPA in 1966. In the intervening years, 28 cultural resources investigations, as listed on the Wyoming SHPO WyoTrack computerized cultural resources system, have been conducted within the confines of the State Park. These investigations cover the entire land area of the park with the possible exception of several small parcels on the east end of the park near the South Fork of the Shoshone River. Two projects (DBI_WY_1999_2409 and DBI_WY_1990_1214) inventoried 6,800 acres within the park. These surveys overlapped with each other in some areas, but essentially accounting for an inventory of most of the State Park. The other investigations covered much smaller acreages and were conducted for a variety of projects. Many of the inventories (17) were conducted before the year 2000. DBI_WY_1999_2409 was conducted in 1980 by the Office of the State Archaeologist at the University of Wyoming in 1980 (Francis et al. 1980). The other large inventory, DBI_WY_1990_1214, was conducted by Reclamation in 1989 (Austin 1989).

Twenty-eight cultural resource properties have been previously recorded within the land area of Buffalo Bill State Park. Two resources are on the National Register of Historic Places (NRHP). The Buffalo Bill Dam (48PA0076) was entered in the NRHP on August 12, 1971 (Reg. # 71000890). The dam was one of the nation's first two gravity-arch dams, built under challenging conditions for the Shoshone Project (Frost 1971). Colter's Hell (48PA0077) was entered into the NRHP on August 14, 1973 (Reg. # 73001937). This site is a dormant

geothermal area encountered by explorer and mountain man John Colter in 1807 and the first definitive place in Wyoming described by a Euroamerican (Frost 1969). This site is within the pool area of the reservoir.

The other previously recorded sites include four indigenous lithic scatters, four indigenous open camps, five water control features, five historic roads and bridges, three homesteads or residences, one tourist resort, and four indigenous sites lacking descriptions in WyoTrack.

In addition to the two sites listed on the NRHP, eight sites are listed as officially eligible or field eligible for nomination to the NRHP, thirteen sites are listed as officially not eligible or field not eligible for nomination to the NRHP, and five sites are either unevaluated or the evaluation is unknown.

While the vast majority of land acres at the State Park have been covered by previous cultural resources inventories, most of these inventories are over 20 years in age and pre-date the use of Global Positioning System (GPS) and Geographic Information System (GIS) technology. To comply with Section 106 of the NRHP, any proposed development, improvements, or major maintenance activities proposed in the alternative analysis should be reviewed to determine if the previous cultural resource investigations and site documentation are adequate.

Paleontological resources in the State Park and Study Area are managed under the Paleontological Resources Preservation Act (PRPA) Title VI, Subtitle D, of P.L. 111-011, state laws, and existing management plans. The significance and abundance of paleontological resources within the state park can be estimated using the Potential Fossil Yield Classification (PFYC) system (BLM no date). This system addresses the potential for fossil resources to be located in geologic formations based on known or estimated fossil resources in the geologic units, their abundance, and their significance. This classification should be used early in the planning process to provide a management baseline but is not meant to replace more detailed desktop paleontological studies or field inventories. Each classification also provides an estimate of management needs and actions for every class.

The PFYC has 5 classes rated from very low (Class 1) to very high (Class 5), as well as categories for water, ice, and areas with unknown potential. The margins Buffalo Bill State Park around the reservoir contain areas rated as Class 2, Class 3, Class 5, and an area of unknown potential (Appendix D, Figure 4).

The Class 2 (low) areas correlate with the Quaternary (2.5 million years ago [mya]-11 thousand years ago [kya]) deposits along the North and South Forks of the Shoshone River, Diamond Creek, and Rattlesnake Creek. Much of the bed of the pool area likely contains Quaternary-age Pleistocene and Holocene alluvial sediments deposited by the rivers and creeks. Class 2 areas are characterized (BLM nd) as areas where 1) Field surveys have verified that significant paleontological resources are not present or are very rare, 2) units are generally younger than 10,000 years BP, 3) consist of recent aeolian deposits, and 4) sediments exhibit significant physical and chemical changes (i.e., diagenetic alteration) that make fossil preservation unlikely.

Quaternary-age fossils were recently discovered in the pool area when the reservoir was drained in 2018. The "Marquette" mammoth was a Columbian mammoth associated with at least four other faunal species investigated by the University of Wyoming. The paleontological remains were found to be greater than 14,000-years-old and not associated with any cultural remains (PowellTribune.com 2019). This find demonstrates that the sediments where the mammoth was found are over 10,000 years old and fossil preservation did occur. It is not known whether or not this find is an isolated occurrence, but it does demonstrate that late Pleistocene mammal fossils can be preserved by the sediments in the area.

Class 3 (moderate) deposits at the State Park correlate with Cretaceous (145-66 mya) formations in the southern and eastern portions of the state park and areas just east of Rattlesnake Creek. These deposits commonly contain invertebrate and plant fossils and are characterized by 1) fossils of marine origin that occur sporadically, 2) low abundance, 3) units may contain significant paleontological resources, but these occurrences are widely scattered, and 4) the potential for an authorized land use to impact a significant paleontological resource is known to be low-to-moderate. No Class 3 fossils are reported for the area.

Class 5 (very high) deposits are located in a small area on the east side of the reservoir between the Shoshone River outlet and Diamond Creek. This area is a Madison Group formation that is Mississippian in age (359-326 mya). Madison Formation deposits in the Rocky Mountains are known to contain a variety of significant fossils including a diversity of dinosaur species and dinosaur tracks. Class 5 characteristics (BLM nd) include 1) highly fossiliferous geologic units that consistently and predictably produce significant paleontological resources, 2) paleontological resources are highly susceptible to adverse impacts from surface disturbing activities, and 3) are frequently the focus of illegal collecting activities. It is not known if this area has been subject to previous investigation or if significant fossils have been located.

3.4.2. Environmental Consequences

3.4.2.1. No Action Alternative

Under the No Action Alternative, cultural resources, tribal concerns, and paleontological resources would be managed under existing plans and procedures. Cultural and paleontological resources would be subject to degradation through erosion and visitor use. Tribal concerns would be managed through current planning procedures, which may not adequately reflect and consider tribal viewpoints.

3.4.2.2. Proposed Action

Under the Proposed Action, additional cultural and paleontological resources may be impacted by the expansion of the visitor areas and facilities. Although no specific cultural and paleontological sites appear to be in locations where visitor amenities would be improved and

expanded, many of the cultural resource inventories are quite old and were conducted prior to the use of GPS and GIS technology. Formal paleontological surveys have not been completed for most or all of the State Park.

In order to mitigate any potential damage to cultural or paleontological sites the procedures of the NHPA, especially Section 106, and the PRPA will be followed in all areas where improvements or developments may occur. For cultural resources this includes, at a minimum, revisiting and redocumenting any previously recorded site no matter the site significance. Most of these sites were recorded 30-50 years ago and the conditions, areal extent, and significance of the sites need to be revised and updated. To avoid impacts, paleontological investigations should be conducted in any Class 2 or Class 3 areas. The small Class 5 area should be subject to a professional paleontological investigation to determine if significant fossil deposits are present and to obtain information relevant to protect the fossil deposit.

Reclamation will consult with the appropriate Tribes as outlined in the Bureau of Reclamation's Working with Indian Tribal Government Consultation, Cultural awareness, and Protocol Guidelines (July 2020).

3.4.3. Cumulative Impacts

The continued use of the park and the improvement and expansion of visitor amenities—minus an active program to investigate, monitor, mitigate, and manage cultural and paleontological resources—would result in a minuscule loss of paleontological and cultural resources through direct impacts.

3.5. VISUAL RESOURCES

3.5.1. Affected Environment

The visual resources located within and around the State Park are immense. The centerpiece reservoir adds a unique scenic quality to the otherwise semi-arid landscape. The surrounding mountains and valleys add to the scenic qualities as well and contribute to the State Park's remarkable natural setting.

The State Park's visual resources are limited to the reservoir and shoreline, valley, and mountains. Sightlines do travel a great extent in this environment as there is little-to-no tall vegetation, like trees, within the State Park's boundaries. Shoshone Canyon limits sightlines to a great degree, focusing a viewer's attention on and framing the enormous made-man feat that is the Buffalo Bill Dam.

There are 89 total RV sites (40 with electric), 11 tent sites, 8 camp shacks, and 1 group camp area across three main campground areas. Stagecoach, Lake Shore, and North Fork and their different locations around the park give them distinct visual resources. These differences

become apparent through the visual resource inventory conducted. To glean further insight into the visual resources, a geodesic viewshed tool was ran on each individual campsite point. This process increased the data output and allowed the analysis to focus on particular areas and features seen again and again. See Appendix D, Figure 5 and Figure 6 for the viewshed analysis.

The north shore of the Buffalo Bill Reservoir is visible from all campsites. This side of the park generally appears more developed as it contains a significant portion of the State Park's infrastructure and the route of US Highway 14-16-20. The gateway to Shoshone Canyon marked by the slopes of Cedar and Rattlesnake Mountains is also visible and prominent from every campsite.

The North Fork Campground's sites have more limited visual resources since they are located in the narrower end of the valley where the North Fork of the Shoshone River flows into the Buffalo Bill Reservoir. Generally, only about half the north side of the reservoir is visible from these sights. The nearby foothills of Logan and Sheep mountains and the North Fork of the Shoshone River are visible from these sites.

The Lake Shore Campground's sites contain wider viewsheds because of the campground's location along the reservoir's shore in a wider part of the valley. From these sites, both the north side and about half of the south side of the reservoir are visible, allowing it to appear more vast. More remote and undeveloped parts of the park along the southern shoreline are visible as well adding to the sites' scenic qualities. This includes higher parts of Sheep Mountain not visible from the North Fork Campground. Flatter agricultural lands to the Southeast of the State Park are also included within the viewshed of the Lake Shore's sites.

The overall visual quality and the public's concern with changes to scenic quality are high. Visual absorption capacity is low due to the open nature of the reservoir and low vegetation.

3.5.2. Environmental Consequences

3.5.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill Reservoir would not be revised. This would result in a continuation of current management practices. Scenic conditions would remain the same.

3.5.2.2. Proposed Action

Visual quality would be modified through implementation of the Proposed Action. However, the degree of change would be reduced because most new facilities would be located in existing use areas where visitor use facilities of a similar scale and density already exists. Visual changes at the State Park would be most notable from the north shore where Highway 14-16-20 and the campgrounds reside. Most of the improvements include expansions of the existing

infrastructure, parking areas, campgrounds, picnic areas, and recreation opportunities. Table 3 lists the proposed improvements per area and the degree of impact to the visual landscape. Detailed maps of each improvement area can be found in Appendix C Master Plan.

Table 3. Proposed Improvements and Visual Landscape Impacts

Improvement Area	Proposed Trails (Miles)	Extent of Potential Improvements (Acres)	General Type of Improvement	Degree of Visual Impact
Diamond Creek	7.9	755.0	New non-motorized trails, water access areas, possible primitive camping	Low – many wildlife trails currently exist in this area that are used by locals.
Bartlett Lane	NA	19.0	Updates to and expansion of existing infrastructure	None – the existing informal parking area would be improved as an official parking area. Potential grazing pasture for Forest Service pack animals.
Shirley's Pond	NA	7.7	Updates to and expansion of existing infrastructure	Low – Existing informal parking area would be improved as an official parking area. Possible installation of a restroom.
South Fork	NA	20.0	New parking area, fishing access, picnic area, and restroom	Low – existing staff housing exists to the south of the proposed site.
Central Shores	NA	305.0	New parking area, walk-through archery range, trails, and restroom	Low - Currently sees heavy use to the informal access points.
Stagecoach	NA	45.0	Updates to and expansion of existing infrastructure	Low – roads, camp sites, and camp shacks already exist. This area is being proposed to be improved to a campground comparable to other campgrounds within the park.
Sheep Mountain	NA	37.2	Updates to and expansion of existing infrastructure	Low – Existing staff housing and recreation facilities exist in this area. This area is being proposed to develop an additional campground comparable to other campgrounds within the park.
North Fork	NA	7.7	Updates to and expansion of existing infrastructure	Low– campground already exists. Proposed landscape, dog park, and dump ground improvements.

Improvement Area	Proposed Trails (Miles)	Extent of Potential Improvements (Acres)	General Type of Improvement	Degree of Visual Impact
North Shore West	NA	23.4	New parking area, restroom, picnic and fishing access	Low – area currently sees heavy informal use.
Shreve Lodge	NA	25.2	Updates to and expansion of existing infrastructure	None – proposed updates to existing infrastructure. Additional playground and potential staff housing may be implemented.
Eagle Point	NA	0.0	Only improvements associated with the North Fork Trail	None.
Headquarters	NA	54	Updates to and expansion of existing infrastructure	Low – The headquarters building and State Park facilities currently exist. Expansion of the headquarters building and campground would increase the density of infrastructure in this area.
Lake Shore East	NA	0.0	Only improvements associated with the North Fork Trail	None.
Marquette	NA	0.0	Only improvements associated with the North Fork Trail	None.
North Fork Trail	4.0	0.0	New trail	None – asphalt roads exist adjacent to proposed trail system.
Totals:	19.1	1,299.2		

Acronyms: NA – Not applicable

3.5.3. Cumulative Impacts

Implementation of the Proposed Action would result in minor, long-term cumulative effects on the visual setting within Buffalo Bill State Park. Residential and agricultural development adjacent to the State Park would likely continue and create additional visual impacts to visitors.

3.6. SOILS AND GEOLOGY

3.6.1. Affected Environment

Topography within the State Park and surrounding areas varies between rolling to steep mountains and relatively flat terrain (Buffalo Bill State Park Master Plan 1988). Within the Absaroka Range, four mountains predominately influence the topography and terrain

surrounding the reservoir: Rattlesnake Mountain to the northeast, Logan Mountain to the northwest, Sheep Mountain to the southwest, and Cedar Mountain to the east. Elevations within the Study Area range from approximately 5,300 feet-5,600 feet above sea level (asl); however, peaks surrounding the study can be in excess of 8,000 feet asl. Depending on seasonal water levels, the reservoir encompasses approximately 8,000 acres.

Dominant bedrock geology within the Study Area is alluvium and colluvium (Table 4; Appendix D, Figure 7). Alluvium and colluvium are sedimentary rock deposits that are deposited by different methods, where alluvium is deposited from events associated with water and colluvium is deposited from events associated with gravity (i.e., landslides) (Bisson et al. 2017). Colluvial fans can be observed along the northern boundary of the State Park near Rattlesnake and Logan mountains, whereas alluvial deposits can be observed along the southern boundary near Sheep Mountain in association with the South Fork of the Shoshone River and Diamond Creek (Buffalo Bill State Park Master Plan 1988). The Rattlesnake Mountain area west of Rattlesnake Creek has a history of unstable slopes resulting in landslides (Buffalo Bill State Park Master Plan 1988).

Table 4. Bedrock geology within the Study area

Bedrock Type	Area (acres)	Percentage of Study area
Alluvium and colluvium	2,047	31%
Cloverly and Morrison Formations or Cloverly Formation (Hartville uplift), or Inyan Kara Group (Black Hills), and Morrison Formation	29	<1%
Cody Shale	1,653	25%
Frontier Formation	118	2%
Frontier Formation, and Mowry and Thermopolis Shales	621	9%
Gallatin Limestone, Gros Ventre Formation and equivalents, and Flathead Sandstone, or Cambrian rocks	77	1%
Gravel, pediment, and fan deposits	1,213	18%
Landslide deposits	708	11%
Madison Group, Madison Limestone or Group, or Madison Limestone	8	<1%
Mesozoic and Paleozoic rocks	85	1%
Oldest gneiss complex	27	<1%
Sundance and Gypsum Spring Formations	9	<1%
Totals:	**6,596**	**100%**

Source: WSGS 2013

Yamac-Vanda-Evanston-Alcova are dominant soils within the Study Area, which covers the northern, western, and southern sides of the reservoir (Table 5; Appendix D, Figure 8).The eastern portion of the Study Area is dominated by Yumac-Evanston-Attewan soils (Table 5; Appendix D, Figure 8). These soils, especially around Diamond Creek, have a high

concentration of bentonite deposits, which are considered highly unstable and may be unsuitable for permanent improvements (pending consultation with a professional soil engineer) (Buffalo Bill State Park Master Plan 1988).

Table 5. Soil types within the Study Area

Soil Unit	Area (acres)	% of Study Area
Yamac-Vanda-Evanston-Alcova (s8975)	3,997	63%
Starman-Prudy-Luhon-Hanson-Crago (s8977)	13	<1%
Yamac-Evanston-Attewan (s8974)	2,303	36%
Totals:	**6,313**	**100%**

Source: National Resources Conservation Service (NRSC) Wyoming STATSGO Soils 2019

3.6.2. Environmental Consequences

Data identifying soils and geology was downloaded from the NRCS Wyoming STATSGO Soils portal and Wyoming State Geological Survey, respectively. Each dataset was clipped to the Study Area to produce acreages in Table 4 and Table 5. While the results of each analysis included an output for the water surface of the reservoir, this attribute was not included as an assumption that water does not qualify as either soils or bedrock geology.

3.6.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill State Park would not be revised, existing management practices would continue, and no changes to soils and geology would occur.

3.6.2.2. Proposed Action

Under the Proposed Action, Reclamation would establish a RMP detailing new recreation developments, improvements to existing infrastructure for specific areas, and improved management practices and standards. The total area managed by SPHST would increase if recreational improvements are made at Diamond Creek.

With the implementation of the Proposed Action, a number of new facilities and amenities would be added, and others upgraded. While impacts to bedrock geology is not anticipated under the Proposed Action, soils would be disturbed during construction and establishment phases. Without proper erosion control specifications and Best Management Practices (BMPs) during construction, the Proposed Action has the potential to create fugitive dust, increase soil erosion by wind and water, increase sediment transportation, and destabilize soils overall. Slopes of areas where new and improved recreation facilities and amenities would occur should

be carefully considered, as susceptibility to these adverse impacts increases with increasing slopes.

Fugitive dust has the potential to impact user experience on windy days and vegetative health, while increased sediment transport has the potential to impact water quality.

3.6.3. Cumulative Impacts

Cumulative impacts to soils from the Proposed Action are anticipated to be short-term and can be mitigated with the proper use of erosion-control specifications and BMPs.

3.7. WATER RESOURCES

3.7.1. Affected Environment

3.7.1.1. Watersheds

As shown on the map (Appendix D, Figure 9), Buffalo Bill Reservoir falls within the North Fork Shoshone Watershed (HUC 10080012), the South Fork Shoshone Watershed (HUC 10080013), and the Shoshone Watershed (HUC 10080014). The primary drainages in the North Fork Shoshone Watershed are Rattlesnake Creek, Trout Creek, and the North Fork Shoshone River. The North Fork Shoshone River headwaters are in Yellowstone National Park, just east of Sylvan Pass, from which the stream flows east through the Absaroka Range where it converges with the South Fork Shoshone River at the Buffalo Bill Reservoir. The primary drainages in the South Fork Shoshone River are Carter Creek, Sheep Creek, Rock Creek, Castle Creek, Boulder Creek, Needle Creek, Marston Creek, Younts Creek, Cabin Creek, Deer Creek, Ishawooa Creek, and Bobcat Creek. The South Fork Shoshone River headwaters are in the Washakie Wilderness, from which the stream flows northeast to the Buffalo Bill Reservoir where it converges with the North Fork Shoshone River to create the Shoshone River. The primary drainages in the Shoshone Watershed are the North Fork Shoshone River and South Fork Shoshone River, Dry Gulch, Bitter Creek, Whistle Creek, Foster Gulch, Polecat Creek, Big Wash, and the Shoshone River. The Shoshone River begins at the Buffalo Bill Dam and flows northeast until it merges with the Bighorn River just east of Lovell, Wyoming.

3.7.1.2. Water Quality

Section 303(d) and Section 305(b) are integral components of the CWA. Section 305(b) requires a report be prepared on a biennial basis by each respective state that describes the water quality of all navigable waters of the state. Using information from the 305(b) report and other sources of information, a 303(d) list is prepared for those streams that are impaired or threatened from meeting assigned beneficial uses. The CWA describes those waterbodies on the 303(d) list as waterbodies in need of a Total Maximum Daily Load (TMDL) calculation for

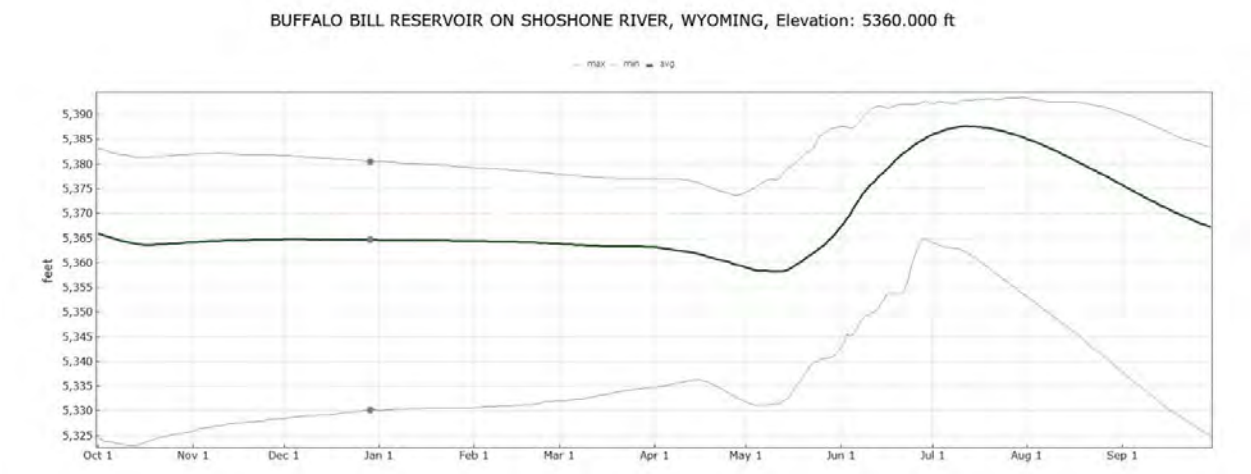
pollutants of concern. The TMDL is an assessment of the loading of a particular pollutant that a stream can sustain and still provide for assigned beneficial uses. The Wyoming Department of Environmental Quality, Division of Water Quality (WDEQ) is responsible for ensuring state water quality standards and beneficial uses are met for surface waters associated with Buffalo Bill Reservoir.

A topical report found that fecal coliform concentrations were elevated above WDEQ's recreational use criterion in the Shoshone River and eight of its tributaries below the Reservoir (McCutcheon et al 2013). Therefore, WDEQ added the Shoshone River from the confluence with Bighorn Lake to a point 9.7 miles upstream to the 303(d) list in 2014 (WDEQ 2023). The North Fork Shoshone River and South Fork Shoshone River are not on the 303(d) list.

Harmful cyanobacterial blooms are microscopic organisms that pose health risks to humans and animals. While blooms can occur any time during the year, they most often occur in the fall when the water is warm, stagnant, and nutrient rich (Centers for Disease Control and Prevention 2022). The Wyoming Department of Health (WDOH) and the WDEQ document HCBs in the state and issue advisories when toxins exceed recreational thresholds. In the fall (August and September) from 2020 through 2023, one public health advisory was documented each year as a result of algal blooms in areas of the Reservoir (WDOH 2024). The State Park posts signage warning recreationists of HCBs.

3.7.1.3. Reservoir

Chapter 1 describes the history and management of the Buffalo Bill Reservoir. The Reservoir surface covers just over 8,000 acres managed by Reclamation. Shoshone River floodwaters are stored for release for agriculture and power generation, and the Reservoir is accessible for fishing, camping, windsurfing, and other recreational activities. As noted in Chapter 1, water levels vary predictively based on historic averages. Reclamation may not fluctuate levels below the top of the dead pool or above the top of the conservation/joint use pool elevation. The high pool elevation is 5,393.5 feet, with 30-year averages of pool elevation shown in the graph below.



30-year average of Buffalo Bill Reservoir pool elevation

3.7.2. Environmental Consequences

The information provided above was used to evaluate the impacts of the alternatives on water resources. Additionally, GIS analysis determined the acreage of land use within each Proposed Action improvement area for the water resource assessment.

3.7.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill State Park would not be revised and existing management and operations practices would continue. Pressures from increased visitor use of existing recreation facilities, as well as use of areas not designated or managed for recreation near the Reservoir would continue to impact water resources.

3.7.2.2. Proposed Action

No changes to water operations or management would occur as part of the Proposed Action, nor would recreation facilities be developed within the Buffalo Bill Reservoir itself. Ground disturbance would include impacts of up to 1,299.2 acres of land and 11.9 miles of new trail resulting from the development and improvement of facilities at the 15 proposed recreation management areas.

With the implementation of standard construction related BMPs, impacts to water resources from the Proposed Action are expected to be minor and short-term. Included in these ground disturbing activities would be the creation of 11.9 miles of new trails, which would eliminate small swaths of pre-existing vegetation and increase soil compaction, thus increasing the potential for surface runoff during precipitation events. Additional impacts from trails near water bodies include increased human-related pollution such as biological waste and litter.

Increased pollutants could potentially impact nutrient loads in the streams or Reservoir, creating additional biological oxygen demand, consequently causing dissolved oxygen and HCB issues.

Long-term impacts from recreation improvements would alleviate issues with limited facilities, thereby improving issues related to litter, facility overuse, and public use of non-designated recreation sites (i.e., off-trail use, camping). Development of new restroom facilities would reduce potential water body pollution from human waste including bacteria, pathogens, viruses, and nutrients. The expansions or developments of new facilities would include new paved roads and parking areas, which would result in potential increased amounts of runoff and in erosion and sediment inputs. During design and implementation planning, site specific analysis would be needed to determine the appropriate placement of water facilities to reduce impacts to groundwater and runoff.

3.7.3. Cumulative Impacts

Past, ongoing, and future activities in and near the Study Area, including nearby residential developments, agriculture, and recreation, contribute incrementally to impacts on water resources. Development related to the Proposed Action would result in minor short-term and long-term impacts on a cumulative scale.

Activities associated with recreational development couldcontribute pollutants such as sediment and trash to the streams and Reservoir. However, the development and expansion of adequate facilities such as restrooms, shower houses, and trash receptacles, would reduce the potential for these associated pollutants to enter water resources.

3.8. WILDLIFE RESOURCES

3.8.1. Affected Environment

This section describes wildlife resources and their habitats, including eagles, Migratory Bird Treaty Act (MBTA) species, big game, trophy game, furbearers, predators, small game, game birds, migratory game birds, and nongame species. A review of the Study Area with the Wyoming Natural Diversity Database (WYNDD) revealed the wildlife species discussed below. The USFWS Information for Planning and Consultation (IPaC) tool was used to analyze threatened and endangered species in Section 3.10. Wyoming SPHST is responsible for managing wildlife habitats within their lease boundary, whereas species management is overseen primarily by WGFD.

Open water and shrub/scrub dominate the Study Area (NLCD 2019; Appendix D, Figure 10). These habitat types are home to many shorebirds and species that nest and live in wetland environments. Grasslands, sagebrush, and inter-mountain shrub vegetative types dominate the surrounding area. The surrounding grasslands, pasture and hay fields, and forests are home to

many raptor species, including the Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus hudsonius*), and prairie falcon (*Falco mexicanus*). These vegetative types support many other wildlife species, including small game, upland game birds, and numerous rodent species upon which raptors prey. Shrub/scrub brush provides crucial winter range for big game and habitat necessary for sagebrush obligate species such as sage grouse (*Centrocercus urophasianus*), Brewer's sparrow (*Spizella breweri*), and sage thrasher (*Oreoscoptes montanus*).

3.8.1.1. Big Game

Big game species, which are commonly found in the Study Area, include pronghorn (*Antilocapra americana*), white-tailed deer (*Odocoildus virginianus*), mule deer (*Odocoileus hemionus*), moose (*Alces alces*), elk (*Cervus canadensis*), American black bear (*Ursus americanus*), Rocky Mountain goat (*Oreamnos americanus*), and bighorn sheep (*Ovis canadensis*). Grizzly bear (*Ursus arctos horribilis*) is discussed federally listed threatened species in Section 3.10.1.2. Big game habitat overlaps much of the Study Area and the vicinity, which include lands managed by Reclamation and SPHST. As such, SPHST and Reclamation regularly consult with the WGFD, which manages big game populations. The WGFD big game herd management objectives are based on herd units. Established herd units boundaries encompass the seasonal ranges and habitats or special life function areas (e.g., calving and lambing) used by a more or less discreet population or herd.

Pronghorn

Pronghorn are a unique animal of the western plains and are the only living species in their taxonomic family (Antilocapra americana). Wyoming is the center of the pronghorn's range. Pronghorn inhabit a variety of open rangeland habitat types throughout the Study Area and forage primarily on shrubs, especially on sagebrush species (Artemesia spp.; Appendix D, Figure 11). Recorded observation occurred in the Study Area in 2022; however, most of the observations are concentrated east of the Study Area where the land cover is primarily shrub/scrub, pasture/hay and cultivated crops (NLCD 2019, WYNDD 2023a).

Bighorn Sheep

Bighorn sheep are a moderate priority species for WGFD and are commonly found near the Study Area (2017) (Appendix D, Figure 10). Bighorn sheep are known to rut outside of Cody, Wyoming and were last observed near the Buffalo Bill Reservoir in 2020 (WYNDD 2023a). In summer, bighorn sheep inhabit the steeper rocky escape terrain surrounding the Reservoir, and in winter, lower elevation, grassy benches and south facing slopes (WGFD 2017).

White-tailed Deer

White-tailed deer are distributed throughout the state of Wyoming, but are mostly concentrated in the northeast and southeast portion of the state (WGFD 2023a). White-tailed deer are common within the Study Area (Appendix D, Figure 12), with the last documented sighting in 2020 (WYNDD 2023). White-tailed deer may not occupy distinct seasonal ranges, but do modify their diets from woody, evergreen species in winter to herbaceous, deciduous

species in spring/summer (Miller et al. 2003). Furthermore, white-tailed deer are known to use agricultural fields located near the Study Area for forage.

Mule Deer

Mule deer are found year-round throughout the Study Area (WYNDD 2023a) (Appendix D, Figure 12). Mule deer use woody riparian-wetland, shrubland, and juniper woodland habitat types during spring, summer, and fall. During winter, mule deer can be found in juniper and limber pine woodlands, big sagebrush/rabbitbrush, sagebrush steppe, and riparian-wetland habitat types (WGFD 2023). Mule deer populations are generally below herd unit population objectives established by WGFD, but some herds have experienced population increases in recent years due to conservative hunting seasons and licenses (BLM 2011). Many factors can contribute to lower populations, including drought, historic heavy forage utilization by livestock, and habitat fragmentation. An increase in juniper establishment in many key mule deer habitats increases cover but decreases desirable browse in these areas (WGFD 2023). Declines in overall habitat quality have affected the reproduction and survival rates, resulting in less recruitment of young.

Elk

Elk are regularly present within the Study Area (WYNDD 2023a) (Appendix D, Figure 13). In summer, elk use aspen and conifer woodlands for security and thermal cover, ranging out into upland meadows, sagebrush/mixed grass, and mountain shrub habitat types to forage. In winter, elk move to lower elevations, foraging especially in sagebrush/mixed grass and mountain shrub habitat types, especially in windswept areas where snow depth is less (WGFD 2017). Elk generally have stable to increasing populations. Furthermore, they have been known to use agricultural fields for forage in winter. Elk forage on grasses, which have had fewer impacts from drought conditions than woody plants.

Black Bear

American black bears are smaller and the more commonly encountered bears species found in Wyoming. Western Wyoming is in the central portion of the black bear's North and Central American primary range (Scheick and McCown 2014). Black bears inhabit a variety of habitats, including grassland and shrub habitat types throughout the Study Area (Appendix D, Figure 14). They forage primarily on fruits, nuts, insects, fish, and small mammals and ungulates, but will feed on carrion, crops, and other unnatural food resources from anthropogenic areas. Recorded observations are common and have occurred in the Study Area in 2023; however, most of the observations are concentrated around water sources where there is likely high concentration of unnatural food sources (ei.eg., litter, garbage facilities, livestock feed storage, etc.; WYNDD 2023b).

Moose

Moose are a moderate priority species for WFGD (WGFD 2017) and are commonly found in the Study Area (Appendix D, Figure 15). Moose were last observed near the Buffalo Bill

Reservoir in 2020 (WYNDD 2023a). Moose inhabit mixed conifer and hardwood forests, brush, beaver flows, and other wetland areas. Although some moose populations migrate seasonally, others simply modify dietary preferences from deciduous species (e.g., willow [*Salix spp.])* in spring/summer to evergreen species in winter (WGFD 2017).

3.8.1.2. Furbearing Animals

Furbearing animal species can be found in a variety of habitats in the Buffalo Bill Reservoir area (WYNDD 2023). Trapping seasons have been established for most furbearers, with badgers (*Meles meles*) being taken year-round, other species (e.g., bobcat [*Lynx rufus*] and muskrat [*Ondatra zibethicus*]) typically trapped in winter, and varied trapping dates for beaver (*Castor canadensis)* (Wyoming Statute [W.S.] Article 23 1-101 – 1-308). Muskrats are usually associated with streams, lakes, and riparian-wetland habitats. Beavers build dams on streams and have been recorded in the Buffalo Bill Reservoir and Shoshone River (WYNDD 2023b). Beaver depend on aspen, willow, and cottonwood trees to build and maintain their dams and lodges (WGFD 2020).

3.8.1.3. Predatory Animals

According to state statute, predatory animals include coyote (*Canis latrans*), jackrabbit (*Lepus californicus*), porcupine (*Erethizon dorsatum*), raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), skunk (*Spilogale spp.*), or stray cat (*Felis catus*) (W.S. Article 3 11-6-302 (ix)(A)). These predator species are found throughout the Study Area in a variety of habitats. Populations tend to fluctuate with the availability of prey species and no population estimates exist. Although classified as predators, jackrabbits typically consume grasses, sedges, forbs, and shrubs, and porcupines consume the inner bark of trees, evergreen needles and buds, leaves, small twigs, and herbs. Coyote populations are typically consistent with prey cycles. When rabbit and ground squirrel populations are high, coyote populations also tend to be high. Red fox populations appear to be expanding into new areas. Red fox typically feed on mice, insects, and plant matter in the summer and rabbits in the winter. Raccoons are omnivorous, feeding on a variety of plants and animals, particularly aquatic animals and insects. Skunks feed primarily on grasshoppers, beetles, crickets, butterfly larvae, deer mice, voles, bird eggs, berries, and fruit. It is expected that populations of skunk, raccoon, and porcupine are static to increasing. Predators are not protected by seasons or bag limits; consequently, any number of animals can be hunted or trapped at any time within specific areas of the State Park.

3.8.1.4. Small Game

The likely small game species in the Study Area are the cottontail rabbit (*Sylvilagus* spp.) and red squirrel (*Tamiasciurus hudsonicus*). Cottontail rabbits are found throughout the Study Area and are hunted during fall and winter (W.S. Article 23 1-101 – 1-308). Red squirrels are typically associated with coniferous areas and may be found north of Buffalo Bill Reservoir. Rabbit and

squirrel populations are cyclic, so trends are difficult to determine. Due to the wide distribution of small game, there are no management challenges in the Study Area.

3.8.1.5. Game Birds

Upland game birds include greater sage-grouse, pheasant, and mourning dove. The Governor of Wyoming issued EO 2015-4 for increased protection of greater sage-grouse. The EO delineates Core Areas in the state and places limits on surface disturbance and habitat fragmentation in Core Areas. Buffalo Bill Reservoir is inside the current distribution of greater sage-grouse, but not included in any Core Areas (WGFD 2023). Pheasants are limited primarily to areas near agricultural fields south of the Reservoir and east of Cody. Wyoming Statute Article 23, Sections 1-101 – 1-308 regulate hunting of game birds in the state. There are no specific management challenges for game birds in the Study Area except a hunter must be 400 yards from any public use facility.

3.8.1.6. Raptors, Owls, and Vultures

Raptor species likely to occur in the Study Area include bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), red-tailed hawk (*Buteo jamaicensis*), northern harrier, Swainson's hawk, rough-legged hawk (*Buteo lagopus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), prairie falcon, American kestrel (*Falco sparverius*), peregrine falcon (*Falco peregrinus*), osprey (*Pandion haliaetus*), and merlin (*Falco columbarius*) (WYNDD 2023). Owl species likely to occur in the Study Area include great horned owl (*Bubo virginianus*), northern pygmy-owl (*Glaucidium gnoma*), burrowing owl (*Athene cunicularia*), long-eared owl (*Asio otus*), and boreal owl (*Aegolius funereus*) (WYNDD 2023b). Turkey vulture (*Cathartes aura*) are also likely to occur in the Study Area (WYNDD 2023b). These species are found in a variety of habitats throughout the Study Area.

Raptors are sensitive to environmental disturbance and occupy an ecological position at the top of the food chain; thus, they act as biological indicators of environmental quality. The nesting season is considered the most critical period in the raptor life-cycle because it determines population productivity, short-term diversity, and long-term trends. Most species have specific nest site requirements that are key factors in nest site selection and in reproductive success. These include nesting strata, available prey base, and nest site disturbance. Raptors build nests in a myriad of habitats, including steep cliffs and rock ledges, trees, and on the ground. Raptors also use human-made structures such as barns, utility poles, and tanks as nesting habitat. Golden eagles and prairie falcons usually build their nests on steep cliffs and rock ledges, but other species, such as red-tailed hawks and great-horned owls, often build on these sites. Turkey vultures will nest on cliffs but may also use caves or hollow stumps. Several species of raptors typically nest in trees. Swainson's hawks, red-tailed hawks, American kestrels, and great horned owls prefer the more open plains and usually nest in trees along drainages. Several

species of raptors are ground nesters. Northern harriers generally nest on the ground in riparian-wetland or marsh habitats.

Management challenges for raptors include habitat degradation and loss. Habitat management has been limited to maintaining upland range sites in satisfactory ecological condition. Range management practices that maintain ranges in good condition will provide an adequate prey base for raptor species. Raptors prey on a variety of species including small mammals, fish, and other birds; the turkey vulture feeds primarily on carrion.

3.8.1.7. Neotropical Migrants

Neotropical migrants (birds that spend the summer in their breeding range in North America, but migrate to Central or South America for their nonbreeding range in winter) include shorebirds, water birds, and songbirds found throughout the Buffalo Bill Reservoir area. These species are protected under the MBTA. Every vegetative community type supports various bird species, with riparian-wetland communities having the most diverse array of species. Neotropical migrant species likely to occur within the Survey Area include black tern (*Chlidonias niger*), bobolink (*Dolichonyx oryzivorus*), California Gull (*Larus californicus*), Cassin's Finch (*Haemorhous cassinii*), Clark's grebe (*Aechmorphorus clarkii*), western grebe (*Aechmophorus occidentalis*), evening grosbeak (*Coccothraustes vespertinus*), Franklin's gull (*Leucophaeus pipixcan*), lesser yellowlegs (*Tringa flavipes*), olive-sided flycatcher (*Contopus cooperi*), pinyon jay (*Gymnorhinus cyanocephalus*), and willet (*Tringa semipalmata*).

There are no population estimates for many of these species; however, the WGFD has been conducting breeding bird surveys that provide limited information (WGFD 2001). The Wyoming Partners in Flight Wyoming Bird Conservation Plan (Nicholoff 2003) is a good guide to management of neotropical migrants. There are three areas surrounding the Study Area that have been identified by Audubon Wyoming as an Important Bird Area (Figure 16). The nearest one, the Breteche Creek Ranch, is located more than four miles from the west side of the Reservoir on the North Fork Shoshone River.

Species that depend on woody plant communities are generally declining in numbers due to declines in habitat quality and quantity (BLM 2011). Species that require herbaceous plants for forage and cover have stable to increasing populations. Due to the declining condition of many riparian-wetland areas, species that depend on these areas for all or part of their life-cycle likely have been impacted. Management challenges include maintaining the habitat types upon which these species depend.

3.8.1.8. Nongame Mammals

Nongame mammals include species such as mice (*Mus* spp.), rats (*Rattus*), voles (*Microtus arvalis*), ground squirrels (*Marmotini*), shrews (*Soricidae*), bats (*Chiroptera* spp.), and prairie dogs

(*Cynomys* spp.), which are found in a variety of habitats in the Study Area. No estimates of population size are available for any of these nongame mammal species.

Nongame mammals play an important role as prey species for many other wildlife. Large carnivores, raptors, and other predatory animals rely on nongame mammals as a food source. As nongame mammal populations fluctuate, so may the populations of the predators that prey on them. Nongame mammal species that depend on woody plant communities are generally declining in numbers due to declines in habitat quality and quantity (BLM 2011). Species that require herbaceous plants for forage and cover have stable to increasing populations. There is no or very little population data for many of these species, so trends cannot be determined. Management challenges include the lack of population data for these species, and maintaining or enhancing the presence of these species and the habitats upon which they depend.

3.8.1.9. Reptiles

Potential reptile species found throughout the Buffalo Bill Reservoir area include gophersnake (*Pituophis catenifer*), prairie rattlesnake (*Crotalus viridis*), common gartersnake (*Thamnophis sirtalis*), terrestrial gartersnake (*Thamnophis elegans*), common sagebrush lizard (*Sceloporus graciosus*), and northern sagebrush lizard (*Sceloporus graciosus graciosus*). The lizard species feed on ants, beetles, grasshoppers, and other insects. The snake species feed on insects, small mammals, frogs, and fish. The wandering gartersnake and prairie rattlesnake bear live young, while the other reptiles listed lay eggs. There are no estimates of population size for any of these species. However, it is likely that populations trend downward due to the overall increase in habitat alteration and loss.

3.8.1.10. Amphibians

Potential amphibian species in the Study Area include northern leopard frog (*Lithobates pipiens*), boreal chorus frog (*Rana luteiventris*) and western tiger salamander (*Ambystoma mavortium*). These species are typically found in riparian-wetland areas. Northern leopard frogs are found in shallow water in marshes and semi-permanent or permanent ponds or slow-moving backwater areas along rivers or streams (Biodiversity Institute 2021a). Boreal chorus frogs are found in shallow water with emergent vegetation, ranging from wet meadows to reservoirs (Biodiversity Institute 2021b). Western tiger salamanders are found in permanent or temporary, natural or man-made ponds, pools, stock tanks, or backwater or slow moving creeks (Biodiversity Institute 2021c). Amphibians deposit eggs in lakes, reservoirs, marshes, bogs, rain pools, and flooded areas. There are no estimates of population size for any of these species. The declining condition of many riparian-wetland areas, combined with drought, has adversely impacted amphibian populations and populations are likely on a downward trend. Management challenges include maintaining a variety of habitat types and components in proximity to provide for the requirements of amphibians.

3.8.2. Environmental Consequences

Information on wildlife species and their occurrence in the Study Area was acquired from sources noted above, including the WYNDD (2023b). The information provided above was used to evaluate the impacts of the alternatives on wildlife and habitat. Additionally, GIS analysis determined the big game species ranges, Important Bird Areas, and the acreage of land use within each Proposed Action area for this assessment.

3.8.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill State Park would not be revised and existing wildlife resource management practices would continue. However, Park visitation would persist in exceeding the facilities and amenities currently available, and wildlife resources would be adversely impacted long-term. Impacts would result from visitors' use of areas not designated or managed for recreation, resulting in disturbance to wildlife within sight distance as wildlife would likely avoid areas.

3.8.2.2. Proposed Action

Under implementation of the Proposed Action, up to 1,299.2 acres of recreational improvements and 11.9 miles of new recreational trails could be developed. Of the 15 proposed improvement areas, five would include new development and 10 would include updates to and expansion of existing infrastructure (Table 1).

Temporary, minor impacts from the Proposed Action resulting from construction activities would include noise and vegetation removal. Wildlife may avoid construction areas during these periods. Once construction activities cease, noise would return to normal levels.

Development of the proposed five new recreational locations would result in permanent loss of wildlife habitat. At the 10 proposed improvement sites, permanent vegetation loss would occur; however, these areas are currently disturbed by visitors and would likely have minimal additional impact to wildlife. Proposed improvements would likely increase the current annual visitation, particularly during the shoulder seasons of the spring and fall. Increased visitation would increase traffic and human presence, which would result in added noise, potential unintended wildlife fatalities, increased conflicts between humans and wildlife, and avoidance of these areas by wildlife.

Development of new and improved facilities such as fishing access, lodging with running water, playgrounds, primitive campsites, signage, and trails would encourage visitation of designated areas. In this case, wildlife would benefit from reduced disturbance as visitors would be discouraged from areas not intended for public use. Off-trail areas would likely see a reduced number of users, resulting in decreased stress and displacement to wildlife. Trails development to connect existing amenities would also provide walking routes, thereby reducing the need to drive to different areas of the park and form informal trails.

The proposed improvements would result in disturbance to the overall habitat for big game. Trails and other proposed improvements would occur within mapped seasonal ranges throughout the Study Area. These areas would likely experience less activity from deer, moose, elk, and pronghorn. The Rocky Mountain goat may avoid sections of the North Fork Trail, which is an area considered year-round range (Table 6).

Table 6. Mapped big game range overlap with proposed improvement areas within the Study Area.

Proposed Improvement Area**	Elk	Moose	Pronghorn Antelope	Rocky Mountain Goat	Black Bear	Mule Deer	White-tailed Deer
Diamond Creek*	-	-	-	-	S/S/F	W/YR	YR
Bartlett Lane	-	S/S/F	-	-	S/S/F	W/YR	YR
Shirley's Pond	-	S/S/F	YR	-	S/S/F	W/YR; CW/YR	YR
South Fork*	-	S/S/F	YR	-	S/S/F	W/YR; CW/YR	YR
Central Shores*	-	S/S/F	YR	-	S/S/F	W/YR; CW/YR	-
Stagecoach	W/YR	S/S/F	YR	-	S/S/F	CW/YR	-
Sheep Mountain	W/YR	S/S/F	YR	-	S/S/F	CW/YR	-
North Fork	W/YR	S/S/F	-	-	S/S/F	CW/YR	-
North Shore West*	W/YR; CW/YR	S/S/F	-	-	S/S/F	CW/YR	-
Shreve Lodge	W/YR	S/S/F	-	-	S/S/F	CW/YR	-
Eagle Point	W/YR	S/S/F	-	-	S/S/F	-	-
Headquarters	W/YR	S/S/F	-	-	S/S/F	-	-
Lake Shore East	W/YR	S/S/F	-	-	S/S/F	-	-
Marquette	W/YR	S/S/F	-	-	S/S/F	-	-
North Fork Trail*	W/YR	S/S/F; W/YR	-	YR	S/S/F	CW/YR	-

* Indicates proposed new improvement areas

** No bighorn sheep range overlap occurs with the Proposed Improvement Area

W/YR = Winter/Yearlong Use; CW/YR = Crucial Winter/Yearlong Use; YR = Yearlong Use; S/S/F = Summer or Spring/Summer/Fall Use; - = No Overlapping Range

Proposed trails would also result in disturbance to other less transient species, such as rodents and reptiles. When proposed facilities are completed and in use, impacts to wildlife from the proposed development could include loss of habitat, potential stress due to increased human activity in newly developed areas, noise impacts, and vehicle fatalities. Big game and migratory birds would likely exhibit a higher flight response to development-related disturbances.

Implementation of the Proposed Action could result in increased disturbance of wildlife species and their habitats in both the short-term and long-term. These disturbances would be primarily

associated with habitat loss and increased human presence and subsequent increases in interactions between humans and wildlife, resulting in increased stress.

3.8.3. Cumulative Impacts

Past, ongoing, and future activities in and near the Study Area, including nearby residential developments, agriculture, and existing recreation, contribute incrementally to impacts on wildlife resources. Development related to the Proposed Action would result in minor short-term and long-term impacts on a cumulative scale. However, mitigation measures and construction related BMPs would reduce the potential for impacts to wildlife.

3.9. FISH RESOURCES AND AQUATIC INVASIVE SPECIES

3.9.1. Affected Environment

3.9.1.1. Fish Resources

Buffalo Bill Reservoir and the North Fork Shoshone River are two of the most popular fisheries in the Cody Region. These waters are managed as wild trout fisheries consisting of Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri*), rainbow trout (*Oncorhynchus mykiss*), rainbow X cutthroat hybrids, brook trout (*Salvelinus fontinalis*), and brown trout (*Salmo trutta*). Lake trout (*Salvelinus namaycush*), illegally introduced walleye (*Sander vitreus*), and yellow perch (*Perca flavenscens*) are also present in Buffalo Bill Reservoir. White suckers (*Catostomus commersonii*) and longnose suckers (*Catostomus catostomus*) are the main nongame fishery species. Buffalo Bill Reservoir is the only reservoir in WY that is not stocked and has self-sustaining, wild populations of trout. Anglers on Buffalo Bill Reservoir mainly target these trout species. The illegal introduction of walleye to Buffalo Bill Reservoir in 2008 has the potential to negatively affect the existing trout fishery. WGFD has been working on a suppression program to reduce walleye numbers in the reservoir.

The following seven species of fish found in Buffalo Bill Reservoir are considered species of conservation need.

Flathead Chub

Flathead chub (*Hybopsis gracilis*) considered vulnerable with moderate limiting factors in Wyoming (NSS4 [Bc]; S5; WGFD 2017). The flathead chub is a slender, silvery minnow with a slightly compressed body, wedge-shaped head, small eye, barbels, and long, sickle-shaped fins (Tibbs 1998). Flathead chub occupy the main channels of sandy, turbid streams (Olund and Cross 1961). These fish prefer small substrates, deep water, and woody debris (Bear 2009). The flathead chub is not considered a federally threatened, endangered, or sensitive species or a Wyoming sensitive species (USFWS 2024; Rahel and Thel 2004). The flathead chub has a Global Heritage Status Rank of G5 (secure status) from the Nature Conservancy.

Lake Chub

Lake chub (*Couesius plumbeus*) is a Wyoming species of potential concern (S5). The lake chub is a medium to large-sized minnow; adults can reach 227 mm (8.9 inches) in length (Scott and Crossman 1973, Becker 1983). The lake chub has a large terminal mouth with a small barbel near the end of the maxilla. It is usually dark olive on the back and silvery or gray on the sides; often there is a horizontal black band along the side from the operculum to the base of the caudal fin. Both sexes develop breeding tubercles during the spring, but these are much more prominent in males (Reighard 1903, 1904, Balinsky 1948, Collette 1977, Maas and Stasiak 1995). Lake chub prefer clear water and gravel bottoms of glacial scour lakes and tributary rivers that feed into them (Stasiak 2006). The lake chub is widespread in Wyoming and the population is considered stable (S5) (Stasiak 2006).

Plains Minnow

Plains minnow (*Hybognathus placitus*) are considered vulnerable with severe limiting factors in Wyoming (NSS3 [Bb]; S3; WGFD 2017). Plains minnow have been reported in the Belle Fourche, Big Horn, Cheyenne, Little Missouri, and Powder River drainages (northeastern and northwestern Missouri aquatic habitats; Baxter and Stone 1995; Patton 1997; McGree et al. 2010). Plains minnow are rare in several Wyoming drainages has and may be extirpated in the Bighorn River where they have not been reported since 1997 (WGFD 2017; Patton 1997). Limited information exists about the plains minnow, but its diet is thought to include algae and other organic matter and spawning likely involves an extended breeding season and semi-buoyant eggs that hatch in the current (Pflieger 1997; Platania and Altenbach 1998).

Cutthroat Trout

Colorado River cutthroat trout (*Oncorhynchus clarkia*) are considered a vulnerable with severe limiting factors in Wyoming (NSS2 [Ba]; S1; SWAP 2017). Colorado River cutthroat trout have large spots that are somewhat concentrated in the caudal area, and are colorful during spawning (Baxter and Stone 1995). Spawning typically starts after peak flows which usually occur during June or early July for higher elevation streams and lakes. They feed mostly on aquatic and terrestrial invertebrates. Colorado River cutthroat trout historically occupied large rivers and lakes but are now typically found in headwater streams (WGFD 2017).

Snake River Fine-spotted Cutthroat Trout

Snake River fine-spotted cutthroat trout (*Oncorhynchus clarkii behnkei*) are considered vulnerable with severe limiting factors in Wyoming (NSS3 [Bb]; S1; WGFD 2017). Snake River cutthroat trout are native to the upper Snake River above Palisades Reservoir (Baxter and Stone 1995). They have been introduced into other drainages as a sport fish. Snake River cutthroat trout are typically distinguished from other cutthroat trout in Wyoming by their profuse and very fine spotting (Baxter and Stone 1995, Behnke 1992). Their diet consists of insects and other fish (Kiefling 1978). Spawning generally begins in late March and continues until early July. Snake River cutthroat trout are found in larger rivers but also occur in reservoirs, lakes, and small

streams (Baxter and Stone 1995, Kiefling 1978). They prefer areas with good overhead or instream cover (Kiefling 1978). Snake River cutthroat trout typically use smaller tributary streams or spring creeks for spawning (Hayden 1967, Kiefling 1978).

In 1998, Snake River cutthroat trout were petitioned for listing as a threatened species under the Endangered Species Act. The petition was rejected in February 2001, but in December 2004, US District Court for the District of Colorado ruled that the USFWS illegally rejected the petition. The USFWS conducted a 12-month status review of the species and found listing unwarranted. After the USFWS decision was announced, proponents for listing filed an Intent to Appeal Brief within 60 days of the decision but have completed no further actions since.

Westslope Cutthroat Trout

Westslope cutthroat trout (*Oncorhynchus clarkii lewisi*) is at high risk in Wyoming (S1). Westslope cutthroat trout have small, non-rounded spots, with few spots on the anterior body below the lateral line. Coloration varies, but generally is silver with yellowish hints. Bright yellow, orange, and especially red colors can be expressed to a much greater extent than on coastal or Yellowstone cutthroat trout (Behnke 1992). Hybridization between westslope and Yellowstone cutthroat trout can produce a spectrum of spotting and coloration ranging between the typical patterns of each subspecies. Some populations that have been affected by hybridization show little or no phenotypic signs of hybridization (Behnke 1992). Hybridization with rainbow trout can be detected by the appearance of spots on the top of the head and on the anterior body below the lateral line, as well as by reduced scale counts, increased caecal counts, and loss of basibranchial teeth (Behnke 1992).

Genetically pure westslope cutthroat trout are estimated to exist in only 2-4 percent of their historic stream distribution (McIntyre and Rieman 1995). Westslope cutthroat trout have three possible life forms, adfluvial (migrates to lakes), fluvial (migrates to rivers) or resident (stays in streams). All three life forms spawn in tributary streams in the springtime when water temperature is about 10 degrees Celsius and flows are high (Liknes and Graham 1988). Cutthroat trout spawn when they are about four or five years old and only a few survive to spawn again (McIntyre and Rieman 1995). Fry emerge in late June to mid-July and then may spend one to four years in their natal streams. While resident fish spend their entire life in tributary streams, migratory life forms can travel several hundred kilometers as they move between adult and spawning habitat.

Westslope cutthroat trout have been included in various "watch lists" of agencies and conservation groups since 1966, the year the US Fish and Wildlife Service (USFWS) first produced the "Red Book." The USFWS has been petitioned to include the westslope cutthroat trout under protection of the Endangered Species Act. In 2000, the USFWS determined that listing was not warranted due to the species' wide distribution, available habitat in public lands, and conservation efforts underway by state and federal agencies.

Yellowstone Cutthroat Trout

Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri*) are considered vulnerable with severe limiting factors in Wyoming (NSS3 [Bb]; S2; SWAP 2017). They are game fish native to cold water habitats in the Snake, Yellowstone, Bighorn-Wind and Tongue River drainages of Wyoming, and have been widely stocked outside of their native range. Yellowstone cutthroat distribution in Wyoming and throughout their historic range has declined substantially (May et al. 2007). Yellowstone cutthroat trout are distinguished from other cutthroat trout by large black spots concentrated towards the caudal peduncle. The fish feed on zooplankton, freshwater shrimp, a wide variety of insects, mollusks, and other fish. Some populations occupy lakes and are adfluvial, while most populations are strictly fluvial. Yellowstone cutthroat spawn in early summer (May to July), often migrating upstream to spawn in tributaries with clean gravel substrates. They require flowing water environments for spawning. In late summer or early fall, eggs hatch and fry emerge. Yellowstone cutthroat are also found in Pacific Creek and other upper Snake River tributaries.

In 1998, Yellowstone cutthroat trout were petitioned for listing as a threatened species under the Endangered Species Act. The petition was rejected in February 2001, but in December 2004, US District Court for the District of Colorado ruled that the USFWS illegally rejected the petition. The USFWS conducted a 12-month status review of the species and found listing unwarranted. After the USFWS decision was announced, proponents for listing filed an Intent to Appeal Brief within 60 days of the decision but have completed no further actions since.

3.9.1.2. Aquatic Invasive Species

Brook Stickleback

Brook stickleback (*Culaea inconstans*) are established in several streams in the Shoshone River drainage (Ruthven 2023). Brook stickleback are olive-green with mottling or light spots on the sides, with light-yellow to silver undersides. During breeding season, the males are black with tinges of red and females may be dusky. The body is smooth with no scales, but has minute bony plates around the pores on the lateral line. Brook stickleback are native to central North America, but have been introduced into 16 states outside of their native range primarily as a result of baitfish introductions. Brook stickleback have been found in drainages throughout Wyoming including the Beaver, Badwater, Big Horn Lake, Cach La Poudre, Glendo, Laramie, Lone Tree–Owl, Medicine Bow, North Platte, Pathfinder-Seminoe Reservoir, South Fork Powder, and Shoshone drainages. Brook stickleback have been shown to compete with and negatively affect other fish species and waterfowl. Sticklebacks live in slow streams and lakes with submerged plants. They are spring spawners that build nests from pieces of vegetation they glue together with a special kidney secretion. Sticklebacks feed on small crustaceans and insects and can reach a length of about three inches.

Curly Pondweed

Curly pondweed (*Potamogeton crispus*) is native to Eurasia, Africa and Australia and was introduced into the US in the mid 1800s. It is now found in almost every state in the continental US. Curly pondweed reproduces by seeds which can be easily transferred in mud or water. It has been introduced into new areas via accidental introductions and as an ornamental plant. Curly pondweed competes with native plants, reducing plant diversity, and forms dense mats that impact water-based recreation (WGFD 2023b). Curly pondweed has been detected at the East Newton Lake boat ramp, Belfry Bridge launch on the Shoshone River approximately 7.5 miles downstream of Buffalo Bill Reservoir.

New Zealand Mudsnail

The New Zealand mudsnail (*Potamopyrgus antipodarum*) is native to mainland New Zealand and adjacent small islands. It was likely introduced to the US via transoceanic ships or transported with live game fish. The species was first discovered in the Snake River, Idaho in 1987 and has since spread to a total of 21 states. The mudsnail is parthenogenic (female fish produce clones) and densities have been recorded over 300,000 per square meter. Impacts of introduction include outcompeting native species and altering water chemistry. Currently, populations in Wyoming occur in Yellowstone National Park (Madison, Firehole, Gibbon, Gardner rivers, Nez Perce Creek), Grand Teton National Park (Polecat Creek and the Snake River), Lake Cameahwait (Bass Lake), and in the Bighorn, North Platte, Salt, Shoshone, and Snake rivers. A new population was found at the Batemans boat ramp on the Salt River in 2020. New Zealand mudsnail are spread by fish and birds, natural downstream dispersal, upstream through rheotactic behavior, and by humans on fishing gear (WGFD 2023b). New Zealand mudsnail have been detected approximately seven miles upstream of Buffalo Bill Reservoir in the North Fork Shoshone River in Cody, Wyoming.

3.9.2. Environmental Consequences

The information provided above was used to evaluate the impacts of the alternatives on fish resources and AIS.

3.9.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill State Park would not be revised and existing management practices would continue.

3.9.2.2. Proposed Action

Under the Proposed Action, improvements would be made to 15 areas of Buffalo Bill State Park. GIS analysis determined the species ranges within the Proposed Action area for this assessment (Figure 17).

Fisheries Resources

Proposed improvements would increase access by anglers, and may lead to greater fishing pressure and potential harvest of sensitive fish species, particularly trout species. As Buffalo Bill Reservoir and Shoshone River trout populations are reliant upon natural reproduction and not stocked, WGFD may reevaluate management options for trout populations. Increased harvest could be mitigated by enforcement of WGFD regulations and management of the fisheries resources at Buffalo Bill State Park, including but not limited to reducing the take limit or reducing the length of the harvest season. The Proposed Action would therefore result in adverse, minor, and long-term effects on fisheries resources.

Aquatic Invasive Species

Under the Proposed Action, an increase in recreation activities would increase the potential to spread or introduce new AIS into Buffalo Bill Reservoir. Certain AIS can negatively impact native fish species via competition, while other species may decrease water quality and negatively impact recreation activities. WGFD's existing program for AIS enforcement could help mitigate this increased potential for the spread of invasive species; however, WGFD staffing on this program may need to increase to support this effort. The Proposed Action would therefore result in adverse minor and long-term effects on native fish species due to potential increased spread of AIS.

3.9.3. Cumulative Impacts

Past, ongoing, and future activities in the analysis area, including nearby residential developments, agriculture, and recreation, cumulatively contribute incrementally to impacts to fisheries resources and aquatic invasive species at the State Park. Development related to the Proposed Action would result in minor long-term impacts on a cumulative scale.

Increased recreational activities would increase fishing pressure and harvest of sensitive species, and recreation activities may also contribute to the spread of aquatic invasive species. However, existing WGFD regulations and management efforts could likely be adapted to mitigate both fishing pressure and the spread of invasive organisms.

3.10. THREATENED AND ENDANGERED SPECIES

3.10.1. Affected Environment

The USFWS indicates five species listed under the Endangered Species Act (ESA) potentially occur in the Study Area. These include two mammals: Canada lynx (*Lynx Canadensis*; threatened), grizzly bear (*Ursus arctos horribilis*; threatened); one insect: Monarch butterfly (*Danaus plexippus*; candidate); one flowering plant: Ute ladies'-tresses (*Spiranthes diluvialis*;

threatened), and a gymnosperm: whitebark pine (*Pinus albicaulis*; threatened) potentially occur in the Study Area.

3.10.1.1.Canada Lynx

Lynx occur broadly across most of Canada and Alaska, where their distribution is closely associated with the boreal spruce-fir forests (USFWS 2023). Their range includes the subalpine forests along the Rocky Mountain ranges, including northwestern Wyoming. Populations of this species are likely to persist in areas across this geography that are characterized by deep snow and dense horizontal forest cover that support adequate densities of snowshoe hares. There are no known observations of Canada lynx within the Study Area (WYNDD 2023b).

3.10.1.2.Grizzly Bear

Grizzly bears are highly adaptable and flourish in a variety of ecosystems, including high mountain forests, subalpine meadows, arctic tundra, wetlands, grasslands, mixed conifer forest, and coastal areas (Biological Diversity 2023). Their range extends from Alaska through western Canada and throughout 18 western states, including Wyoming (USFWS 2023). Grizzly bears have been observed within the Study area since 2010, and most recently in 2021 (WYNDD 2023b).

3.10.1.3.Wolverine

Wolverines (*Gulo gulo luscus*) are listed as threatened by USFWS (2023c). Although wolverine does not show up in the USFWS IPaC at the Study Area, WYNDD shows the vicinity of the Reservoir as year-round range for wolverine (2024). Regular occupancy range is thought to be concentrated in the western portion of the state, in Yellowstone and Grand Teton National Parks and the Absaroka, Wind River and Wyoming mountain ranges, with irregular occupancy considered in the northern portion of the Bighorn Mountains, and in the Medicine Bow Mountains (2024). The most recent observation recorded was in March 2021 roughly 11 miles southeast of the Reservoir, but has not been verified by a WYNDD biologist (WYNDD 2024).

In Wyoming, wolverines are almost completely restricted to prominent high-elevation mountain ranges, with activity centered in subalpine and alpine landscapes. Habitat requirements include cold temperatures and persistent snow drifts. Rock crevices, caves, fallen trees and talus fields provide potential den structures. Although wolverines are capable hunters and opportunistic feeders, populations are reliant on scavenging carrion from large ungulates (elk, mule deer, and moose). Although larger carnivores such as grizzly bears are known to prey on wolverines, wolverine habitat and populations may be enhanced by the presence of larger carnivores and increased availability of carrion (WYNDD 2024).

Monarch Butterfly

The monarch butterfly has been a candidate for federal listing under the ESA since 2020 (USFWS 2022). Monarchs have a widespread distribution and use a variety of habitats for foraging, including fields, roadsides, and open areas (US Forest Service 2021). Wyoming occurs within the summer breeding range of the species (Monarch Joint Venture 2022). Flowering plant species such as milkweed (*Asclepias* spp.) within the Study Area, and limited wetland and riparian habitat could support reproductive habitat (i.e., milkweed). Based on the presence of suitable habitat and the wide range of this species, the monarch butterfly has a moderate potential to occur within the Study Area.

Ute Ladies-tresses Orchid

The Ute ladies'-tresses orchid is found in Wyoming, but there are no known occurrences within Buffalo Bill State Park or Park County. Nine populations of the Ute ladies'-tresses occur in Wyoming at eight sites in Goshen, Laramie, Converse, and Niobrara counties. Populations of Ute ladies'-tresses occur in southeastern Wyoming, western Nebraska, north central Colorado, northeastern and southern Utah, east central Idaho, southwestern Montana, and central Washington.

On January 17, 1992, the USFWS listed the Ute ladies'-tresses as threatened in the lower 48 states under the ESA. Ute ladies'-tresses occurs primarily in seasonally moist peat, sand, silt, or gravel soils near wet meadows, springs, lakes, ponds, or perennial streams. Ute ladies'-tresses establishes in open grass- and forb-dominated riparian areas that are not particularly dense or overgrown. Most populations occur as small, scattered groups occupying relatively small areas within the riparian system. Populations occur in mesic or wet meadows near riparian edges, gravel bars, and old oxbows along perennial streams at elevations ranging from 4,000 to 7,000 feet asl. Most sites are sub-irrigated and seasonally flooded, remaining moist into the summer. Ute ladies'-tresses are well-adapted to periodic disturbances from stream movement and grazing. It is known to establish in heavily disturbed sites, such as re-vegetated gravel pits, heavily grazed riparian edges, and along well-traveled foot trails on old berms.

Whitebark Pine

Whitebark pine commonly grow on ridges and just below the tree line at elevations of 4,300 to12,100 feet, at higher elevations than other pines. Their historic range is from southwest Canada to the Sierra Nevada Mountains in California and northern Nevada, and the Rocky Mountains in Wyoming (National Park Service 2021). Whitebark pine are unlikely to occur, but have the potential to occur within the Study Area as it is within its range (WYNDD 2023b). The closest documented species is found within two miles of the Study Area (WYNDD 2023b).

3.10.2. Environmental Consequences

Information on threatened and endangered species and their occurrence in the Study Area was acquired from the USFWS IPaC and WGFD (2023) and used to evaluate the impacts of the alternatives on threatened and endangered species. Additionally, GIS analysis determined the acreage of land use within each Proposed Action area for this assessment.

3.10.2.1.No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill State Park would not be revised and existing management practices would continue. However, State Park visitation would persist in exceeding the facilities and amenities currently available, and threatened and endangered species would be adversely impacted long-term. Impacts would result from visitors' use of areas not designated or managed for recreation, resulting in disturbance to species within sight distance as they would likely avoid areas.

3.10.2.2. Proposed Action

Impacts under the Proposed Action would be similar to those described in Section 3.8 Wildlife Resources, including adverse minor short-term impacts from construction, and minor long-term impacts from increased visitor use. Beneficial long-term impacts of the Proposed Action would include reduced disturbance as visitors would be discouraged from areas not intended for public use. Off-trail areas would likely see a reduced number of users, resulting in decreased stress and displacement to species.

Construction and visitor use activities may impact monarch habitat with disturbance to plant communities that provide potential habitat on which monarchs rely. The monarch may experience disturbance and displacement during construction, with potential mortality of adults and caterpillars. Impacts would be temporary and minor given the abundance of suitable habitat in adjacent areas where adult butterflies can disperse.

In the long-term, the addition of new and upgrading of existing facilities and amenities is likely to increase park visitation. This includes new areas proposed to host recreational facilities. The increase in visitor use may result in increased stress on populations of threatened and endangered species, including displacement. In addition, increased opportunity for contact and interaction between humans, and increased mortality. This impact is anticipated to affect grizzly bears as increased visitor use within the Study Area could lead to grizzly bears seeking unnatural food sources generated by additional visitation and use. Traffic into the park may also increase the likelihood of the introduction and spread of weed species, which could potentially degrade plant communities and result in loss of monarch habitat. SPHST could offset impacts by establishing pollinator-friendly gardens throughout the Park.

No impacts to Canada lynx and Ute's ladies'-tresses are anticipated, primarily because a lack of recorded occurrences of these species in the immediate area suggest that suitable habitat does

not currently occur. While whitebark pine is found within two miles, no occurrences of whitebark pine have been recorded within the Study Area. No impacts to whitebark pine are anticipated.

3.10.3. Cumulative Impacts

Past, ongoing, and future activities in and near the Study Area, including nearby residential developments, agriculture, and existing recreation, contribute incrementally to impacts on wildlife resources. Development related to the Proposed Action would result in minor short-term and long-term impacts on a cumulative scale. However, mitigation measures and construction related BMPs would reduce the potential for impacts to wildlife.

3.11. VEGETATION

3.11.1. Affected Environment

A variety of vegetation communities are found in the Study Area (Appendix D, Figure 10). This assessment of existing conditions was developed using the US Geological Survey (USGS) National Land Cover Database (NLCD) 2019 data and definitions (USGS NLCD 2019) as well as the State of Wyoming (Wyoming Weed and Pest Control Council 2015) and Park County-listed noxious weed list obtained from Park County Weed and Pest (2016).

Barren. Barrens are areas of bedrock, desert pavement, scarps, talus, slides, volcanic material, glacial debris, sand dunes, strip mines, gravel pits and other accumulations of earthen material. Barrens account for less than one percent of total cover in the Study Area.

Cultivated Crops. Cultivated croplands are areas used for the production of annual crops, such as corn and soybeans, as well as perennial woody crops . Crop vegetation, including land being actively tilled, is found south of the Study Area, but accounts for less than one percent of total vegetation at the Study Area.

Developed. Developed lands include areas of human-constructed development, or impervious surfaces (e.g., pavement, housing) mixed with vegetation, as well as open space (e.g., residential lawns and vegetation). Impervious surfaces account for less than two percent of the total cover in the Study Area, while open space areas cover less than one half percent of total cover in the Study Area.

Forest. Evergreen forests are dominated by trees generally greater than 16 feet tall with more than 75 percent of the tree species maintaining their leaves all year. Approximately 0.18 percent of the Study Area includes evergreen forest cover.

Herbaceous. Herbaceous areas are dominated by graminoid or herbaceous vegetation, comprising five percent of vegetation in the Study Area. These areas are not subject to intensive management such as tilling, but nearby areas may be used for grazing.

Pasture/Hay. Pastures are areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for less than one half percent of total vegetation in the Study Area.

Wetland/Open Water. Wetlands in and around the Study Area include emergent herbaceous and woody wetlands. Emergent herbaceous wetlands are areas where perennial herbaceous vegetation is rooted and erect. Woody wetlands are areas where forest or shrub land vegetation dominate. In both wetland types, the soil or substrate is periodically saturated or covered with water. Areas of open water account for approximately 66 percent of cover at the Study Area, with the two wetland types encompassing approximately 0.75 percent of area cover.

Wetland communities may include wet and moist meadow grasslands, marsh and swamp wetlands, cattail, bullrush and sedge dominated wetlands, and inland saltgrass/alkali sacaton dominated wetlands. Low salinity wetlands are characterized by cattails (*Typha* spp.), Baltic rush (*Juncus balticus*), sedges (*Carex* spp.), and prairie cord grass (*Spartina pectinatus*). High salinity wetlands are characterized by alkali sacaton (*Sporabolus airoides*), alkali cordgrasss (*Spartina gracilis*), desert saltgrass (*Distichlis stricta*), pursh seepweed (*Suaeda depressa*), wild rye (*Elymus* spp.), and crested wheatgrass (*Agropyron* ssp.).

Shrub/Scrub. Shrubland and scrubland are dominated by vegetation less than five feet tall with shrub canopy. In the Study Area, shrub/scrub comprises approximately 25 percent of the vegetative cover.

Noxious Weeds. Noxious weeds are plant species with seeds or plant parts determined to negatively impact management of agriculture and natural ecosystems, is a carrier of disease or parasites, or is detrimental to the general welfare of the state or locale (Wyoming Weed & Pest Control Act 2015). Table 7 shows plant species listed by the State of Wyoming and by Park County as noxious weeds (Park County Weed and Pest 2013). Portions of the Study Area that are most vulnerable to infestation by noxious weeds include roadsides, camping areas, fishing access areas, and the Reservoir shoreline. Noxious weeds frequently infest roadsides because vehicles tend to disperse seeds. All-terrain vehicle travel, fishing and hunting access, and other recreational activities may also result in the spread of noxious species through disturbance of existing vegetation and dispersal of seeds. Persons walking in areas next to waterways can spread species, including (but not limited to) common burdock (*Arctium minus.*), Canada thistle (*Cirsium arvense)*, hoary cress (*Cardaria draba*), and perennial pepperweed (*Lepidium latifolium).* Dogs may spread species such as houndstongue (*Cynoglossum officinale*), common burdock, and thistle by carrying seeds in their fur. Fluctuating water levels along shorelines are vulnerable to saltcedar (*Tamarix chinensis*) and Russian olive (*Elaeagnus angustifolia)* infestation.

Table 7. State of Wyoming designated and Park County declared noxious weeds.

State of Wyoming Noxious Weeds		Park County Noxious Weeds	
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
ventenata grass	*Ventenata dubia*	black henbane	*Hyoscyamus niger L*
Canada thistle	*Cirsium arvense*	blue mustard	*Chorispora tenella*
common burdock	*Arctium minus*	bull thistle	*Cirsium vulgare (Savi) tenore*
common St. Johnswort	*Hypercum perforatum*	chicory	*Cichorium intybus L.*
common tansy	*Tanacetum vulgare*	common mullein	*Verbascum thapsus L.*
dalmatian toadflax	*Linaria dalmatica*	dame's rocket	*Hesperis matronalis L.*
diffuse knapweed	*Centaurea diffusa*	flixweek	*Descurania Sophia*
Dyer's woad	*Isatis tinctoria*	lanceleaf sage	*Salvia reflexa*
field bindweed	*Convolvulus arvensis*	redstem filaree	*Erodium cicutarium*
houndstongue	*Cynoglossum officinale*	showy milkweed	*Asclepias speciosa*
leafy spurge	*Euphorbia esula*	wild four o'clock	*Mirabilis nyctaginea*
musk thistle	*Caduuas nutans*		
oxeye daisy	*Chrysantemum leucantemum*		
perennial pepperweed	*Lepidium latifolium*		
perennial sowthistle	*Sonchus arvensis*		
plumless thistle	*Carduus acanthoides*		
purple loosestrife	*Lythrum salicaria*		
quackgrass	*Agropyron repens*		
Russian knapweed	*Centaurea repens*		
Russian olive	*Elaeagnus angustifolia*		
saltcedar	*Tamarix chinensis*		
Scotch thistle	*Onopordum acanthium L.*		
skeletonleaf bursage	*Ambrosia tomentosa*		
spotted knapweed	*Centaurea maculosa Lam.*		
whitetop (hoary cress)	*Cardaria draba (L. Desv)*		
yellow toadflax	*Linaria vulgaris*		

The Study Area is dominated by herbaceous scrub/shrubland interspersed with trees and developed areas. Established vegetative communities are important as erosion control and wildlife habitat, as well as adding aesthetic value. Future uncontrolled wildfires pose a threat to vegetative communities as drought pressures increase. Accumulation of fuels such as grasses and dry brush increases the chance of wildfire ignition.

Currently, the U.S. Forest Service, with Reclamation approval via a Special Use Permit, grazes approximately 463 acres of lands near Diamond Creek covered in this RMP. Grazing is

conducted in accordance with the plan and operating guidelines stated in the permit. The Forest Service assumes responsibilities of preventing and controlling noxious and undesirable plants in the grazing area, fence maintenance, and irrigation of the area as described in the special conditions of the permit.

3.11.2. Environmental Consequences

The information provided above was used to evaluate the impacts of the alternatives on vegetation. GIS analysis determined the NLCD land cover categories (Appendix D, Figure 10). State of Wyoming and Park County-listed noxious weed lists were obtained from Park County Weed and Pest (2016) and Wyoming Weed & Pest Control Act (2015).

3.11.2.1. No Action Alternative

For the No Action Alternative, the 1988 Master Plan for Buffalo Bill State Park would not be revised and existing vegetation management practices would continue. However, Park visitation would persist in exceeding the facilities and amenities currently available, and vegetation resources would be adversely impacted long-term. Impacts would result from visitors' use of areas not designated or managed for recreation, resulting in existing vegetation being trampled or removed, and noxious weeds being spread more broadly.

3.11.2.2. Proposed Action

Under the Proposed Action, recreation-related improvements would be made at 15 sites within the Park. Improvements would include the creation of 11.9 miles of new trails and the expansion or creation of approximately 1,299.2 acres of recreational facilities and amenities. These areas would experience minor to moderate short-term and long-term adverse impact on native vegetation resulting from the physical removal of plant species during construction, and the spread of noxious weeds through increased visitor use.

The Proposed Action would also be expected to result in long-term beneficial impacts to vegetation resources in the State Park. Increasing recreational capacity and access to facilities and amenities would result in adequate management of visitor use, thereby mitigating use of areas not designated or managed for recreation. With implementation of standard construction-related best management practices, including re-planting native vegetation and re-seeding with certified weed-free native seed upon completion of construction, adverse impacts can be mitigated. Additionally, with fuels reduction and interagency fire management strategies, wildfire risk and the rate of future wildfire spread can be reduced.

3.11.3. Cumulative Impacts

Past, ongoing, and future activities in the Study Area, including nearby residential developments, agriculture, and recreation, cumulatively contribute incrementally to impacts on vegetation

communities. Development related to the Proposed Action would result in minor impacts on a cumulative scale.

Land conversion to recreational areas and activities associated with recreation would impact native vegetation and may promote the dispersal and establishment of noxious weeds. However, adequately managing recreation activities, as well as re-seeding or re-planting disturbed areas could help mitigate these impacts and improve wildlife habitat and visitor experiences.

3.12. SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

3.12.1. Affected Environment

The analysis area for socioeconomic conditions and Environmental Justice is Park County, Wyoming. The county is a rural inter-mountain region. As of 2020, the human population of Park County was 29,624, and more recent predictions estimate a population of 30,518 in 2022. Considering that the county had an estimated population of 28,205 people in 2010, it has experienced a general trend of population growth over the past decade (US Census 2023).

The recent statistics continue the trend of county-wide growth seen since the start of the Covid-19 pandemic in 2020. According to the Wyoming Department of Administration and Information, 1,135 people moved to Park County since April 2020. This is the second-highest migration rate in the state, behind only Sheridan County which has welcomed 1,312 new residents. Park County, in contrast to other rural counties in the Rocky Mountain region, enjoys a relatively diversified economy. The County's largest industries include healthcare and social assistance, retail trade, and educational services (Data USA, 2024). The median household income in Park County, Wyoming, is $66,754 while the median household income of the state of Wyoming is $70,042. The employment rate in Park County, Wyoming, is 59.6 percent while the state employment rate is 62.5 percent (US Census 2023).

The State Park is staffed by three Full-time Equivalent (FTE) employees: a Park Superintendent, Assistant Superintendent, and a Maintenance Technician. During the busy months in the summer, the State Park hires two seasonal law enforcement rangers, four seasonal fee collectors, one fee supervisior, and three maintenance employees. Until the 2023 season, the State Park only hired one seasonal park ranger. In addition to staff, 10 seasonal volunteers are brought on as camp hosts or stewards. Volunteers each provide an additional 24-30 hours per week of assistance at the State Park. In 2021-2022, 12 volunteers contributed over 3,500 hours, the equivalent of 1.69 full time employees. While visitation has increased significantly over the years, FTEs have remained at nearly the same level since 1988.

SPHST generates revenue across its State Park system from camping reservations and park entrance fees. The State Park is the third-highest revenue-generating Park, after Glendo and Curt Gowdy state parks. While Glendo and Curt Gowdy state parks have significantly higher

visitation, Buffalo Bill has a higher percentage of out of state visitors—resulting in higher revenue generation. Table 8 provides an overview of resident versus non-resident fees.

The State Park's overall annual operating budget is approximately $406,000 per year, which includes general funds, fee collection revenue, and Wyoming Motor Boat Taxes. As utilities and the cost of services (e.g., waste removal) continue to increase, the amount available for seasonal hires is limited.

Table 8. Resident versus non-resident fees (2023)

Fee Type	Resident	Non-Resident
Day-use	$7	$12
Camping	$18.10	$31.98
Electric site (camping)	+$10	+$10
Annual Day Use Permit	$48	$96
Annual Camping Passes	$89.60	N/A

Generally, the county's demographics are skewed older and mainly white. The population distribution for the county was overrepresented at the upper ends of the age spectrum and underrepresented at the lower ends of the age spectrum. Compared to Wyoming and the US, the county had a lower proportion of its overall population in the younger age groups and had a higher proportion of its overall population in the older age, especially the 65 and over age category (US Census 2023).

Environmental Justice is principally concerned with protecting human rights and wellbeing of humans and their relied-upon natural systems. It is an important lens to look through when making future decisions involving environmental planning and policy. The results of taking Environmental Justice into consideration should be two-fold. First, they should prevent any further adverse environmental effects to more vulnerable groups, and second, they should specifically correct past injustices that were caused by overlooking or targeting certain groups. The best practice to do this involves mandating that all relevant parties, regardless of any demographic factors, are present, included, and considered in the decision-making process.

Executive Order (EO)12898 requires each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations" (EO 12898, 59 Federal Register 7629) (US Environmental Protection Agency [EPA] 1994).

The CEQ provides the following definitions to provide guidance for compliance with environmental justice requirements in NEPA:

> Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.
>
> Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect (CEQ 1997).

Non-white communities overall had a 28 percent higher health burden and those living under the poverty line had a 35 percent higher burden (US EPA 2018).

3.12.2. Environmental Consequences

Only the resources potentially affected within the analysis area are analyzed for environmental consequences.

3.12.2.1. No Action Alternative

Under the No Action Alternative, the 1988 Master Plan for Buffalo Bill Reservoir would not be revised. This would result in a continuation of current management practices which would have a minor direct effect on the local economy. Increases in visitation caused by increasing recreation trends would likely benefit local businesses.

3.12.2.2. Proposed Action

Implementation of the Proposed Action would result in both short-term and long-term socioeconomic impacts. Short-term impacts would be associated with the construction phase of the project, including construction-related expenditures. Construction-related spending would also generate secondary benefits from local spending. Although the Proposed Action would increase short-term employment and potentially result in a slight increase in park staffing, there would be no substantial change to economic factors from the proposed construction activities. Park operations and employment would continue to contribute to state and local economic activity.

Long-term effects would be associated with visitation trends. An upward trend in visitation would be expected from constructing additional recreation facilities. By ensuring that there would be adequate numbers of properly designed facilities, located in appropriate areas that respond to the current and future expected level of use, the Proposed Action may strengthen the recreation-related service sectors of the analysis area's economy by making it easier for visitors to access and utilize recreation resources in the Study Area.

The Proposed Action would not have disproportionately high, adverse effects on minorities or low-income populations or communities. The anticipated environmental and socioeconomic effects would be spread across all races, ages, and income levels.

3.12.3. Cumulative Impacts

Ongoing population growth and regional recreation demand would result in impacts to socioeconomics in the region.

CHAPTER 4. REFERENCES

All hyperlinks were active at the time of publication.

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APPENDIX A: RESOURCE MANAGEMENT PLAN

1.1. PLAN DEVELOPMENT

Reclamation has the primary responsibility to manage Buffalo Bill Reservoir and the adjacent lands under its jurisdiction. SPHST directly manages the recreation resources at the park. Reclamation exercises oversight responsibility to ensure SPHST fulfills its responsibilities pursuant to terms and conditions of the management agreement between both parties.

In developing the RMP for Buffalo Bill Reservoir, Reclamation and SPHST identified public and agency concerns. Based on the public involvement comments and agency concerns, Reclamation and SPHST identified goals and objectives and potential management actions to address the concerns and resolve identified problems. Pursuant to NEPA requirements, potential environmental effects of implementing management actions were analyzed in an associated Environmental Assessment. Management actions were selected that were perceived to be acceptable to the public and agency personnel, that could be implemented without significant environmental conflicts, that are within the environmental resource limitations, and consistent with existing policy, laws, project purposes, and the RMP goals and objectives.

The RMP presumes that the existing rules and regulations of Reclamation and SPHST for managing Buffalo Bill Reservoir and State Park will continue to be applied.

1.2. MANAGEMENT CONSTRAINTS

The ability of agencies to manage environmental and recreational resources depends on maintaining sufficient personnel and the ability to obtain adequate funding to operate and maintain facilities and programs. The following discussion addresses the legislative, environmental, and operational constraints associated with the recreational development and management of the reservoir.

1.2.1. Legislative Constraints

Project planning and/or development on federal land must comply with a variety of rules, laws, and EOs. These legislative mandates require federal land management agencies to consider the effects of its management decisions on endangered or threatened species, water quality, Indian Trust Assets (ITAs), recreation, fish and wildlife, and cultural resources.

The reservoir's foremost purposes are water storage for irrigation, power generation, recreation, fish and wildlife, municipal water, and flood control. Recreational use of the reservoir is secondary. Operating the reservoir for these purposes limits Reclamation's ability to manage exclusively for recreation or natural resources.

This RMP does not address changes to how the reservoir is operated with respect to water deliveries or maintenance of water levels. Modifications to existing operating requirements and contractual obligations are beyond the scope of the RMP.

1.2.2. Environmental Constraints

Limiting factors, such as steep slopes and the lack of an adequate land base at some locations, constrains the development of new or expanded recreation facilities. Constraints to recreation development include the following:

- Presence of a wetland or riparian vegetation
- Sensitive habitat for certain wildlife species
- Reservoir inundation zones
- Slopes greater than 10 percent
- Shoreline erosion areas

1.2.3. Dam Safety and Facility Operations and Maintenance Constraints

Limiting factors include Reclamation's need to protect federal infrastructure and monitoring capabilities that support Reclamation's Dam Safety Program and facility operations and maintenance. Reclamation's Dam Safety Program ensures Reclamation dams do not present unreasonable risk to people, property, and the environment. Dams must be operated and maintained in a safe manner, ensured through inspections for safety deficiencies, analyses utilizing current technologies, and corrective actions if needed based on current engineering practices. A failed dam can no longer provide recreational benefits.

1.3. GOALS AND OBJECTIVES

The RMP is a planning document. It includes management goals with associated objectives for Buffalo Bill Reservoir. The management objectives have multiple functions including appropriate use and protection of the land and associated natural resources while, at the same time, protecting the authorized Shoshone Project purposes consistent with the mission and goals identified in Reclamation's and the Department of Interior's Strategic Plan. Reclamation's and SPSHT's management goals are similar and include but, are not limited to: management, development and protection of water and other related natural resources in a safe, efficient, and effective manner. This section establishes the desired condition of resources to assure conformance and good stewardship with state and federal practices.

1.3.1. Goal 1: Optimize opportunities for development and use at Buffalo Bill State Park.

- Provide recreation opportunities, including day use and overnight camping facilities, for both resident and non-resident visitors to the park.

- Provide multiple-use recreation facilities that are appropriate for the site and will meet projected recreation demand.
- Separate conflicting use areas.
- Consider the provision of year-round recreation opportunities at the site.
- Provide appropriate weather protection at the park including the use of windbreaks, shelters, protected coves, and other measures.
- Provide for future concession development at the State Park, reviewing opportunities on a case-by-case basis for developments including but not limited to a camp store, marina, a restaurant or food trucks, equipment rental opportunities, or guiding opportunities.
- Maximize the use of the reservoir by providing for various types of boating and fishing opportunities.
- Utilize creative design concepts to accommodate the large water level fluctuations anticipated in the reservoir.
- Make use of seasonal changes in shoreline characteristics created by water level fluctuations in the reservoir.
- Consider incorporating various development features that will maximize the economic importance of the park to the region and the state.
- Integrate holistic access that meets ADA and ABA Guidelines.
- Maximize the recreation experience of the park visitor by providing diverse interpretive facilities and services.

1.3.2. Goal 2: Maintain and, where possible, enhance the park's natural appearance and overall integrity.

- Maximize aesthetic values by utilizing design that is secondary to and harmonizes with nature.
- Retain the overall natural qualities of the park by providing areas of undisturbed open space with native vegetation.
- Enhance the wildlife values of the State Park by enhancing existing and providing new terrestrial and aquatic wildlife habitats.
- Implement an ecological restoration program, such as pollinator gardens, that will complement existing State Park features, be aesthetically pleasing, and environmentally appropriate for the region.
- Minimize impacts to the natural environment and implement restoration best practices during construction work.

- Provide adequate interpretation, signing, and, where appropriate, barriers to protect sensitive natural areas.
- Prevent the introduction and spread of and otherwise control invasive plant and animals.
- Follow a fire management plan of strategies and tactics to protect values at risk and provide the necessary tools to meet resource and park management goals and objectives.
- Minimize sedimentation and erosion and control dust.

1.3.3. Goal 3: Provide an ample level of public safety in future park development.

- Utilize appropriate signing, visitor information services, controls, and supervision to ensure park visitors are afforded a safe recreation experience.
- Engage in wildland fire management, provide for law enforcement, solid waste and wastewater management, safe drinking water, and other measures so that site hazards are minimized, and visitor safety is enhanced.
- Balance the need for access with safety and aesthetic considerations in the design of park roads.
- Restrict vehicular traffic to designated roads by utilizing signage and, where needed, barriers to control off-road vehicle use.

1.3.4. Goal 4: Minimize operation and maintenance costs in planning for future park development.

- Utilize durable and easily maintained materials and facilities.
- Design park facilities to discourage vandalism.
- Provide easy maintenance access to all portions of the site.
- Provide a diverse selection of low-maintenance and drought-tolerant vegetation.
- Avoid developing in areas that are characterized by unstable soils, steep slopes, or other physical development limitations.
- Cluster high-maintenance facilities.
- Maintain adequate staffing levels to ensure goals and objectives are met.
- Investigate cultural resources prior to the implementation of any improvement activities or surface-disturbance actions.

1.4. STANDARD ENVIRONMENTAL COMMITMENTS

1.4.1. Recreation Facilities, Trails, and Aesthetic Values

- Erosion-control structures, such as waterbars, drain dips, check dams, culverts, or French drains will be installed, where appropriate, to control water movement and protect soils and vegetation.
- User-created informal trails will be closed, restored, and discouraged.
- Proper regulatory and informational signing will be posted throughout the reservoir areas informing the public of rules and regulations governing the use of at the State Park.
- During facilities or trails location, all efforts will be made to avoid wetlands, riparian areas, rare plant communities, cliffs, and steep and/or rocky slopes. See additional commitments below.
- In high-use areas, designated campsites and signage may be used to limit ecological and social disturbance.
- Temporary recreation closures may be necessary when construction poses a risk to visitor safety or resource damage. Temporary signs and fencing would be installed, when appropriate, to prevent public access. Construction would be scheduled during periods of low use, to a practical extent.
- As much as possible, onsite material will be used for construction as approved by Reclamation.
- Recreation facility development will complement the surrounding landscape as much as practical and will follow: (1) site specific recreation master plans; (2) design and construction criteria, guidelines, and standards; and (3) development criteria to protect the visual quality of the reservoir area.
- Reclamation and the State Park will work with law enforcement entities to ensure enforcement of all laws and regulations.
- Mandatory watercraft inspections (carried out by WGFD) will be required for all boats entering Wyoming at an authorized inspection check station.

1.4.2. Noxious Weeds and Pest Management

- Maintain compliance with state and county noxious weed laws.
- Reduce competition of undesirable plants with native and/or planted vegetation.
- Control vertebrate and invertebrate pests as necessary to protect public health and safety, and to prevent damage to public and private property.

- Clean all heavy equipment before entering and exiting construction sites to minimize transporting weed seed.
- Reseed after construction, heavy maintenance, and other soil-disturbing activities.
- Minimize sources of weed seed. Use clean fill material from weed-free sources. If straw is used for stabilization and erosion control, it must be certified weed free or weed seed free.
- Control noxious weeds and prevent their establishment and spread on public and adjacent private lands.
- All known noxious weed populations at new construction sites will be treated or eliminated prior to project implementation to prevent the spread of these populations.
- Work with WGFD on signage for Aquatic Invasive Species.

1.4.3. Plants and Wildlife

- Protect known active and inactive raptor nest areas.
- Avoid disturbing threatened, endangered, and proposed species (both flora and fauna) during breeding, young rearing, or at other times critical to survival. Areas will be closed to activities, as needed, during these periods.
- Maintain a database of important wildlife resources, fill data gaps that are currently unknown (e.g., active raptor nests, additional winter eagle-use area).
- Restore disturbed areas with native plant species to enhance existing wildlife habitat; establish native plants in areas disturbed by new construction.
- Control the invasion and spread of noxious weeds and other undesirable exotic plants that threaten native habitat or biological diversity.
- Perform various forms of hazardous fuels reduction as necessary to mitigate threats of wildland fire.
- Adhere to Interagency Agreements regarding wildlife management.

1.4.4. Soil and Water

- Where excessive soil impacts exist from prior activity, the emphasis shall be on reclamation and preventing any additional detrimental impact, where feasible.
- Build erosion resistance into project design to reduce costly maintenance and restoration (Clean Water Act Sections 402(p) and 404); mitigate concurrently with construction (disturbance of more than 5 contiguous acres per project requires a state storm water discharge permit; a 404 permit would be required if more than 0.5 acre of Waters of the U.S. are disturbed).

- Obtain appropriate permits related to discharge and sedimentation prior to construction.
- Erosion-control plans and revegetation plans will be developed and implemented in project-specific NEPA compliance.
- When constructing roads and trails, steep slopes and areas already prone to landslides should be avoided where possible. Specific measures to stabilize landslide potential slopes will need to be identified in the project-specific NEPA compliance.
- Avoid soil-disturbing actions during periods of heavy rain, wet soils, and periods of heavy snowmelt.
- Control adverse water quality effects from human activities below high water levels.
- Allow camping in designated sites only.
- Protect or restore shoreline vegetation as a means of controlling erosion.
- Ensure that operations at marinas follow best management practices for fueling boats and use of fuel containers. Control potential pollutants (gasoline, petroleum products) associated with boat activity.
- Design catchment basins and or wetlands to detain runoff from campgrounds and parking lots.
- Minimize the area disturbed during construction.
- Control runoff from disturbed areas during construction.
- Revegetate disturbed areas as soon as practically possible after construction.
- Construct trails to follow topographic contours or to have low slopes.
- Use retaining walls where necessary.
- Minimize native tree removal.

1.4.5. Cultural Resources

- In accordance with the NHPA, all significant cultural resources (historic properties) and will be protected or mitigated in consultation with SHPO and tribes.
- Prior to the initiation of any federal undertaking, all cultural resources sites within the undertaking Area of Potential Effects (APE) area will be evaluated for NRHP eligibility.
- If historic properties are located within the individual concept plan areas, and if they would be adversely affected by the undertaking. SHPO/THPOs will be consulted to determine a plan of action, e.g. MOA, PA, to resolve adverse effects of the undertaking upon historic properties. Should an unknown cultural resource site be discovered during construction or slope stabilization, all ground disturbing activities within 100 feet of the discovery must be suspended immediately. Reclamation's Wyoming Area Office (WYAO) archaeologist will be notified and appropriate measures implemented to

preserve the integrity of the site. No further work will be allowed in the area until the discovery has been adequately mitigated. All contracts would include a "stop work" clause if evidence of cultural resources is found during construction.

- Should unknown vertebrate fossils be encountered prior to or during ground disturbing activities, construction must be suspended immediately. Reclamation's WYAO archaeologist should be contacted and work in the area of discovery shall cease until a qualified paleontologist can be contacted to assess the find. All contracts would include a "stop work" clause if evidence of paleontological resources is found during construction.
- In the event of an inadvertent discovery of human remains or funerary objects, all work at the find spot and in the immediate vicinity shall cease. The site will be secured and protected until Reclamation officials, the Park County Coroner, State Archaeologist, and the SHPO have been notified and arrive on site. Protection of the discovery site may include flagging the discovery location with a buffer zone around it, tarping the find spot, and having an individual stay at the location to prevent further disturbance. Contact information for the individual who discovered the site must be provided to Reclamation and the SHPO. No digging, collecting, or moving human remains or other items will occur after the initial discovery. The Park County Coroner and the State Archaeologist would be responsible for determining the appropriate course of action under the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq. [Nov. 16, 1990])."

1.4.6. Wetlands and Riparian Areas

- If stream crossings or other instream structures are necessary, they will be designed to provide for passage of flow and sediment, withstand expected flood flows, and allow free movement of resident aquatic life.
- Avoid any loss of rare wetlands such as fens and springs.
- During design and implementation planning, site specific analysis would be needed to determine the appropriate placement of water facilities to reduce impacts to groundwater and runoff.

1.4.7. Livestock Grazing

- Grazing management practices promote plant health by providing for one or more of the following:
    - periodic rest or occasional deferment from grazing during critical growth periods;
    - adequate recovery and regrowth periods;

    - opportunity for seed dissemination and seedling establishment.
- Grazing management practices address the kind, numbers, and class of livestock, season, duration, distribution, frequency and intensity of grazing use and livestock health.
- Grazing management practices maintain sufficient residual vegetation on both upland and riparian sites to protect the soil from wind and water erosion, to assist in maintaining appropriate soil infiltration and permeability, and to buffer temperature extremes. In riparian areas, vegetation dissipates energy, captures sediment, recharges ground water, and contributes to stream stability.
- Native plant species and natural revegetation are emphasized in the support of sustaining ecological functions and site integrity. Where reseeding is required, on land treatment efforts, emphasis will be placed on using native plant species. Seeding of non-native plant species will be considered based on local goals (such as reseeding of irrigated pasture), native seed availability and cost, persistence of non-native plants and annuals and noxious weeds on the site, and composition of non-natives in the seed mix.
- Range improvement projects are designed consistent with overall ecological functions and processes with minimum adverse impacts to other resources or uses of riparian/wetland and upland sites.
- Grazing management will occur in a manner that does not encourage the establishment or spread of noxious weeds. In addition to mechanical, chemical, and biological methods of weed control, livestock may be used where feasible as a tool to inhibit or stop the spread of noxious weeds.
- Natural occurrences such as fire, drought, flooding, and prescribed land treatments should be combined with livestock management practices to move toward the sustainability of biological diversity across the landscape, including the maintenance, restoration, or enhancement of habitat to promote and assist the recovery and conservation of threatened, endangered, or other special status species, by helping to provide natural vegetation patterns, a mosaic of successional stages, and vegetation corridors, and thus minimizing habitat fragmentation.
- Practices that enhance land and water quality should be used in the development of activity plans prepared for land use.

1.5. STANDARDS AND GUIDES

The Reclamation Recreation Facility Design Guidelines (Reclamation 2013) provides examples of recreation facility design details. These guidelines are intended to meet best management practices, assist in the planning and budget processes, and provide consistent designs throughout Reclamation's system of facilities. Reclamation, its managing partners, and concessionaires are encouraged to use these guidelines in the design and development of new recreation facilities and the renovation of existing facilities. As new designs, technology, and materials are developed, they will be added to the manual guidelines, and existing materials will

be reevaluated. The manual provides guidelines for the following facilities (Note: not a comprehensive list):

- Entrance stations
- Camping facilities and campground layout
- Picnicking facilities
- Comfort station buildings
- Boating facilities
- Fishing facilities
- Utilities

Sign guidelines, to improve communication with the public, are provided in the Reclamation Visual Identity Manual. Roadway signs on Reclamation land must also follow the Federal Highway Administration's Manual on Uniform Traffic Control Devices. These guidelines encourage the development of a sign program that fosters safety, facilitates management of an area, provides a learning opportunity for visitors, and offers a positive image and identity for all entities involved in the management of the area.

1.6. PLAN IMPLEMENTATION

The implementation of the majority of these projects would be phased over the next 10 years. Implementation depends on, among other things, available funding, cooperation of other involved entities, cost-sharing efforts, results of visitor use surveys; and monitoring of individual recreation areas. Due to the uncertainty of funding from fiscal year to fiscal year, a precise schedule for each project cannot be developed. To facilitate this, annual coordination is needed between Reclamation and the managing partners to discuss issues, solutions, funding sources, and implementation priorities of the management actions.

Reclamation's WYAO has primary responsibility for implementation and monitoring of the RMP. An effective and cooperative relationship between Reclamation and the managing partners is necessary, which includes commitment by all of the entities to seek financial, program, and staffing resources necessary to implement the proposed management actions. Implementation of the RMP by Reclamation and its partners will be guided by existing and future laws, Executive orders, regulations, and Reclamation policies and guidelines. This RMP is designed to supplement existing direction provided by those sources.

Because funding priorities are subject to change, implementation of specific actions will require close coordination between Reclamation and managing partners. Administering and managing partners interested in the management and use of the reservoir lands and waters include Reclamation, SPHST, WGFD, and Park County Weed and Pest. The responsible entity will prepare a work plan to accomplish the identified actions and request an adequate level of

funding. Reclamation can enter into cooperative agreements with permittees, users, interested public, and others to accomplish RMP objectives.

Other factors that may influence the implementation of a particular action are based on whether the action: (1) is procedural or technical, such as preparing agreements or developing specific plans; (2) addresses public health and safety concerns; (3) is required to prevent resource damage or protect wildlife species or habitats; or (4) requires large capital investments, such as facility development. Successful planning and coordination will be necessary to identify annual program priorities and will be essential in securing funding necessary to accommodate the goals and objectives of this RMP.

During the Buffalo Bill State Park Master Plan process, the desire for additional recreational opportunities were identified on Reclamation-owned lands outside of the current State Park boundary. This RMP includes those additional lands. However, per Wyoming State Statute, SPHST must complete a Site Criteria Review process before managing additional property. This includes gathering data; consulting with an evaluation team and the State Parks and Cultural Resources Commission; seeking support from the Travel, Recreation, Wildlife, and Cultural Resources Committee of the Legislature; and drafting a bill for introduction and approval by the Legislature.

1.6.1. Monitoring

Reclamation will conduct periodic monitoring on an on-going basis throughout the 10-year life of the RMP to track implementation progress, the effectiveness of management actions, the progress toward a desired condition, and to detect unacceptable effects. Monitoring activities may be reduced when goals and objectives have been reached. Ongoing evaluation of the monitoring program will allow Reclamation to make modifications in timing of improvements, timing of mitigation implementation, and changes in the RMP that are needed to take into account changing visitation needs or other changes in site conditions.

Review and monitoring should consist of:

- Accessibility Reviews
- Facility Condition Assessments
- Financial Reviews
- NEPA Compliance
- Recreation Use Data Reports
- Reservoir Management Reviews
- Water Quality Monitoring
- Weed Monitoring
- Visitor Surveys (by State Parks)

- Angler Surveys (by WGFD)

1.7. RMP APPROVAL AND REVIEWS

SPHST will submit this RMP to Reclamation for approval. Reclamation will document which RMP-proposed improvements and actions are approved to move forward in processing a Finding of No Significant Impact decision document. Reclamation may revise or amend portions of the RMP at any time. Portions that directly affect SPHST will not be amended without SPHST input and agreement.

1.8. PLAN REVISION OR AMENDMENT TO THE RMP

Reclamation may revise or amend the RMP within the established 10-year planning period as necessary. During the implementation or monitoring phases of the RMP, Reclamation, other agencies, or the public may identify problems, deficiencies, or additional issues that should be addressed. Changes in the social, economic, physical, or environmental conditions may also necessitate changes to the RMP. Minor changes in master plan project descriptions that do not conflict with the established goals and objectives would be documented by Reclamation and SPHST and would not require further public involvement and NEPA compliance. Changes that would modify one or more of the prescribed decisions and require major changes to the established goals and policies would be documented by an amendment to the RMP and may require further public involvement and NEPA compliance. Reclamation will determine the level of public involvement and NEPA compliance.

The RMP is expected to be re-evaluated at the end of the 10-year planning period to determine whether or not the RMP should be revised.

REFERENCES

Bureau of Reclamation. 2013. Recreation Facility Design Guidelines. April 2013. Available online: https://www.usbr.gov/recreation/publications/RecreationFacilitiesDesignGuidelines.pdf

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APPENDIX B: CONSULTATION AND COORDINATION

1.1. PUBLIC PROCESS

The development of the Master Plan, RMP, and EA involved multiple ongoing methods, including consultation and internal scoping with individuals and agency representatives, public meetings, and formation of a Steering Committee. Internal scoping activities were completed by meetings with the Committee, technical staff at the State Park and regional leadership, government organizations to collect input concerning management of Buffalo Bill Reservoir. The following groups/organizations that participated in the Steering Committee:

- Big Horn Basin Boat Club
- Buffalo Bill Center of the West
- Buffalo Bill Dam Visitor Center, Inc.
- Bureau of Land Management
- Cody Canal Irrigation District
- Cody Chamber of Commerce
- Cody Heritage Museum
- Interested Citizens/Adjacent Landowners
- Park County Historical Society
- National Park Service
- Northwest College
- Park County Commission
- Park County Conservation District
- Park County Economic Development
- Park County Emergency Management
- Park County Outdoor Recreation Collaborative
- Park County Planning Department
- Park Couty Travel Council
- Park County Weed and Pest
- Powell Chamber of Commerce
- State Parks and Cultural Resources Commission
- Tribes
- Wyoming Business Council
- Wyoming Department of Transportation
- Wyoming Game and Fish Department
- Wyoming Office of Outdoor Recreation

In addition to the Steering Committee members listed above, other agencies were contacted throughout the process, including but not limited to:

- Army Corps of Engineers
- Natural Resource Conservation Service
- U.S. Forest Service
- Western Area Power Association
- Wyoming Department of Environmental Quality
- Wyoming State House of Representatives

- Wyoming State Senate
- Wyoming Governor's Office

The public was asked for input during multiple phases of the planning process: pre-scoping/Master Plan Development, public scoping, and review of the draft RMP and associated analysis. Each phase involved multiple meetings with the public along with other Steering Committee meetings.

The SPHST website provided project updates, meeting notifications, and meeting materials. Reclamation and SPHST used press releases, direct mailings, and SPHST e-newsletter and social media pages to notify the public of meetings and in-person notifications about the project. The timeline of planning activities are identified in Figure 1.

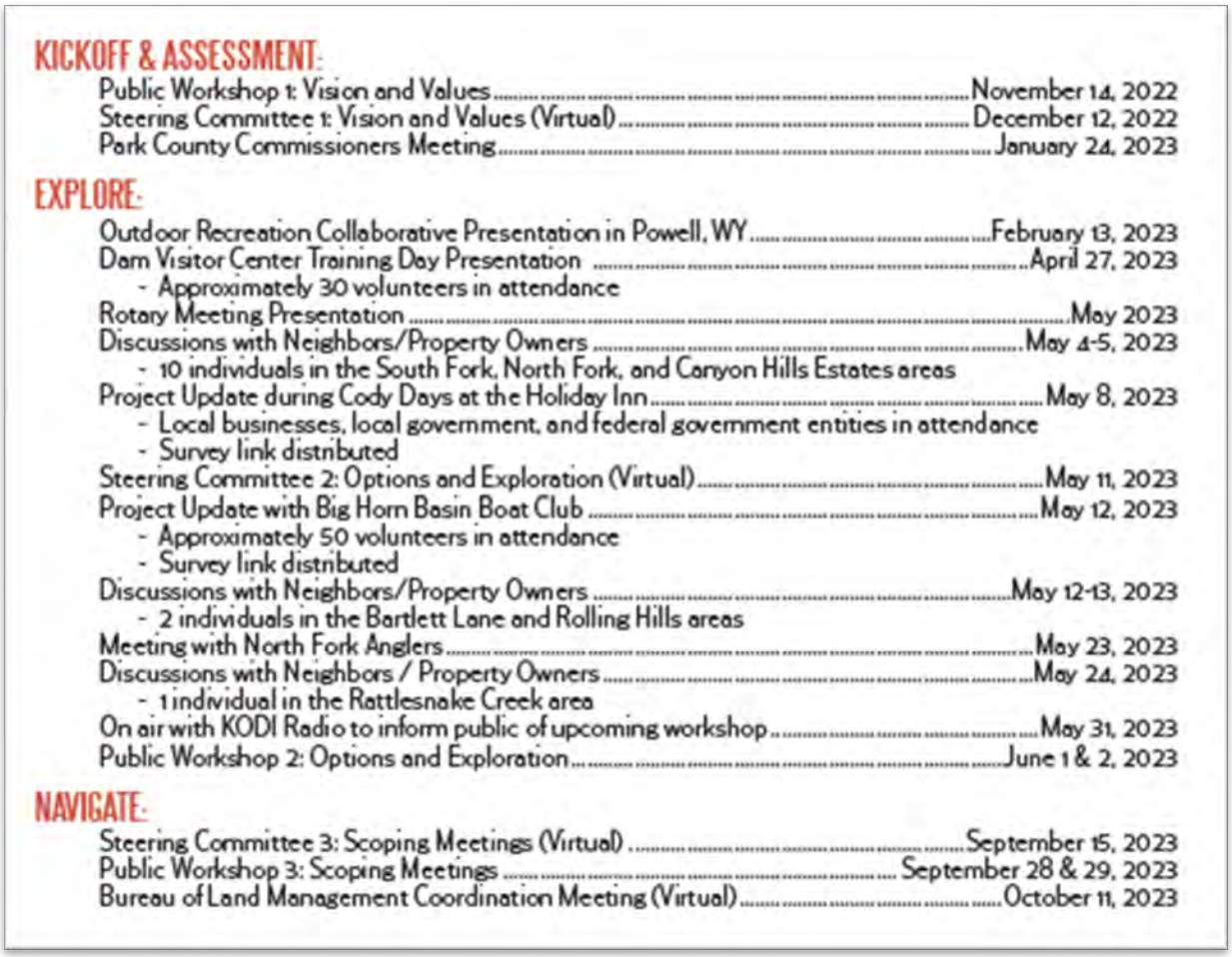

Figure 1: Timeline of Engagement Activities (Source: Master Plan)

The scoping process extended over a 45-day period (September 14, 2023, through October 29, 2023) and provided an opportunity for the public to identify issues, opportunities, and to finalize the facility improvements for managing resources and recreation use. Each meeting, located in Cody, Wyoming, was conducted in an open-house format that included a series of exhibits about the facility improvements, the RMP, and associated analysis process. During pre-scoping preliminary concepts for site improvements at each recreation area were developed. Meeting participants were encouraged to discuss their issues and questions with staff. A complete summary of public input from scoping is documented in the "Public Scoping Report."

1.2. TRIBAL COORDINATION

Reclamation will consult with the appropriate Tribes as outlined in the Bureau of Reclamation's Working with Indian Tribal Government: Consultation, Cultural Awareness, and Protocol Guidelines - July 2020.

1.3. LIST OF PREPARERS

This RMP/EA was prepared by an interdisciplinary team of staff from Reclamation, SPHST, and specialists from independent consulting firms. Table 1 lists the core team members and key contributors that prepared or contributed to the development. In addition to the list of preparers, the RMP/EA and associated Master Plan were reviewed by SPSHT's Construction and Engineering, Law Enforcement, and Concession and Revenue sections.

Table 1. List of Preparers

Agency/Firm	Member	Role
Reclamation (Missouri Basin Region)	Joseph G. Felgenhauer	Outdoor Recreation Planner
Reclamation (Missouri Basin Region)	Shain Wright	NEPA Compliance
Reclamation (Missouri Basin Region)	Nathan Shelley	Archaeologist
Reclamation (Wyoming Area Office)	Lyle D. Myler	Area Manager, Authorized Official
Wyoming State Parks and Cultural Resources	Dave Glenn	Director of State Parks and Cultural Resources
Wyoming State Parks, Historic Sites, and Trails	Nick Neylon	Deputy Director
Wyoming State Parks, Historic Sites, and Trails	Brooks Jordan	Bighorn District Manager
Wyoming State Parks, Historic Sites, and Trails	Dan Marty	Buffalo Bill Park Superintendent
Wyoming State Parks, Historic Sites, and Trails	Carly-Ann Carruthers	Planning and Grants Manager
Wyoming State Parks, Historic Sites, and Trails	Dan Bach	Senior Planner
Logan Simpson	Kristina Kachur Webb	NEPA Coordinator

Agency/Firm	Member	Role
Logan Simpson	Jeremy Call	NEPA Advisor
Logan Simpson	Sarah Smith	Resource Specialist/GIS
Logan Simpson	Andrew Braker	Resource Specialist
Logan Simpson	Ted Hoefer	Archaeologist
Logan Simpson	Brian Taylor	Resource Specialist/GIS
West, Inc.	Casi Lathan	Associate Biologist
West, Inc.	Jason Klein	Consulting Biologist
West, Inc.	Caroline Brown	Consulting Biologist
West, Inc.	Julie Dickey	Consulting Biologist

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BUFFALO BILL RESERVOIR AND STATE PARK

2023 MASTER PLAN

PLAN PREPARED FOR:

PLAN PREPARED BY:

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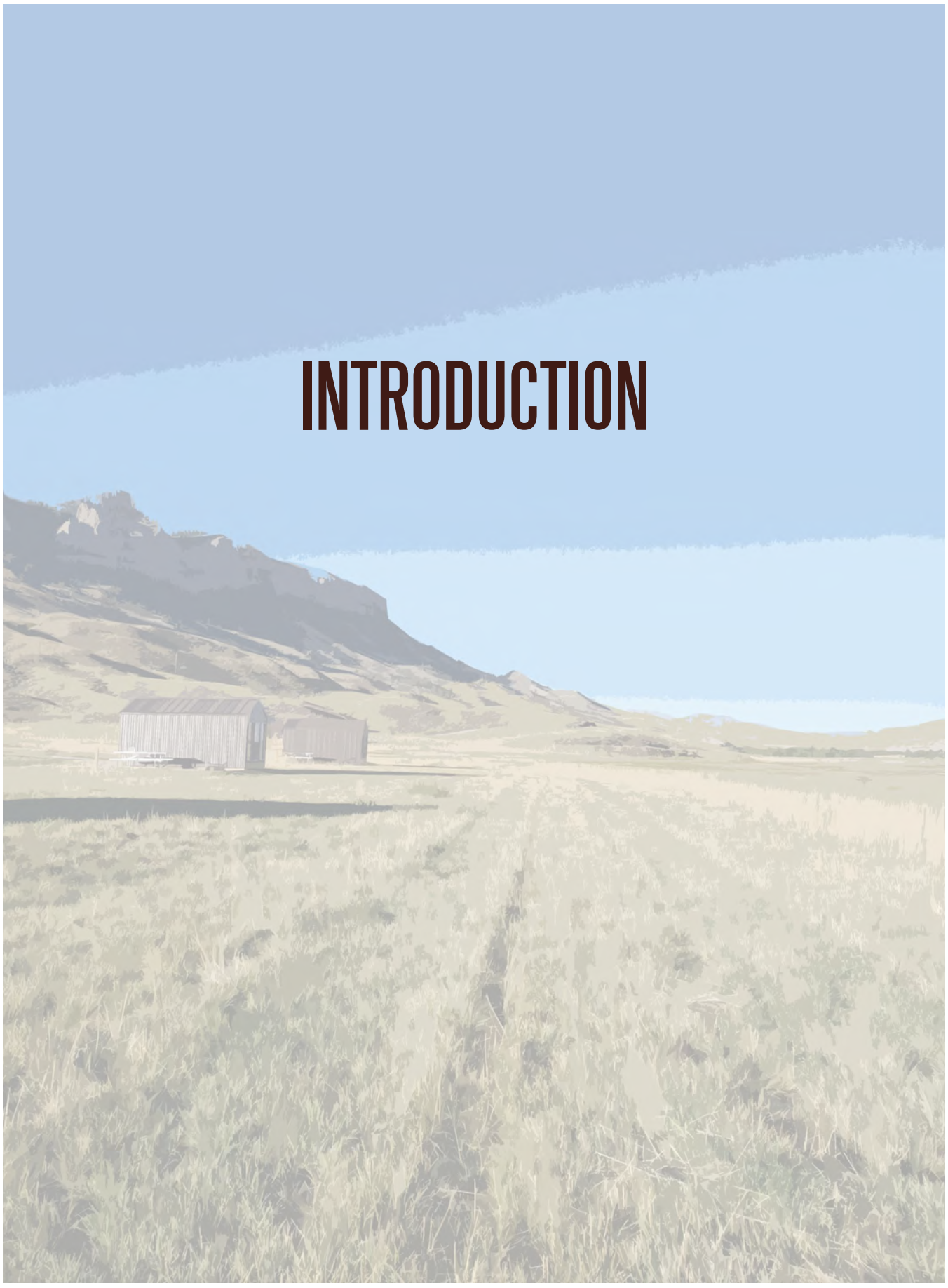
INTRODUCTION



INTRODUCTION

The following master plan report was developed through a cooperative effort between Wyoming State Parks, Historic Sites, and Trails (SPHST), a division of The Wyoming Department of State Parks and Cultural Resources (SPCR) and their federal partner, the U.S. Bureau of Reclamation (Reclamation). SPHST authorized the preparation of this report in early August of 2022 and a project kickoff meeting was held later that month. The selected planning consultant team then worked with staff to establish a steering committee and outline a strategy to engage the public.

The outreach to identify members for the steering committee was a robust effort and involved contacting over one hundred community, state, and federal managers, leaders, and interested citizens to inform them of this project and develop a working group to assist in the development of this document.

This included representatives from the following organizations, just to name a few:

- National Park Service
- Bureau of Reclamation
- Bureau of Land Management
- Tribal Partners (12 were contacted)
- Wyoming State Parks and Cultural Resources Commission
- Wyoming Office of Outdoor Recreation
- Wyoming Game and Fish
- Wyoming Department of Transportation
- Wyoming Business Council
- Powell County Chamber of Commerce
- Park County Commissioners
- Park County Historical Society
- Park County Planning Department
- Park County Economic Development
- Park County Emergency Management
- Park County Travel Council
- Park County Outdoor Recreation Collaborative (PCORC)
- Park County Weed and Pest
- Cody Chamber of Commerce
- Cody Heritage Museum
- Cody Canal Irrigation District
- Buffalo Bill Center of the West
- Buffalo Bill Dam Visitor Center, Inc.
- Northwest College
- Big Horn Basin Boat Club
- South Fork Neighborhood/Bartlett Lane Group

Following the selection of a core Steering Committee team, SPHST and Reclamation worked closely to coordinate and engage with the Steering Committee working group and the public on a regular and ongoing basis to gather initial thoughts, organize ideas, develop concepts, and coalesce this input into this master plan document. A summary of this process can be found in the Community Engagement Process section of this report with additional detail on each community open house provided in the appendices.

Master Plans are an essential tool for State Parks managers and leadership as they provide a vision to guide preservation, protection, development, and future use of the park in a manner that supports the SPCR and SPHST's mission to improve communities and enrich lives, and which stewards these public assets for future generations. The 1988 Buffalo Bill State Park Master Plan has guided park improvements and development since its publication – even recently with development pressures brought on by the surge in park visitation during the COVID-19 pandemic. Recent campsite expansion at North Fork and Stagecoach were both contemplated and proposed in the 1988 plan. However, while this plan has provided excellent guidance for the last thirty years, many trends and visitor demands have changed since 1988.

> *The Park, which is open year-round, saw nearly 92,000 visitors in 2019, an increase of 18% from the 5-year average, and experienced a 55% increase in revenue during 2020 as the pandemic spurred a surge in visitation.*

The average campsite occupancy rate during the May-September 2020 season was 74%; during the busiest month of July campgrounds were at 96% capacity. It is estimated that during the summer, 40% of the visitors are residents and that number jumps to 80% during the winter season.

Based on just these basic statistics, an updated plan for the park is clearly needed to account for changes in use and the sheer volume of impact of this increased visitation. The 2019 Wyoming State Park's Visitor Survey and other outreach developed by SPHST provides additional data about who is visiting the park and why, and will be discussed further in this report.

The 2024 plan builds on the improvements completed over the last thirty years and sets a new course based on public needs and resource considerations. It is important to understand that Buffalo Bill Reservoir and State Park is more than just a stop on the way to Yellowstone and has a unique visitor profile and is itself a destination for local users and visitors from outside the community. During the surveys, public engagement, and steering committee meetings it became evident that visitors valued many of the existing offerings like boating, camping, and picnicking at the park. At the same time, we heard that new improvements and access would be welcomed and supported. Improved signage and interpretation as well as hiking trails and additional camping were requested.

As ideas were documented, three major improvement categories emerged. There are many areas of that park where improvements have been recommended. All improvements fall in to one of these categories:

- **Enhancement of Existing Facilities**
  Many of the existing beloved places at the park need improvements and upgrades to sustain them and maintain their value. Additionally, there are sites at the park that have been tilted up quickly in reaction to increased visitation that need to be formalized to provide a similar quality of experience to the more established sites.

- **New Active Recreation**
  During the engagement process we heard from many participants that there was a need to bring new active recreation offerings to the park. This included adding more hiking trails at both novice and more challenging levels, primitive camping options, and new offerings such as dog parks.

- **Access to New Areas**
  With increased usage there were also requests for access to more of the park. Most notably this includes recommendations to convert some of the Diamond Creek/Cedar Mountain area to SPHST management and develop hiking trails and primitive camping. Additional access at South Fork and enhancement of access at Central Shores was also requested.

The 2024 Master Plan recommendations are organized around an overview plan of the reservoir starting at the Cedar Mountain / Diamond Creek area and circling counterclockwise back to Marquette. Each improvement area has a breakout map and corresponding description to provide more detail on the proposed recommendations.

This master plan attempts to capture improvements and recommendations identified during the creation of this document. However it is essential to recognize that over the life of a master plan that could span multiple decades, new opportunities for enhancement are likely to develop. Trends in park use, recreation, as well as influences such as new technologies may emerge. Master Plans will inevitably have to flex to incorporate these needs as they arise.

One such area of potential growth is the integration of emerging technologies. For instance, the installation of electric vehicle (EV) charging stations could be appropriate in the future. These technologies were considered during the writing of this plan, however specific locations were not identified. By remaining open to emerging trends and opportunities, we can ensure that Buffalo Bill Reservoir and State Park continues to thrive and adapt to the changing needs of all users.

HOW TO USE THIS DOCUMENT

This document was developed to guide the next ten years of Buffalo Bill Reservoir and State Park. It is intended to provide aspirational ideas and larger concepts while also being a practical and applicable guiding document or "road map" for State Parks staff and leadership to act upon on a day-to-day basis. The ideas cataloged here can certainly be re-prioritized as needs change or funding sources are identified but the hope is that staff, the consultant team, and the community have together highlighted the projects that will bring the most value to the park and its users for the next few decades and that the public engagement process has created partnerships that can build momentum to move forward.

Basic program and concept ideas were developed for each proposed project area at the park. These frameworks were intended to function as a starting point for individual project development and evolution. Further analysis, investigation, public engagement, and design will be needed to take these projects from concept to implementation.

In addition to the information included in this master plan document, a Resource Management Plan (RMP) and corresponding Environmental Assessment (EA) were produced as part of this project. These three documents are intended to work together to meet state and federal requirements, help guide management decisions, provide a practical road map to implementation, as well as publicly communicate the community engagement and working group processes.

Master Plan
The Master Plan document is the origin point for the Resource Management Plan and the Environmental Assessment. It records the public engagement efforts, provides higher level analysis that is more understandable and easier to present to the public, and outlines the projects and recommendations proposed for the coming decades. It is intended for succinct and direct communication of intent and for use in fund-raising and project implementation.

Resource Management Plan and Environmental Assessment
The Resource Management Plan and Environmental Assessment provide the deeper, detailed study of site features and context to ensure that environmental impacts were disclosed in the decision-making processes associated with proposed improvements and recommendations of the Master Planning process. These are, of course, federally required efforts but they also function to provide important detailed analysis to more sophisticated managers and citizens interested in the stewardship of Buffalo Bill Reservoir and State Park.

Together these documents provide the needed regulatory approval and compliance while providing SPHST with a tool to talk to staff and the public about the proposed recommendations at a higher level. They can be used together or separately as needed to communicate varying levels of detail and information.

TIMELINE

01 VISION & VALUES
Kickoff, Inventory, & Assessment

02 EXPLORE
Options

03 NAVIGATE
Preferred Direction

04 LAUNCH
Formalizing RMP & Strategies

05 DRAFT
RMP & EA

06 FINAL
RMP, EA, & Decision

2022

- AUG
  - Project Kickoff Meeting (Virtual) - [August 15, 2022]
- SEP
  - Kickoff Meeting and Site Tour - [September 26, 2022]
  - Bureau of Reclamation Kickoff Meeting - [September 27, 2022]
- OCT
- NOV
  - Public Workshop #1 *Vision and Values* - [November 14, 2022]
- DEC
  - Steering Committee #1 *Vision and Values* (Virtual) - [December 12, 2022]

2023

- JAN
  - Develop Big Picture Ideas & Options - [January 2, 2023 to May 10, 2023]
- FEB
- MAR
- APR
- MAY
  - Steering Committee #2 *Options and Exploration* (Virtual) - [May 11, 2023]
- JUN
  - Public Workshop #2 *Options and Exploration* - [June 1 & 2, 2023]
  - Refine Proposed Alternatives - [June 5, 2023 to September 14, 2023]
- JUL
- AUG
- SEP
  - Steering Committee #3 *Scoping Meetings* (Virtual) - [September 15, 2023]
  - Public Workshop #3 *Scoping Meetings* - [September 28 & 29, 2023]
- OCT
  - Bureau of Land Management Coordination Meeting (Virtual) - [October 11, 2023]
- NOV
- DEC
  - Finalize Master Plan/Alternatives - [December 22, 2023]

2024

- JAN
- FEB
- MAR
  - Preliminary Administrative RMP/EA Draft - [March 2024]
- APR
  - Public Draft RMP/EA Released - [April 2024]
- MAY
  - Public Meeting - [May 28 & 29, 2024]
- JUN
- JUL
- AUG
- SEP
- OCT
  - Final RMP/FONSI (Tentative) - [October 2024]
  - SPCR Commission Recommendation - [October 2024]
- NOV
  - Appeal Period (30 days) - [November 2024]
- DEC
  - Bureau of Reclamation Decision - [December 2024]

CONTEXT, EXISTING CONDITIONS & PARK TRENDS

HISTORY OF THE PARK

Many indigenous people lived in modern day Buffalo Bill Reservoir and State Park and the surrounding region for thousands of generations. It is the homeland of the Shoshone and the Crow. Several other tribes traveled to the area to hunt the sizable bison herds. The Bannock, Nez Perce, Arapaho, Lakota, Cheyenne, and Blackfeet were among them.

The first Euro-Americans to explore the region were fur trappers and mountain men, such as John Colter. When he first ventured to the area, he encountered the Crow and Shoshone tribes who referred to the Shoshone River as "Stinking Water" for the sulfurous odor produced by geothermal features along the river. He would later relay notable geographical information and tell stories of fire and brimstone, earning the nickname "Colter's Hell" for the area at the mouth of the Shoshone Canyon. The name stuck. Although geothermal activity has since reduced, it is still called " Colter's Hell" to this day.

One of the most famous settlers in the area was William F. "Buffalo Bill" Cody, who arrived in the 1870s as a guide for a survey expedition. The famous showman was impressed by the potential of the region for agriculture, tourism, and hunting. He and a group of investors founded the nearby town of Cody in 1896.

Buffalo Bill at Irma Hotel in Cody, WY | Image: truewestmagazine.com

To make the area more attractive to settlers, Buffalo Bill lobbied the Wyoming legislature to change the name of the Stinking Water River to the Shoshone River. He and his supporters successfully argued that the name was derogatory and inaccurate, as the river was clear and clean. It was officially renamed in 1901. Cody and his partners began digging a canal that would carry water from the Shoshone River to Cody and the surrounding farms and ranches. They encountered many setbacks, and eventually turned to the federal government to step in to help. It took several years of lobbying and negotiating before the federal government finally agreed.

The construction of Shoshone Dam began in 1905, after the project was authorized by the U.S. Congress as one of the first federal irrigation projects in the West. On January 15, 1910, workers finished construction in the cold of minus 15 degrees. It cost $1,345,000 and the lives of 7 men.

Final Bucket of Concrete Poured | Image: wyomingtalesandtrails.com

At the time, Shoshone dam was the tallest in the world, standing at 325 feet. It was renamed in 1946 to honor Buffalo Bill Cody. The dam was later listed on the National Register of Historic Places and named a National Civil Engineering Landmark. In 1993, the crest of the dam was raised 25 feet to increase the reservoir storage capacity.

Top of Dam - approximately 1910 | Image: wyomingtalesandtrails.com

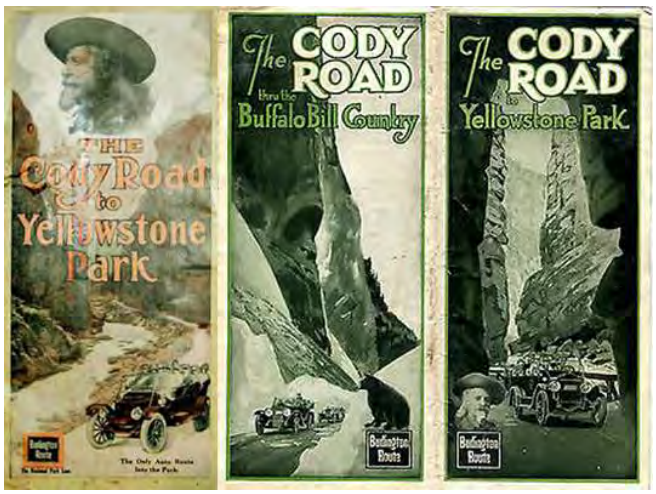
15 miles upstream from Cody, the little town of Marquette was located at the confluence of the North and South Forks of the Shoshone River. It was commonly referred to as the "Poverty Flats." Before being flooded by the reservoir, it had a barbershop, dance hall, general store, schoolhouse, saloon, sawmill, graveyard, and several residences. Some of the buildings were relocated to higher ground, but others were left to be submerged.

Marquette General Store | Image: wyomingtalesandtrails.com

The construction of Cody Road (North Fork Highway) was another major project that shaped Buffalo Bill State Park and the region as a whole. It was built to connect the town of Cody with the East Entrance of Yellowstone National Park, passing through Shoshone Canyon and along the north shore of the reservoir. It opened in 1903 and was incorporated into Federal Highway 20 in 1926. Before its construction, the only practical route to Yellowstone was through Montana. Cody Road was considered one of the most scenic and engineeringly difficult roads in the country, with several tunnels bored through solid rock.

Triple Tunnels Postcard | Image: *Along Wyoming's Historic Highway 20*

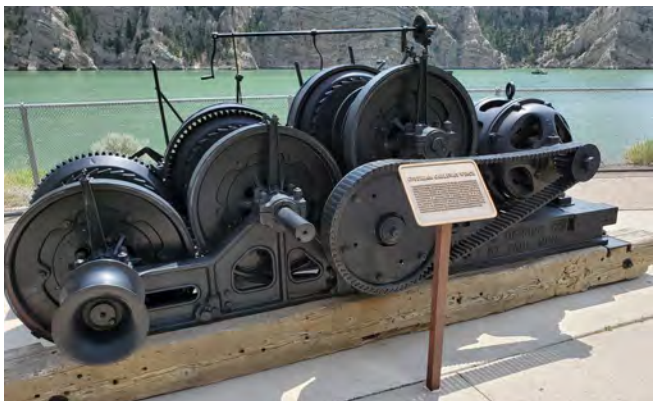
It became a tourist attraction in and of itself, with many ads featuring the tagline, "If you don't see the Cody Road you don't see Yellowstone."



Burlington Ads for Cody Road | Image: wyomingtalesandtrails.com

Buffalo Bill State Park was established in 1957. The 1993 expansion project inundated many former recreation areas and facilities along the original shoreline. The Park was redeveloped in response to the expansion project.

Balanced Plunger Hydraulic Valve and Ball Plug | Image: Ayres



Upstream Cableway Winch | Image: Ayres

PREVIOUS STUDIES

1988 Master Plan

The 1988 Buffalo Bill State Park Master Plan was published by the Wyoming Recreation Commission in response to plans to raise Buffalo Bill Dam and increase reservoir storage capacity. The purpose of the Master Plan was to replace existing facilities lost to reservoir expansion. Many factors were considered in the planning process. Improvements needed to be aesthetically pleasing, environmentally sound, economically viable, and considerate of the needs of both resident and nonresident visitors.

The following areas were identified as key locations for recreational development, as they had the best potential for success.

North Shore Bay:

- Boat Launch
- Picnic Area
- Campground
- Sailboard Access
- Marina
- Boat Storage
- Country Store
- Campground

Group Events Site:

- Large Group Pavilion
- Picnic Area
- Scenic Overlook
- Sailboard Access
- Park Office/Visitor Center

South Shore:

- Primitive Campground
- Boat Launch

Eagle Valley:

- Group Lodge/Picnic Site
- Park Shop
- Superintendent's Residence
- Staff Residence

North Fork:

- Campground
- River Access
- Picnic Area
- Amphitheater
- Group Picnic Site
- Dump Station

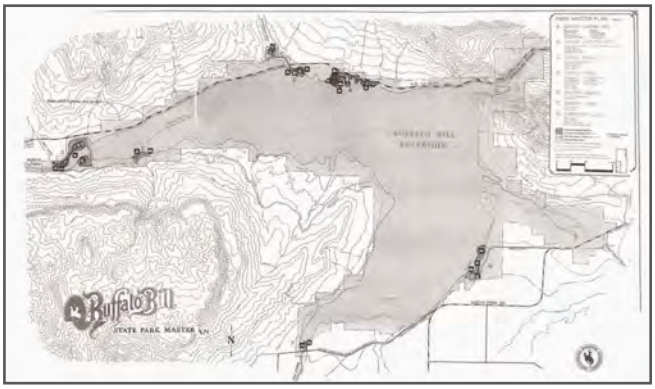
South Fork:

- River Access
- Picnic Area

Bartlett Lane:

- Boat Launch
- Picnic Area
- Group Picnic Site
- Big Horn Basin Boat Club

Master Plan Cover | Image: 1988 Buffalo Bill State Park Master Plan



Master Plan Map | Image: 1988 Buffalo Bill State Park Master Plan

Most of the improvements or changes proposed in the 1988 master plan have been implemented.

2019 Visitor Survey Report

In 2018, the Wyoming State Parks, Historic Sites & Trails (WYO Parks) system saw an influx of 4.35 million visitors, a figure that rose to 4.42 million in 2019.

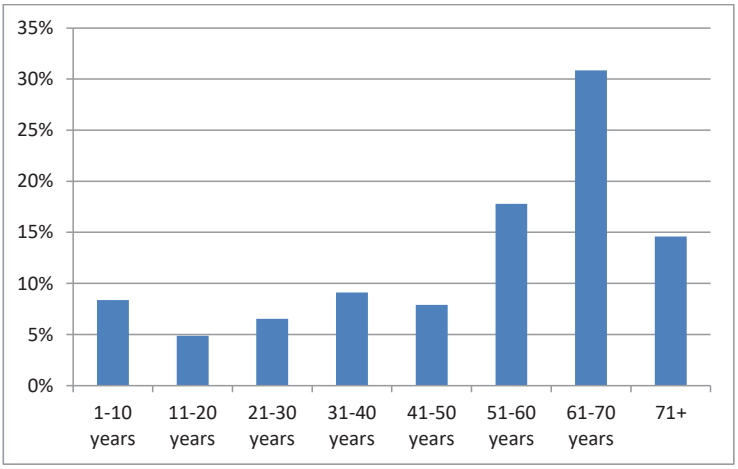
Comprehending the demographic profile of visitors to Wyoming's parks and historic sites is crucial for State Parks in terms of resource distribution and future planning. To gain a deeper insight into these demographics, State Parks carries out a visitor usage survey every five years, collecting data on various factors that impact the parks and historic sites across the system.

Each state park and historic site is considered individually due to their unique experiences and amenities. The results of the survey provided a summary of visitor behavior and demographic information, such as age groups, activities engaged in, and duration of stay.

Summer Survey Results for Buffalo Bill State Park:

1. Name of Park/Site (# of Surveys)	BUFFALO BILL (324)		SUMMER	
2. Have you visited this Park/Historic Site before?	Yes	54%	No	46%
3. How many days do you plan to visit this park or site in 2019?				16 Days
4. Do you have an annual Parks day-use permit or an annual camping permit?	Day-Use Permit			19%
	Camping Permit			10%
	Both Day-Use and Camping Permit			19%
	Neither			52%
4a. How many days do you use, or plan to use, your annual day-use permit in 2019?				33 Days
4b. How many days do you use, or plan to use, your annual camping permit in 2019?				22 Days
4c. If we did not offer an annual camping permit, how many nights would you camp?				11 Days
5. Did you have contact with Park/Historic Site Staff?	Yes	94%	No	6%
5a. How helpful did you find Park/Historic Site Staff?			Very Helpful	95%
			Fairly Helpful	5%
			Not Very Helpful	0%
			Not At All Helpful	0%
6. During your most recent visit, who were you traveling with?			Alone	15%
			Family & Friends	82%
			Organized Group	3%
7. During your visit, including yourself, how many people were in your vehicle?				2.5
8. Average age of visitors to the State Park/Historic Site				51 Years
% People staying over vs. day-use?	Day Use	73%	Overnight	27%

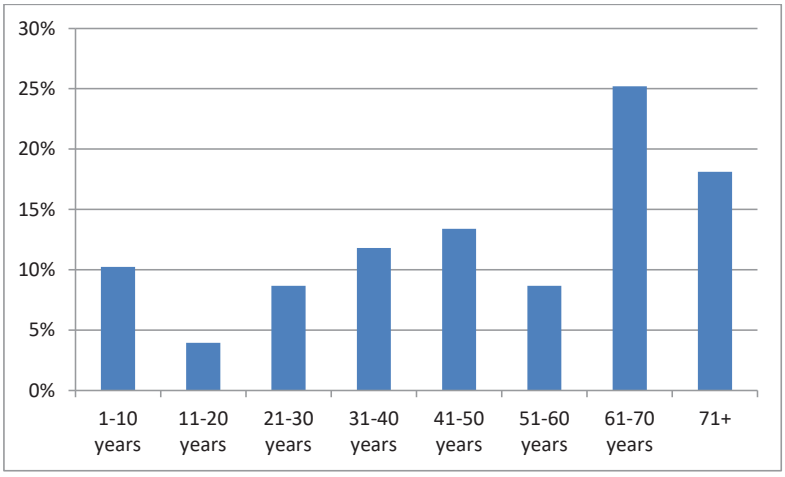
Buffalo Bill State Park, Visitor Age Distribution, Summer



Winter Survey Results for Buffalo Bill State Park:

1. Name of Park/Site (# of Surveys)	BUFFALO BILL (69)		WINTER	
2. Have you visited this Park/Historic Site before?	Yes	80%	No	20%
3. How many days do you plan to visit this park or site in 2019? (Average)				43 Days
4. Do you have an annual Parks day-use permit or an annual camping permit?	Day-Use Permit			40%
	Camping Permit			1%
	Both Day-Use and Camping Permit			19%
	Neither			40%
4a. How many days do you use, or plan to use, your annual day-use permit in 2019?				63 Days
4b. How many days do you use, or plan to use, your annual camping permit in 2019?				39 Days
4c. If we did not offer an annual camping permit, how many nights would you camp?				27 Days
5. Did you have contact with Park/Historic Site Staff?	Yes	89%	No	11%
5a. How helpful did you find Park/Historic Site Staff?			Very Helpful	98%
			Fairly Helpful	2%
			Not Very Helpful	0%
			Not At All Helpful	0%
6. During your most recent visit, who were you traveling with?			Alone	29%
			Friends and Family	70%
			Organized Group	1%
7. During your visit, including yourself, how many people were in your vehicle?				2.09
8. Average age of visitors to the State Park/Historic Site				50 Years

Buffalo Bill State Park, Visitor Age Distribution, Winter



CONTEXT

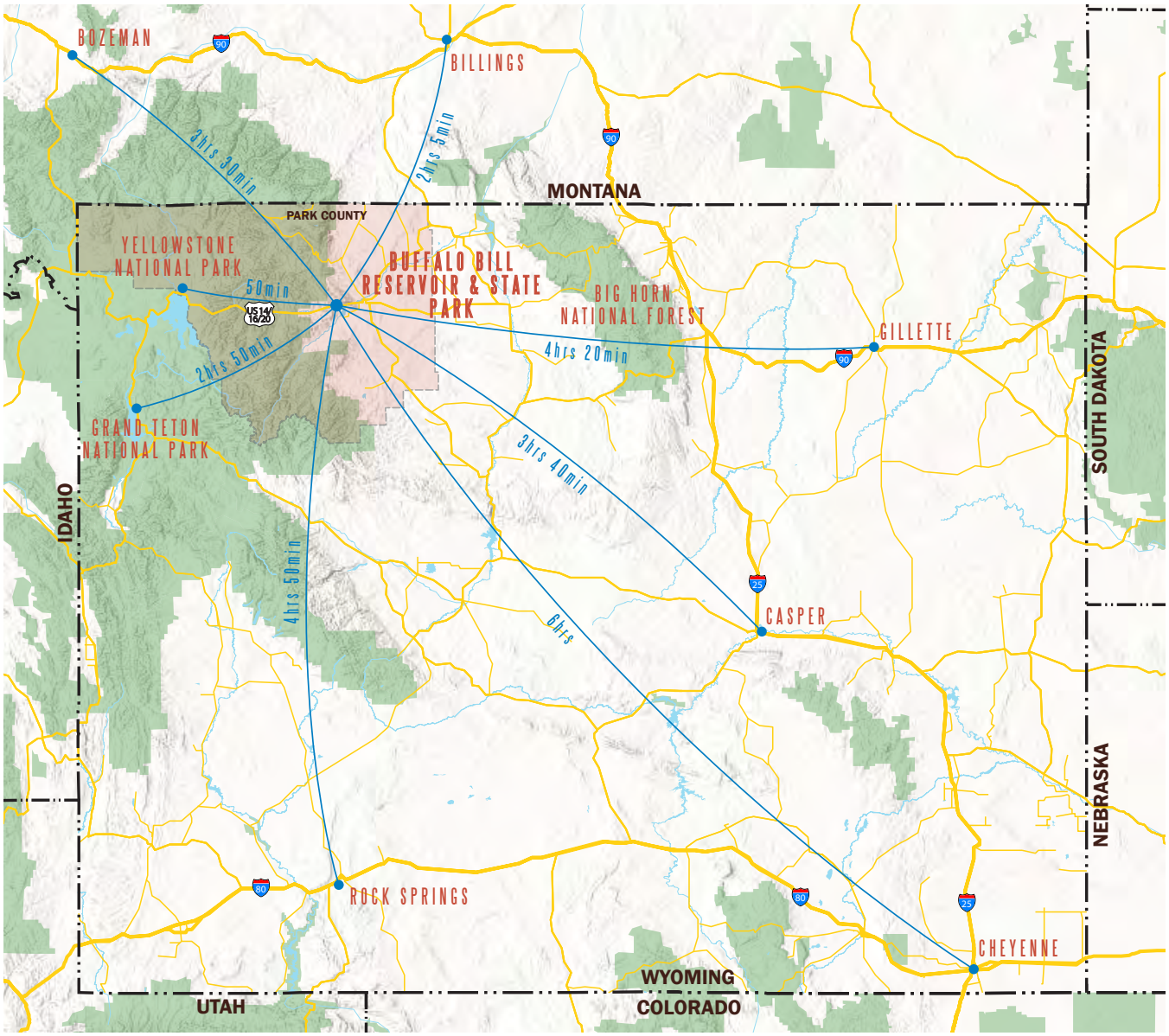
Regional Context

Park County, Wyoming is home to Buffalo Bill Reservoir and State Park and is located in the northwest corner of the state. The county has a diverse landscape, ranging from high mountains to rolling plains, and is rich in wildlife and natural resources.

A significant portion of Park County is held under state or federal control. Yellowstone National Park and Shoshone National Forest make up the western half of the county, with Buffalo Bill Reservoir and State Park flanking their eastern border. It is located roughly in the center of the county.

Park County is a major tourism destination, attracting visitors from all over the state and the country to see its natural wonders. Tourist routes to Yellowstone and Grand Teton National Parks pass directly through Park County. US Highway 14/16/20 connects travelers from Interstate I-90, which can be accessed approximately 2 hours from Buffalo Bill Reservoir and State Park.

The State Park's relationship to other attractions and location along a major highway make it highly accessible to visitors, especially those from Wyoming and Montana.



Regional Distance Map | Buffalo Bill Reservoir & State Park within greater Wyoming

Location & Adjacent Lands

Buffalo Bill Reservoir and State Park is located approximately 7 miles west of Cody, Wyoming, on the eastern edge of Shoshone National Forest.

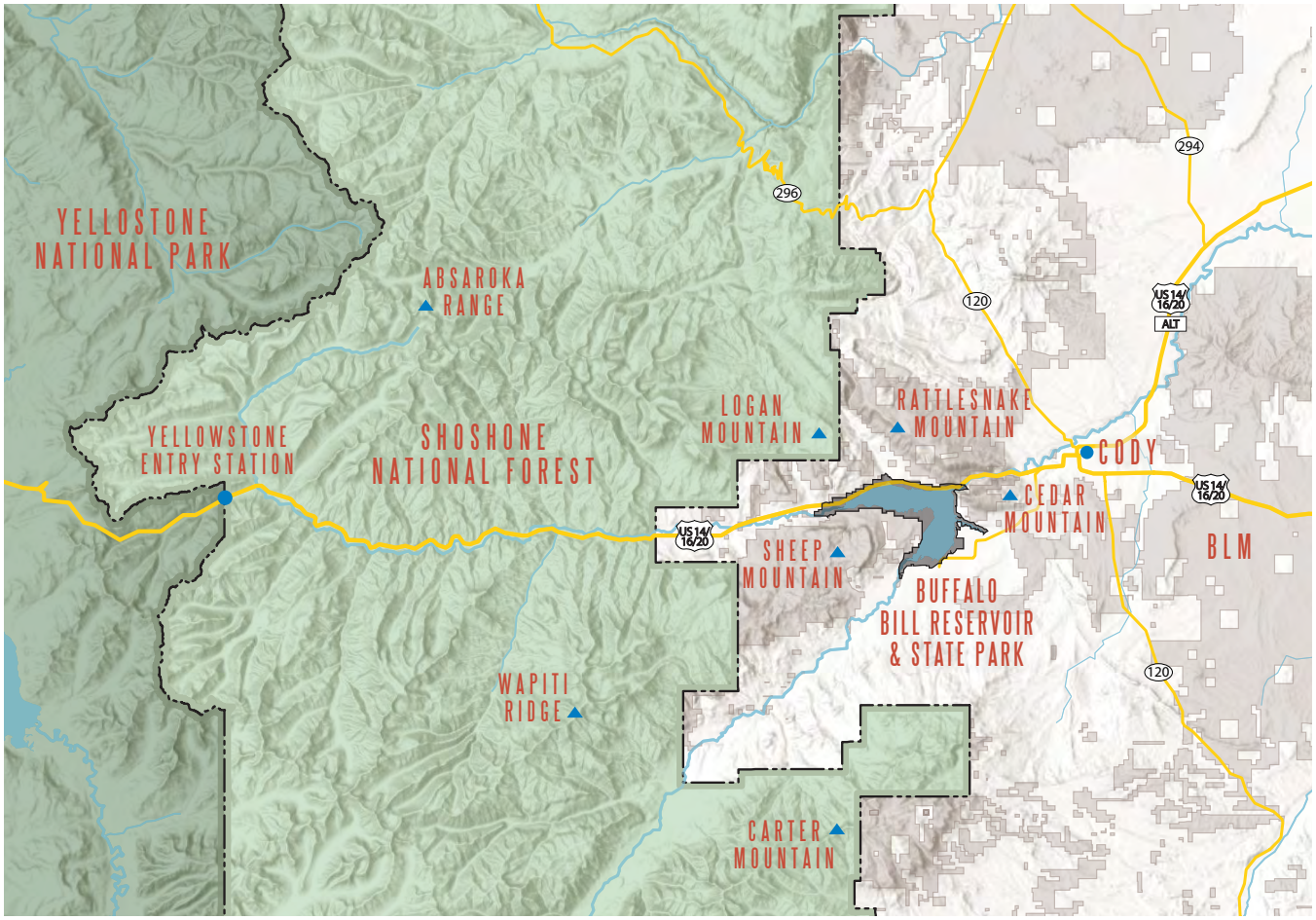
Nearly all vehicular access to Buffalo Bill Reservoir and State Park is from US 14/16/20. It is a major tourist route, connecting the park with Shoshone National Forest and Yellowstone to the west, and Shoshone Canyon and Cody to the east.

The population of Cody is 10,066 (US Census 2022). It is primarily known for being a gateway and base camp for Yellowstone excursions. It hosts many tourist attractions such as museums, summer rodeos, restaurants, and shopping locations. Buffalo Bill Reservoir and State Park is located adjacent to land of various different ownership types. A significant portion of adjacent land is federally controlled and available for public use. Notable examples include Bureau of Land Management (BLM) land, Shoshone National Forest, and Yellowstone National Park.

BLM land directly borders a significant portion of Buffalo Bill Reservoir and State Park land. If expansion of State Park activities are desired, inter-agency coordination becomes essential. Examples of such projects could include:

- Improve the county road to Stagecoach Campground and route new utilities below road construction
- Transference of adjacent land to State Park

Several notable public hiking trails are located on adjacent BLM land and are often associated with Buffalo Bill Reservoir and State Park even though they are managed by different entities.



Vicinity Map | Location of Buffalo Bill Reservoir & State Park in relation to adjacent land

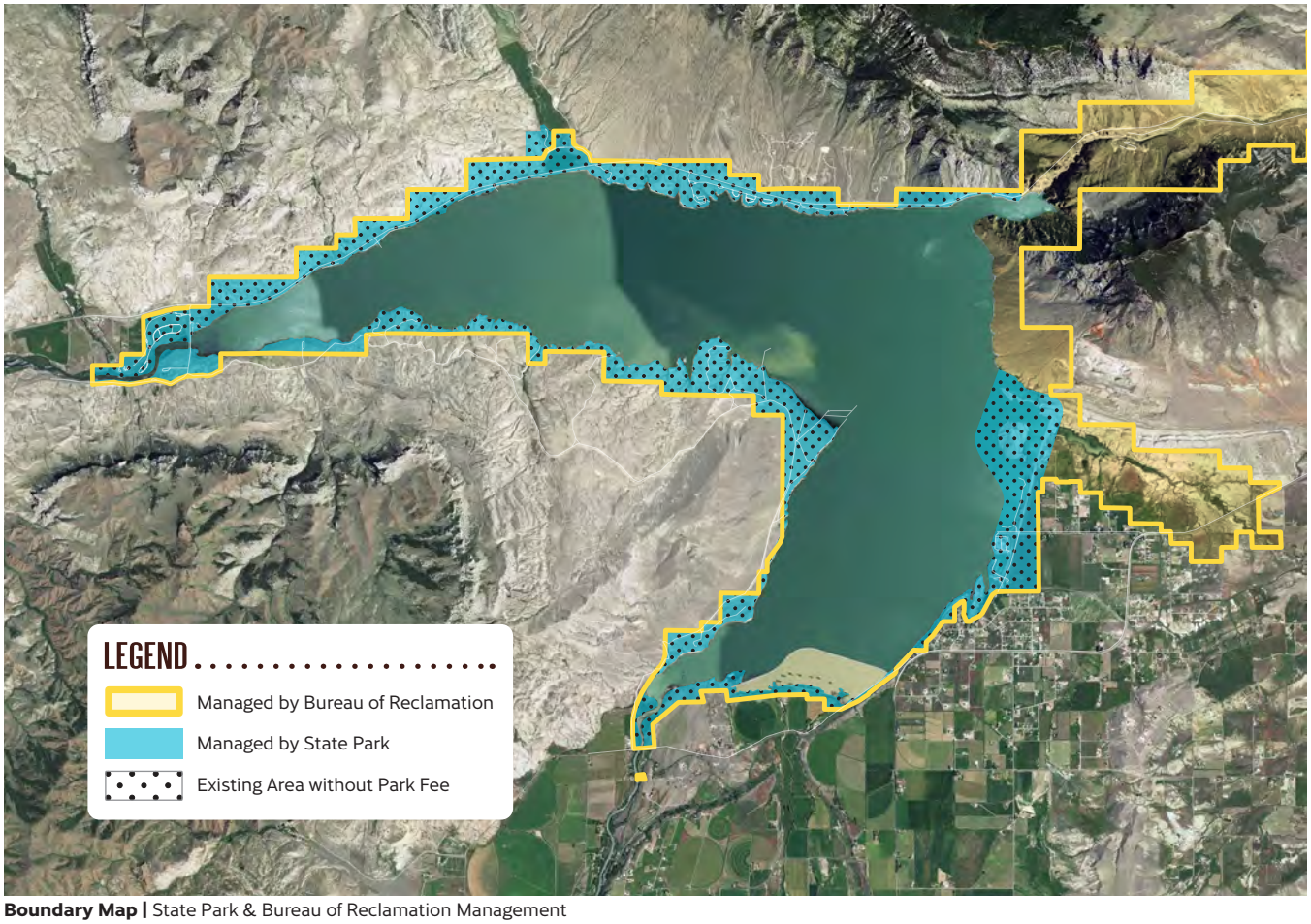
Park Boundary & Management Partners

Buffalo Bill Reservoir and State Park can be subdivided into two separate areas: land managed by the State Park and land managed by the Bureau of Reclamation. For someone not familiar with the collaborative relationship of the two management areas, it is easy to mistake them as one and the same.

The most easily recognized distinction is State Park fee areas, where entry booths, signs, and fence lines delineate the boundary. Only a portion of state park managed lands require an entry fee. Land along the southern shoreline is largely undeveloped and inaccessible to the average park user. Therefore, fees are not required.

The relationship between Buffalo Bill State Park and Bureau of Reclamation is highly collaborative. However, this collaborative arrangement between Buffalo Bill State Park and the Bureau of Reclamation is not without challenges. While the State Park focuses on recreational activities, conservation, and visitor services, the Bureau of Reclamation primarily oversees water resource management, irrigation, and hydroelectric power generation. As a result, their priorities and expertise differ.

The differences in management expertise become evident in areas where some informal recreational use is currently occurring on Bureau of Reclamation land. These areas, lacking the oversight provided by the State Park, can lead to unintended consequences. For instance, hikers and campers may inadvertently disturb sensitive habitats, endanger wildlife, or leave behind trash. Without proper supervision, these activities pose risks to both the environment and public safety. Wyoming State Parks and Bureau of Reclamation worked collaboratively during this master-planning process to discuss changes in management in an effort to better regulate to Buffalo Bill Reservoir and State Park.



Boundary Map | State Park & Bureau of Reclamation Management

CURRENT AMENITIES & AREAS FOR IMPROVEMENT

The park is a popular recreation destination for both tourists and local visitors. The unique ecological, geological, and geo-hydrological characteristics attract outdoor enthusiasts, campers, those interested in water recreation, and those interested in natural history. Within Buffalo Bill Reservoir and State Park, camping and water recreation are the primary experiences. However, hiking trails are found within portions of the State Park and adjacent BLM land management area.

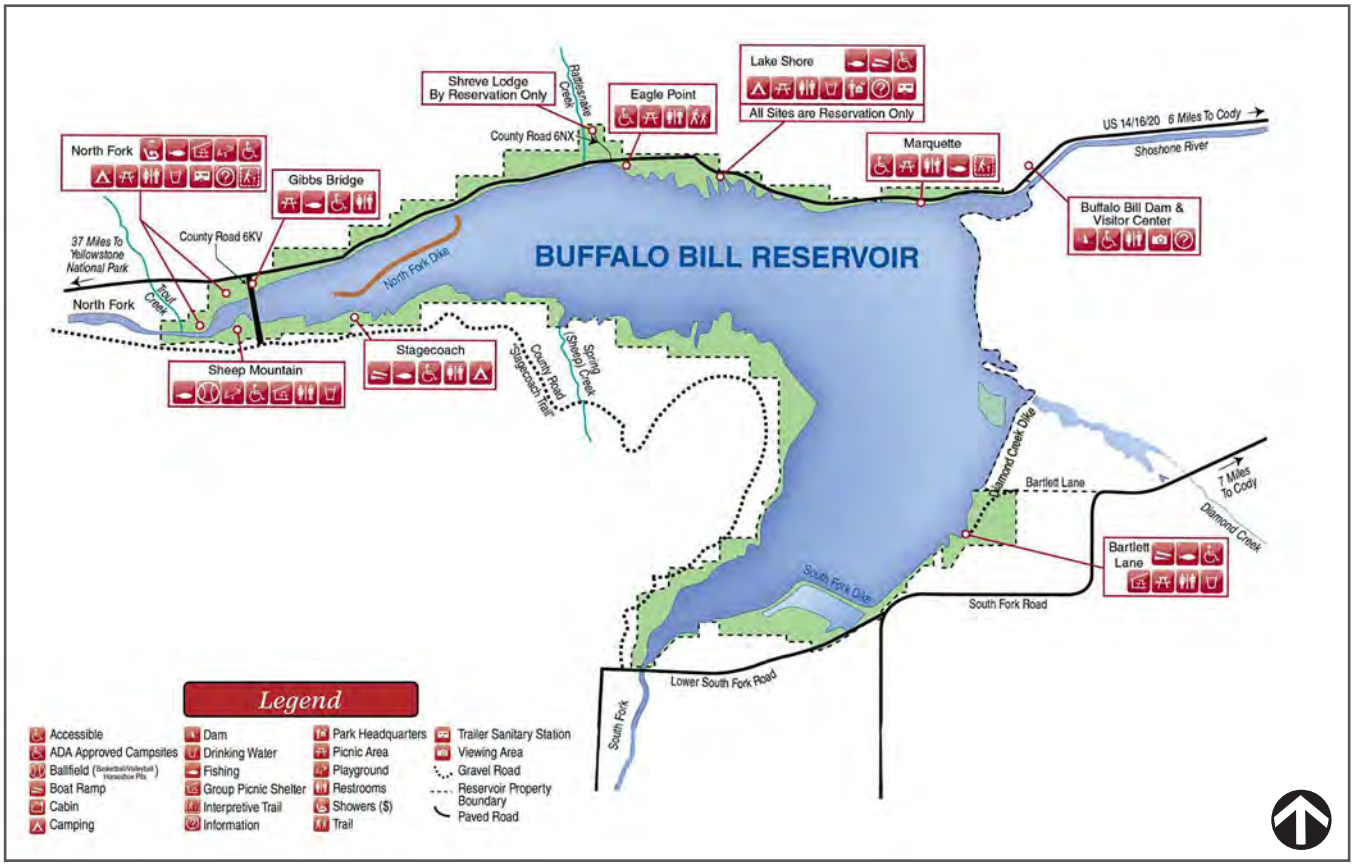
The park is open and utilized year-round. The highest use is during the summer months (May-September) as visitors are traveling to or from Yellowstone National Park. Locals utilize the park often.

In recent years, there has been a significant surge in the number of visitors to national and state parks across the United States. In 2018, the Wyoming State Parks, Historic Sites & Trails (WYO Parks) system saw an influx of 4.35 million visitors, a figure that rose to 4.42 million in 2019. Demand increased significantly during the pandemic, with many people seeking opportunities for outdoor recreation, and has remained high.

Buffalo Bill State Park Visitation by Year:

- 2018 - 91,631 Visitors
- 2019 - 91,953 Visitors
- 2020 - 173,273 Visitors
- 2021 - 178,608 Visitors
- 2022 - 143,225 Visitors
- 2023 - 148,624 Visitors

This increased demand warrants careful consideration and improvements to ensure the sustainability of Buffalo Bill Reservoir and State Park.



Existing Park Amenities | State Park Brochure Map

Camping

The park is a popular destination for camping. Many stop to camp on the way to or from Yellowstone National Park. There are three campgrounds: Lake Shore, North Fork, and Stagecoach.

Lake Shore Campground is located along the north shore of the reservoir, near the park headquarters. This campground is ideal for campers who are interested in boating, fishing, or easy access from the highway. It has 37 total campsites. 5 campsites are tent-only, 7 have water hookups, 22 have electric hookups, and 2 are ADA accessible. Facilities & amenities include a dump station, ADA accessible restrooms, and water spigots. Each campsite has a fire ring, grill, and picnic table.

North Fork Campground is located on the west end of the reservoir, along the river. This campground is more suitable for campers who are looking for a quiet and secluded setting. It has 86 total campsites 6 campsites are tent-only, 8 have water hookups, 30 have electric hookups, and 3 are ADA accessible. Facilities & amenities include a playground, shower facility, dump station, ADA accessible restrooms, and water spigots. Each campsite has a fire ring, grill, and picnic table. Trout Creek Group Area is located on the southwest end of the campground, near the Trout Creek inlet. It is a flexible group camping area for both tent and RV campers. It can accommodate up to 80 people. Facilities and amenities include a large pavilion, restrooms, fire rings, and electric hookup.

Camp Shacks at Stagecoach | Image: Ayres

Stagecoach Campground is located on the southwest side of the reservoir, near Sheep Mountain. It has 8 shack cabins, 36 RV campsites, and an undefined number of tent campsites. The shacks can accommodate up to four people each and include a bunk bed, deck, and fire ring, but no electricity or plumbing. Facilities and amenities include restrooms.

All three campgrounds require reservations during peak season (May 1st to September 30th), except for RV and tent campsites at Stagecoach Campground, which are first-come, first-served. North Fork and Stagecoach Campgrounds close during the off-season (October 1st - April 30th). Lake Shore Campground remains open year-round, but reverts to first-served during the off-season.

Lake Shore Campground | Image: Ayres

Water Recreation

Fishing is one of the most popular activities at the park. Lake trout, rainbow trout, Yellowstone cutthroat trout, walleye, perch, suckers and carp can be caught in the reservoir. There are many access points along the shoreline for fishing from the bank. In winter, ice fishing is popular for all species. Tournaments and events are held throughout the year.

Boating is another popular water activity at the park. The reservoir has three boat ramps, Bartlett Lane, Lake Shore, and Stagecoach. Gibbs Bridge is raft takeout area. The reservoir is open to all types of boats, including motorboats, sailboats, rafts, kayaks, canoes, jet skis, etc.. The reservoir has been rated one of the top 10 in the nation for windsurfing, as it often has strong and steady winds.

Boat Launch | Image: Ayres

Trails

Buffalo Bill State Park offers limited hiking opportunities. Eagle Point Trail is the only official hiking trail located within park boundaries. It is handicapped accessible, and is the first phase of a planned trail system that runs along the north shoreline.

Many State Park visitors opt for nearby trails that are located outside of park boundaries, but are easily accessible from the main road. Examples of popular trails are Sheep Mountain Trail, Hayden Arch Bridge Trail, and Cedar Mountain Trail/Spirit Mountain Trail.

Although there are no designated equestrian trails or facilities within the park, horseback riding is allowed on roadways.

Access

US Highway 14/16/20 is the main access route for Buffalo Bill Reservoir and State Park. It runs along the north shore of the reservoir and connects the park with Cody and Yellowstone. The highway provides access to the park headquarters, visitor center, and several campgrounds and boat ramps.

However, there are also some alternative routes that are typically only used by locals or adventurous travelers. Bartlett Lane, which branches off from Highway 291 at the southeast shore of the reservoir, is primarily a residential road. It also offers access to a boat launch and fishing spots. Stagecoach Trail, a county road, is located on the south side of the reservoir and passes through largely undeveloped areas of the park. It is a dirt road, with winding sections and steep hills. It is significantly less traveled and maintained than the highway and may be closed or impassable due to weather or road conditions. Any future park development along this route would be dependent on road improvements.

US Highway 14/16/20 | Image: Ayres

STAFFING, MAINTENANCE, & FEES

Buffalo Bill State Park is staffed by three Full Time Equivalent (FTE) employees: a Park Superintendent, Assistant Superintendent, and a Maintenance Supervisor. In the summer busy months the State Park hires two seasonal rangers, four seasonal fee booth attendants, one maintenance supervisor, and four maintenance employees. Until the 2023 season, the State Park only hired one seasonal park ranger. In addition to staff, 10 seasonal volunteers are brought on board as camp hosts or stewards. Volunteers each provide an additional 24-30 hours per week of assistance to the State Park. While visitation has increased significantly over the years, FTEs have remained at nearly the same level since 1988.

SPHST generates revenue across its State Park system from camping reservations and the park entrance fee system. Buffalo Bill State Park is the third highest revenue generating Park, after Glendo and Curt Gowdy. While Glendo and Curt Gowdy have significantly higher visitation, Buffalo Bill has a higher percentage of out of state visitors, resulting in the higher revenue generation.

Buffalo Bill State Park's annual operating budget for maintenance, utilities, and seasonal employees is approximately $203,000 per year. FTE salaries and capital improvements are budgeted separately. As utilities and cost of services, such as waste removal, continue to increase, the amount available for seasonal hires is limited.

	RESIDENT FEES	NON-RESIDENT FEES
Day Use	$7.00	$12.00
Camping	$18.10	$31.98
Electric Site	$10.00	$10.00
Reservation Fee	$4.00	$8.00
Annual Camping Permit	$48.00	$96.00

The existing maintenance building and yard are well appointed and capable. More covered storage for equipment would be a good investment. It is recommended that maintenance facilities be updated and expanded as new improvements at the park come on line, and that development improvements consider new equipment storage.

Maintenance Facility | Image: Ayres

COMMUNITY & STAKEHOLDER ENGAGEMENT

ENGAGEMENT OVERVIEW

The 2023 Buffalo Bill Reservoir and State Park Master Plan relied on a robust engagement process to promote and raise awareness of the project. Through a series of workshops, the process collected community, park user, and stakeholder feedback to guide the creation of the plan.

The outreach process kicked off with an online survey that was developed and deployed early in the project to collect community and park user ideas, concerns, and interest in participation. The data collected helped guide the team in developing a plan to maximize user participation in future workshops. The following schedule was implemented:

KICKOFF & ASSESSMENT:

- Public Workshop 1: Vision and Values ..... November 14, 2022
- Steering Committee 1: Vision and Values (Virtual) ..... December 12, 2022
- Park County Commissioners Meeting ..... January 24, 2023

EXPLORE:

- Outdoor Recreation Collaborative Presentation in Powell, WY ..... February 13, 2023
- Dam Visitor Center Training Day Presentation ..... April 27, 2023
  - Approximately 30 volunteers in attendance
- Rotary Meeting Presentation ..... May 2023
- Discussions with Neighbors/Property Owners ..... May 4-5, 2023
  - 10 individuals in the South Fork, North Fork, and Canyon Hills Estates areas
- Project Update during Cody Days at the Holiday Inn ..... May 8, 2023
  - Local businesses, local government, and federal government entities in attendance
  - Survey link distributed
- Steering Committee 2: Options and Exploration (Virtual) ..... May 11, 2023
- Project Update with Big Horn Basin Boat Club ..... May 12, 2023
  - Approximately 50 volunteers in attendance
  - Survey link distributed
- Discussions with Neighbors/Property Owners ..... May 12-13, 2023
  - 2 individuals in the Bartlett Lane and Rolling Hills areas
- Meeting with North Fork Anglers ..... May 23, 2023
- Discussions with Neighbors / Property Owners ..... May 24, 2023
  - 1 individual in the Rattlesnake Creek area
- On air with KODI Radio to inform public of upcoming workshop ..... May 31, 2023
- Public Workshop 2: Options and Exploration ..... June 1 & 2, 2023

NAVIGATE:

- Steering Committee 3: Scoping Meetings (Virtual) ..... September 15, 2023
- Public Workshop 3: Scoping Meetings ..... September 28 & 29, 2023
- Bureau of Land Management Coordination Meeting (Virtual) ..... October 11, 2023

The following pages provide a summary of the public engagement process conducted for this Master Plan. A more detailed record of these engagements can be found in Appendix 2 of this document.

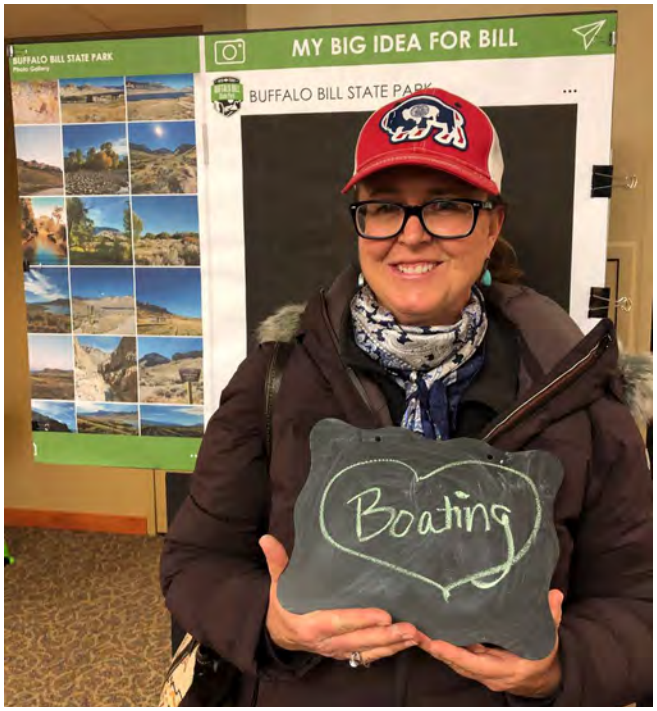
Public Workshop 1: Vision & Values

On November 14, 2022, the first public meeting was held at the Park County Public Library. The workshop hosted 13 Cody Residents.

The meeting featured a series of boards with images of places, amenities and programming. A park basemap was displayed as a tool to locate and discuss existing conditions. Participants were asked to provide feedback on the activities they enjoyed, places they frequented, and things they would change in the Park by providing written comments and dot-based preferences.

The project Team left several boards from the public meeting at the Library for further input. A significant number of people provided feedback in this manner.

The meeting was a successful first step in engaging the community for the Buffalo Bill State Park Master Plan. The feedback received provided the team with additional information about the park and a better understanding of the users and needs in the park.



Public Workshop 2: Options & Exploration

On June 1st and 2nd, 2023, a second series of public input meetings were held to gather additional input from the public regarding the park master plan update. Meetings were held at three separate locations and varying times to connect with a broad range of the public and provide engagement opportunities that were convenient and accessible. All three meetings were well attended with over 30 participants taking part in the activities.

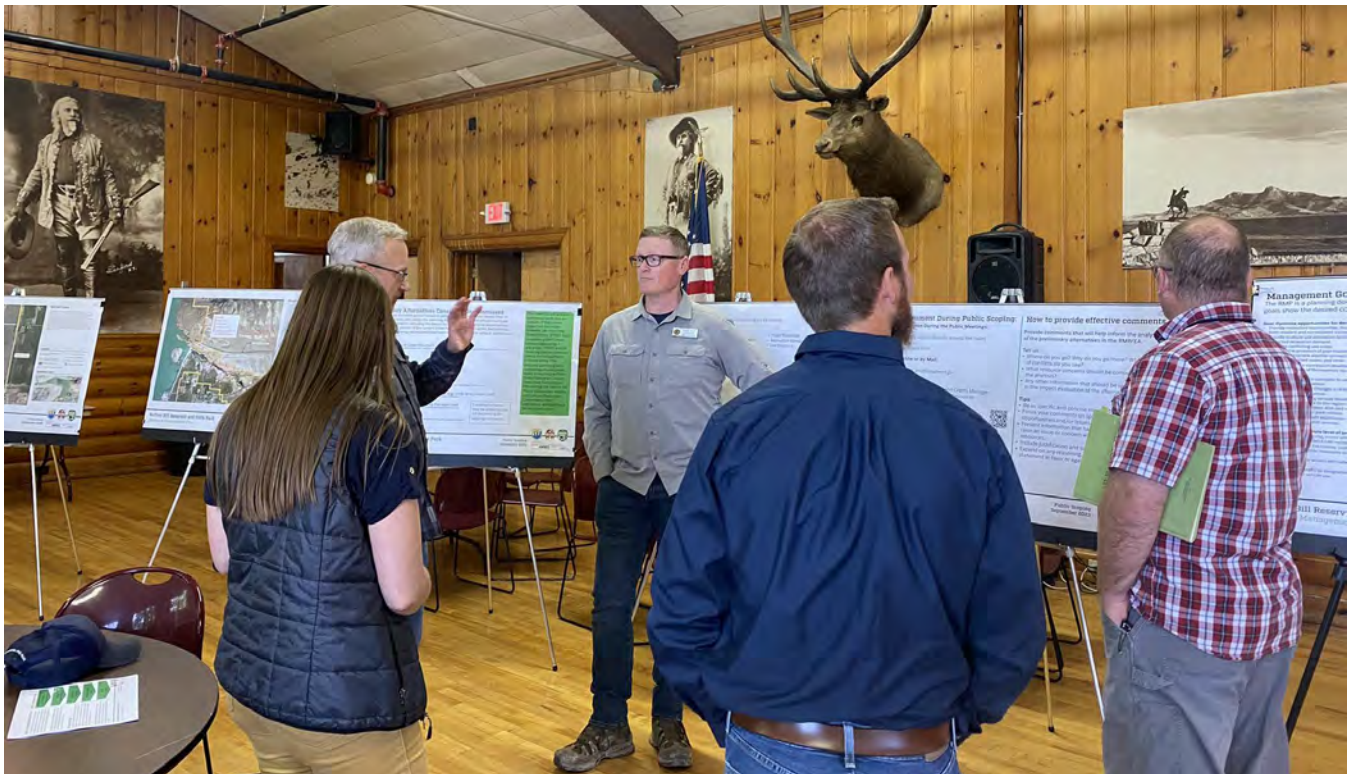
The meeting featured a series of boards with maps of existing and proposed amenities and programming based on feedback received in previous meetings. Participants described their opinions and preferences in relation to the proposed ideas.

These meetings provided a deeper insight and understanding of the programmatic, environmental and physical constraints, as well as specific interest group needs within the park. Planning and design options that emerged during the public workshop were explored by the design team in the following weeks.

Public Workshop 3: Scoping

The third series of public input meetings were held at Cody Auditorium, Sunlight Sports, and City Brew Coffee on September 28th & 29th, 2023. They were attended by a diverse group of local community members with over 25 participants in total.

The open house format included various stations that prompted participants to provide feedback on specific improvement concepts proposed for the park. SPHST, Bureau of Reclamation, and the consultant team received many detailed scoping comments and facilitators had the opportunity to speak in detail with many community members to answer specific questions about the proposed park improvements.



COMMON THEMES & OVERALL TAKEAWAYS

INCREASED DEMAND ON THE PARK

Participants noted that many existing facilities need improvements and upgrades to sustain them and maintain their value. Additionally, there are sites at the park that have been tilted up quickly to react to increased visitation that need to be formalized to provide a similar quality of experience to the more established sites.

PARK IDENTITY AND WAYFINDING

Buffalo Bill State Park does not have any monument signage or other destination signage that is common in other Wyoming State Parks. This, along with being a pass-through for Yellowstone National Park, leads to a lack of identity for the Park. Increased place-making and park signage will lead to a stronger park identity and community ownership over its amenities. Additionally, there were also comments about providing signage that helps interpret the unique features of the park for visitors.

NEW ACTIVE RECREATION

We heard from many participants that there was a need to bring new active recreation opportunities to the park. Shoreline connectivity, hiking, and archery were suggested for the south side of the park, and additional trails were recommended for the north. Other active recreation opportunities suggested include primitive camping and dog parks.

ACCESS TO NEW AREAS

Many participants noted the abundant recreational opportunities near Cedar Mountain/Diamond Creek on the eastern edge of the Park. These opportunities include hiking, primitive camping, and sight seeing. Additional access at South Fork and along the southern shoreline was also requested.

PRESS COVERAGE

Mark Davis of the Powell Tribune attended the first public workshop event and completed an article overviewing the content of the meeting, documented below.

POWELL TRIBUNE

Planning for the next generation

Buffalo Bill State Park begins process by asking users what they want

(https://delta.creativecirclecdn.com/powell/original/20221117-091312-State-Park.jpg)

Buffalo Bill State Park Superintendent Dan Marty discusses ideas for the next generation in the park with Evan Bennett while meeting in the Grizzly Room on Monday night at the Park County Library.

TRIBUNE PHOTO BY MARK DAVIS

Posted Thursday, November 17, 2022 8:10 am

By Mark Davis (mailto:mark@powelltribune.com)

The expectation by many for Monday night's planning meeting was to hear what Buffalo Bill State Park management envisions for the next two decades. Instead, the park offered no plans — there wasn't even an opening speech — and concentrated solely on what the park's local users want.

The Buffalo Bill Reservoir and State Park Resource Management Plan is intended to be a 20-year plan for the park, providing the foundation for decision-making to accommodate recreation and visitor amenities in balance with the preservation of recreation, setting, and natural and cultural resources. Attendees moved through a series of displays manned by park employees and were allowed to make suggestions on the direction of the park.

The suggestions didn't fall on deaf ears. Instead, each suggestion was written directly on detailed maps of the park which is on Bureau of Reclamation land but managed by the state for recreation.

"While the great ideas are going to come from the citizens, the community and stakeholders, our job is to put them all together in a package that can stand the test of time, and hopefully be implemented long term," said Matt Ashby, vice president of Ayres Associates Development Services Division.

Ayres Associates has been selected to facilitate the planning process. It's a multidisciplinary company that includes planning and engineering, community development and resource planning. It's been involved in a number of different Wyoming State Parks and Historical Sites Department projects, including the Sinks Canyon Master Plan recently, and bridge inspections along backcountry trails.

"We are really excited to be involved in planning the future of Buffalo Bill," Ashby said as the meeting kicked off.

Over the next year, the Ayres and the state park team will be collecting information, feedback, and ideas about ways to both enhance the visitor experience at the park and "preserve its resources for future generations to enjoy."

"This is the first step," Ashby said. "It's going be a long process. It'll be about two years, wrapping up 2024."

The final Resource Management Plan will be subject to a federal environmental assessment, but the first part of the process is identifying the community's vision for the park and coming up with the view for the future.

"This is a great way to involve people," said Wes Allen, co-owner of Sunlight Sports and steering committee member of the Park County Outdoor Recreation Committee. "Having an open ended, kind of a sandbox for people to come in and give their ideas like this is the perfect way to start the process."

Buffalo Bill Dam, constructed on the Shoshone River 6 miles upstream from Cody, was completed in 1910, creating Buffalo Bill Reservoir. The dam is listed on the National Register of Historic Places and is also a National Historic Civil Engineering Landmark.

Much of the area was designated a state park in 1957. The park offers fishing, camping, picnicking and a variety of water sports. The last major overhaul of the park was in the 1990s.

The park currently has three boat ramps, nine developed day use areas, two group shelters and 11 picnic shelters, and 100 campsites in two campgrounds which can be reserved through the State Parks Reservation System. Shreve Lodge, which hosts up to 200 and has a large kitchen, is also available to rent for day use.

Community attendees discussed hiking, lodging, parking and facilities, as well as uses for available land that could offer a more broad list of recreational activities.

"I think that one of the biggest opportunities here is for the state and other land managers to kind of partner up to make sure that the recreational experience is a little bit more cohesive and a little bit better supported," Allen said.

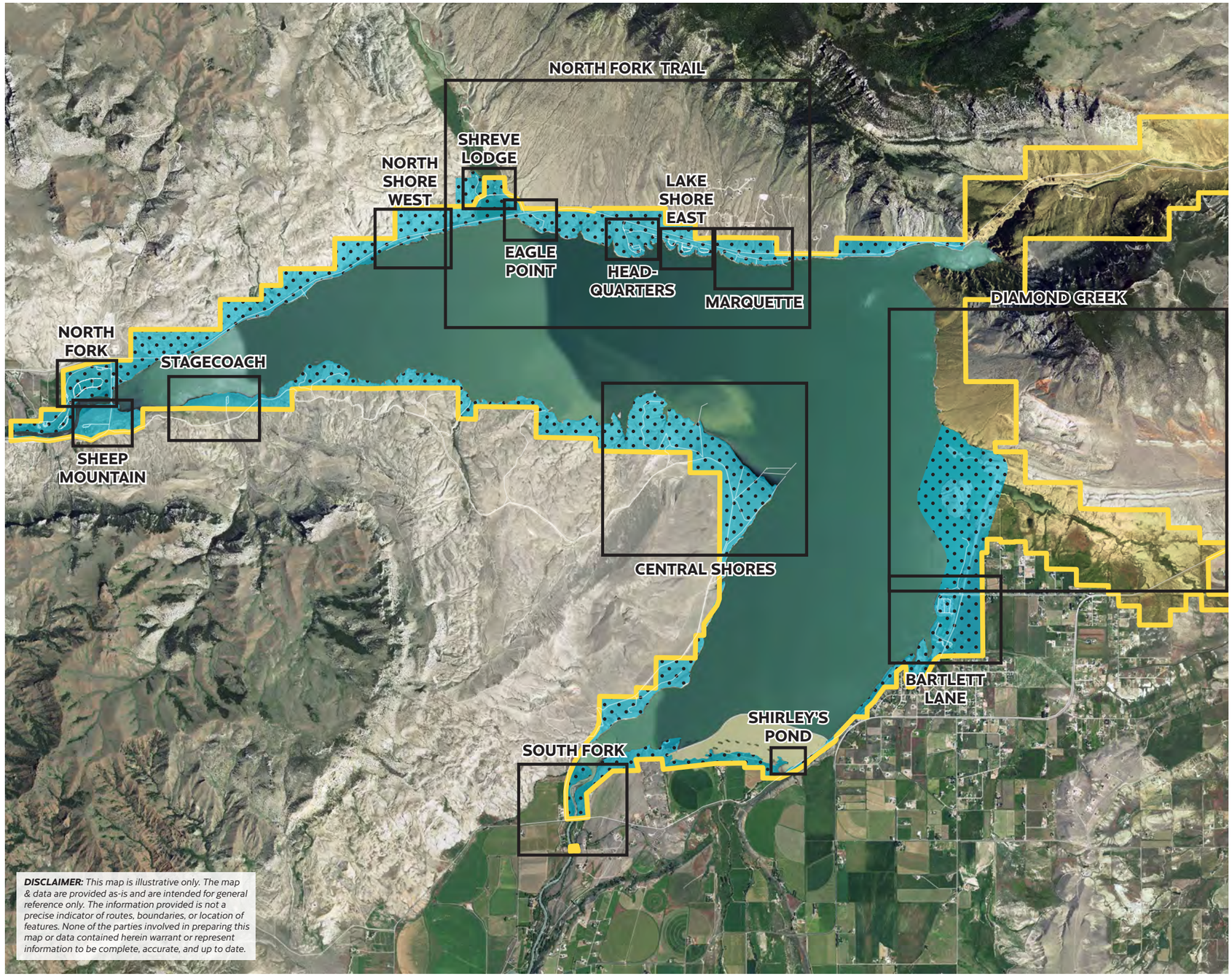
Park supervisor Dan Marty said his priority for the park is how it serves the local communities. Marty has spent his entire career working for or leading Buffalo Bill and Boysen state parks. He graduated from Cody High School and spent two years at Northwest College in Powell before finishing his studies at the University of Wyoming. He started in the park as a seasonal employee in 1982 and became the assistant superintendent in 1999. He became the Buffalo Bill State Park superintendent in 2016.

"As everybody knows, the North Fork Highway is a gateway to Yellowstone. So we get a lot of tourists. I lean towards local folks, so I'm trying to advocate things for the community," Marty said.

The public is invited to complete an initial survey about the park and planning process, and to sign up to receive more information at wyoparks.wyo.gov/index.php/news-updates-Buffalo (https://wyoparks.wyo.gov/index.php/news-updates-Buffalo).

For more information and to stay up to date with events and amenities at Buffalo Bill State Park: wyoparks.wyo.gov/index.php/places-to-go/buffalo-bill (https://wyoparks.wyo.gov/index.php/places-to-go/buffalo-bill) or or call Superintendent Dan Marty at 307-587-9227.

RECOMMENDATIONS



DISCLAIMER: *This map is illustrative only. The map & data are provided as-is and are intended for general reference only. The information provided is not a precise indicator of routes, boundaries, or location of features. None of the parties involved in preparing this map or data contained herein warrant or represent information to be complete, accurate, and up to date.*

OVERVIEW

This map view shows the overall Bureau of Reclamation boundary surrounding Buffalo Bill Reservoir and identifies the sections of this Reclamation land currently managed by Wyoming State Parks. This map also serves as a key for the zoomed-in sections of the park on the following pages. These closer-in views describe the proposed master plan improvements in more detail for those specific locations. All proposed improvements and proposed management boundary changes shown in this report will be subject to a specific site criteria review process at each location prior to implementation. As proposed improvements are implemented, new opportunities for enhancement may emerge.

This master plan attempts to capture improvements and recommendations identified during the creation of this document. However it is essential to recognize that over the life of a master plan that could span multiple decades, new opportunities for enhancement are likely to develop. Trends in park use, recreation, as well as influences such as new technologies may emerge. Master Plans will inevitably have to flex to incorporate these needs as they arise.

One such area of potential growth is the integration of emerging technologies. For instance, the installation of electric vehicle (EV) charging stations could be appropriate in the future. These technologies were considered during the writing of this plan, however specific locations were not identified. By remaining open to emerging trends and opportunities, we can ensure that Buffalo Bill Reservoir and State Park continues to thrive and adapt to the changing needs of all users.

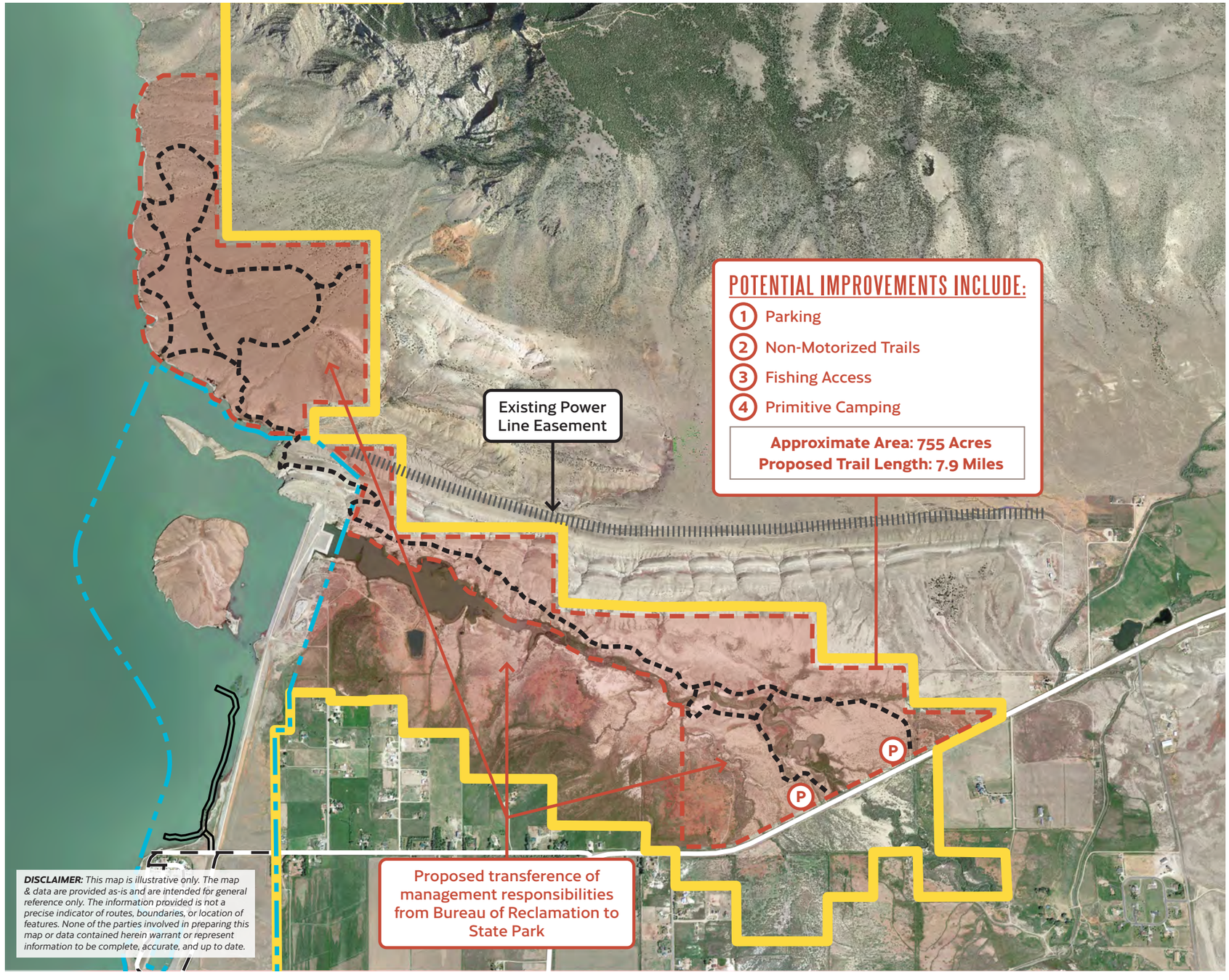
Other program elements could be identified as individual planning and design work efforts are conducted at the site areas identified in the following map pages. For example, the size of a camping area, the length and routing of a trail, and the exact program elements included in any implementation effort will be determined by this more detailed planning and design work.

LEGEND

- Managed by Bureau of Reclamation
- Managed by State Park
- Existing Area without Park Fee

DIAMOND CREEK

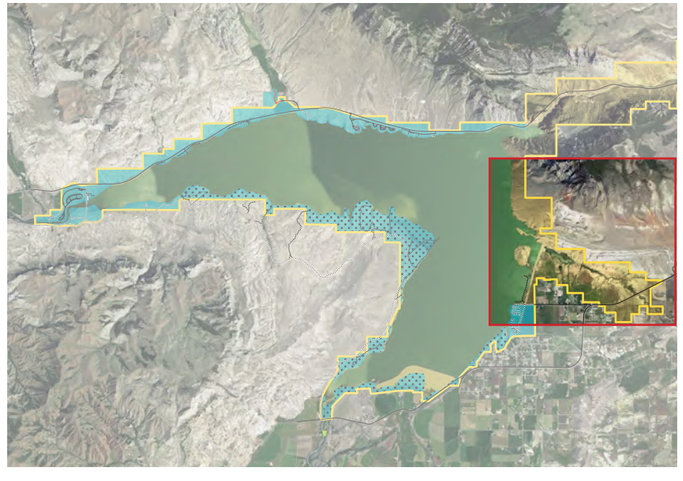
The area around Diamond Creek and north to the shoreline west of Cedar Mountain is in the Bureau of Reclamation boundary but is not currently part of the State Park management area. This area is not currently designated for use by the public; however, many locals walk and use the wildlife paths via access from several informal locations. To keep the area clean, safe, and well-functioning, it needs to be actively monitored and maintained. This can best be accomplished by transferring management responsibilities from Bureau of Reclamation to the State Park. Proposed improvements within this draft management boundary change are intended to be non-motorized, low impact and would include the addition of approximately 6-10 miles of trail, water access areas, and possibly several primitive camping locations. Specific locations and final quantities of each proposed amenity within the area defined here will be further developed during future public engagement and concept development phases.



LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Approximate Area of Proposed Improvements
- Proposed Non-Motorized Trail (Approximate Location)
- Proposed Transference of Management Responsibilities from Bureau of Reclamation to State Park
- Existing Asphalt Road
- Existing Gravel Road
- Existing Two-Track Road
- Existing Power Line Easement
- Proposed Parking Area

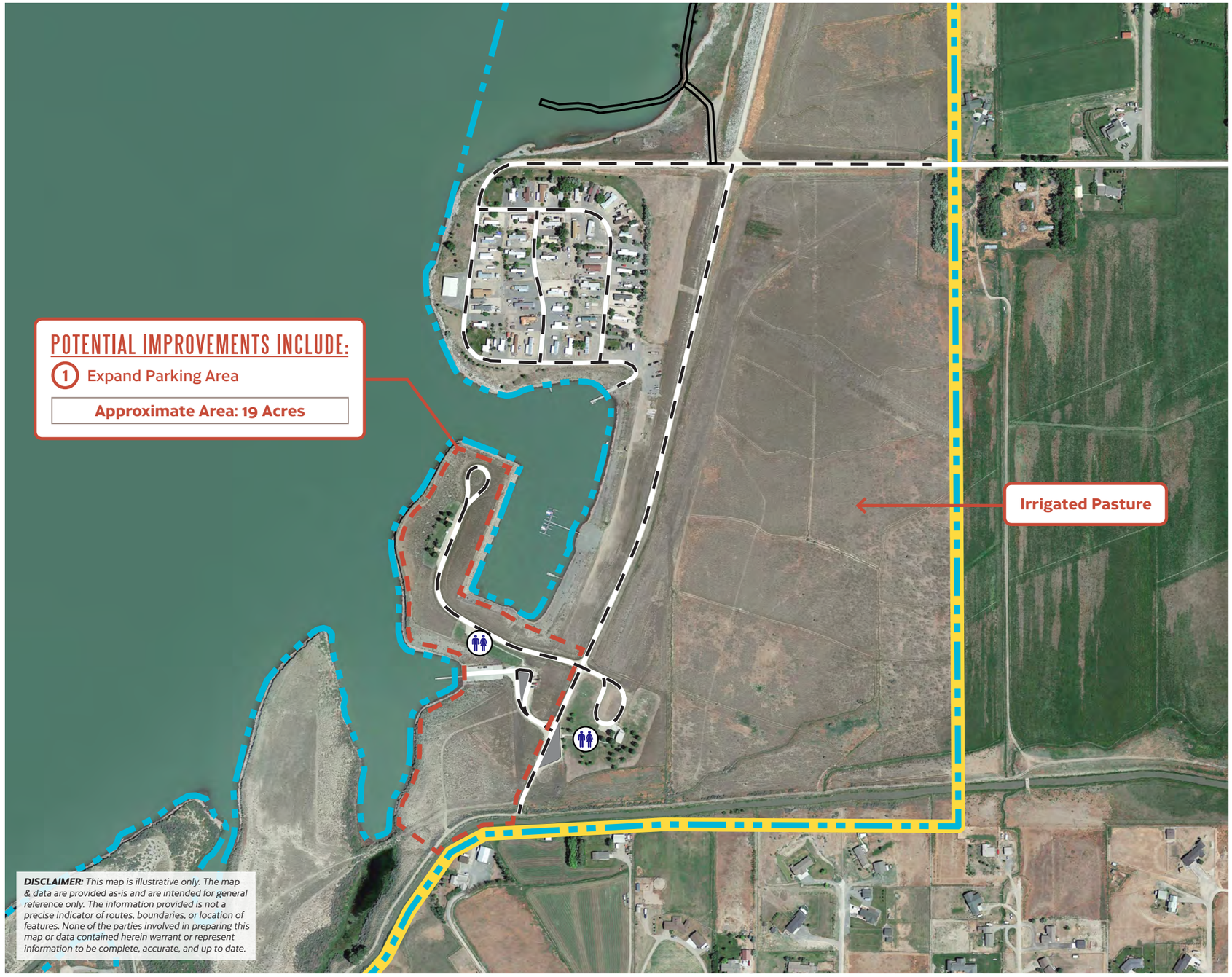
REFERENCE MAP



BUFFALO BILL RESERVOIR AND STATE PARK | DIAMOND CREEK

BARTLETT LANE

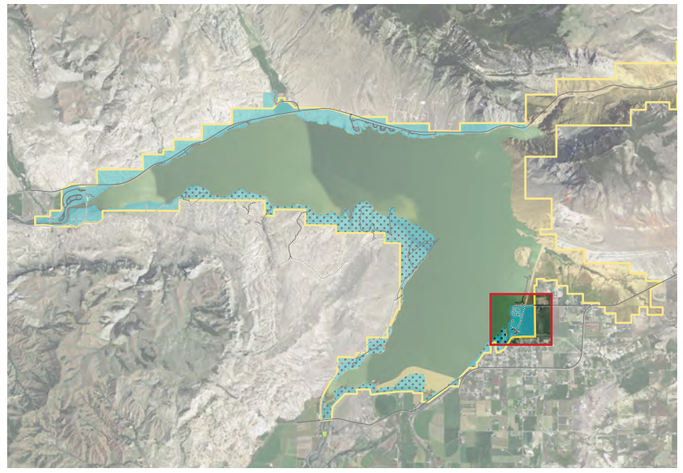
The existing informal parking area at the public boat launch sees a heavy amount of traffic at key points throughout the year. Without a formal layout for parking, drive paths, and pedestrians flows, visitors can easily park in a way that limits access and reduces the number of available parking spaces. This can affect the efficiency, flow, and safety of the space. Proposed improvements include redesigning the parking area to develop better vehicular and pedestrian movements and increase the amount of parking. Additionally, the irrigated area east of the Boat Club and Public Boat Launch is being considered as a potential grazing pasture for U.S. Forest Service pack horses.



LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Parking Lot
- Approximate Area of Proposed Improvements
- Existing Asphalt Road
- Existing Gravel Road
- Existing Two-Track Road
- Existing Pit/Vault Toilet

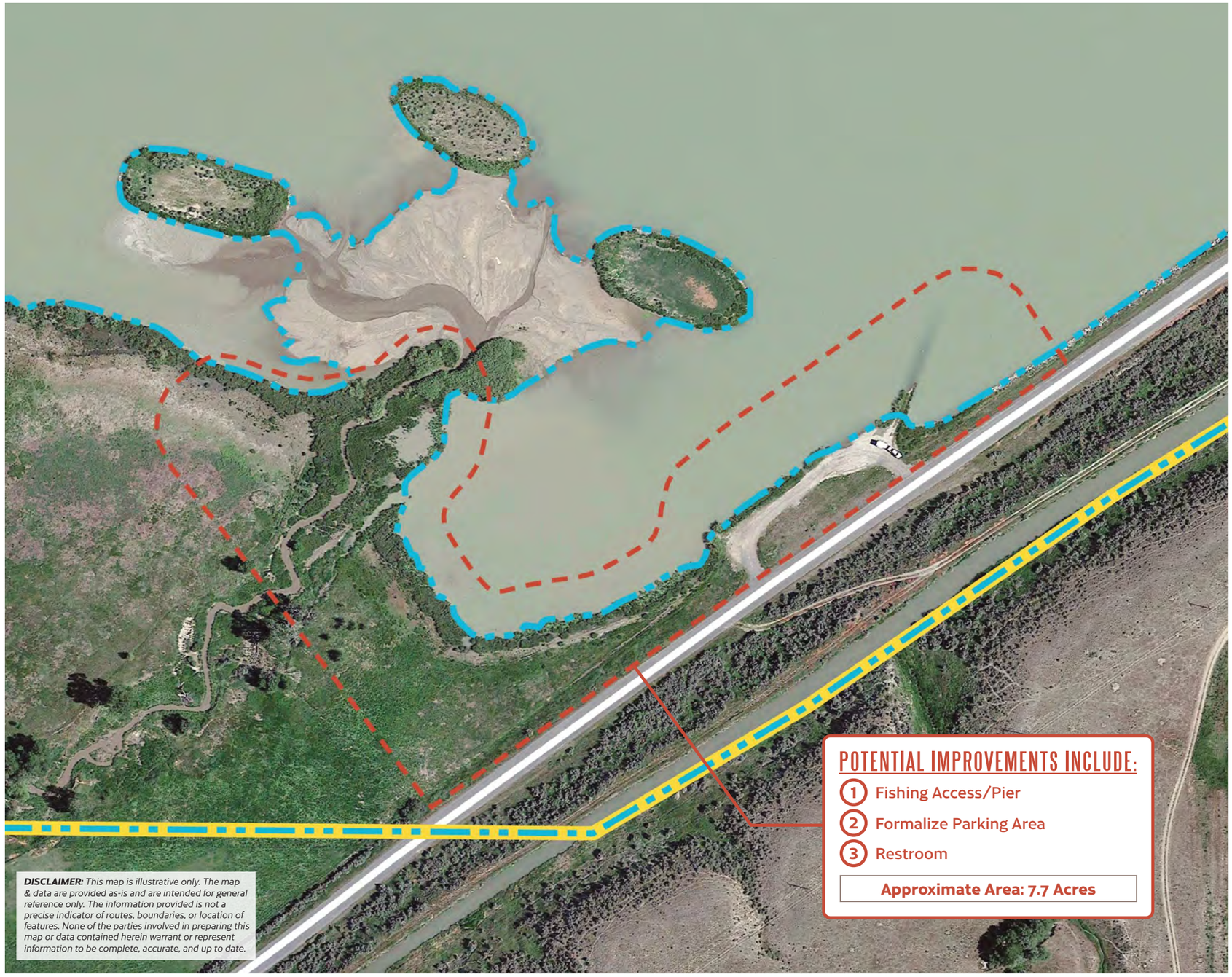
REFERENCE MAP



BUFFALO BILL RESERVOIR AND STATE PARK | BARTLETT LANE

SHIRLEY'S POND

This area is currently being used informally as a parking area and access point for fishing and wildlife viewing. Proposed improvements include formalization of parking, fishing access and potentially a restroom. Location for these improvements will be finalized with a site-specific analysis and public review process prior to implementation.



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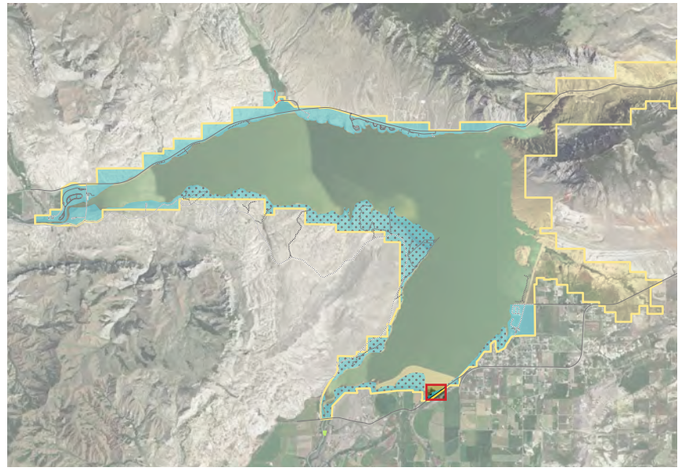
LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Asphalt Road
- Approximate Area of Proposed Improvements

REFERENCE MAP

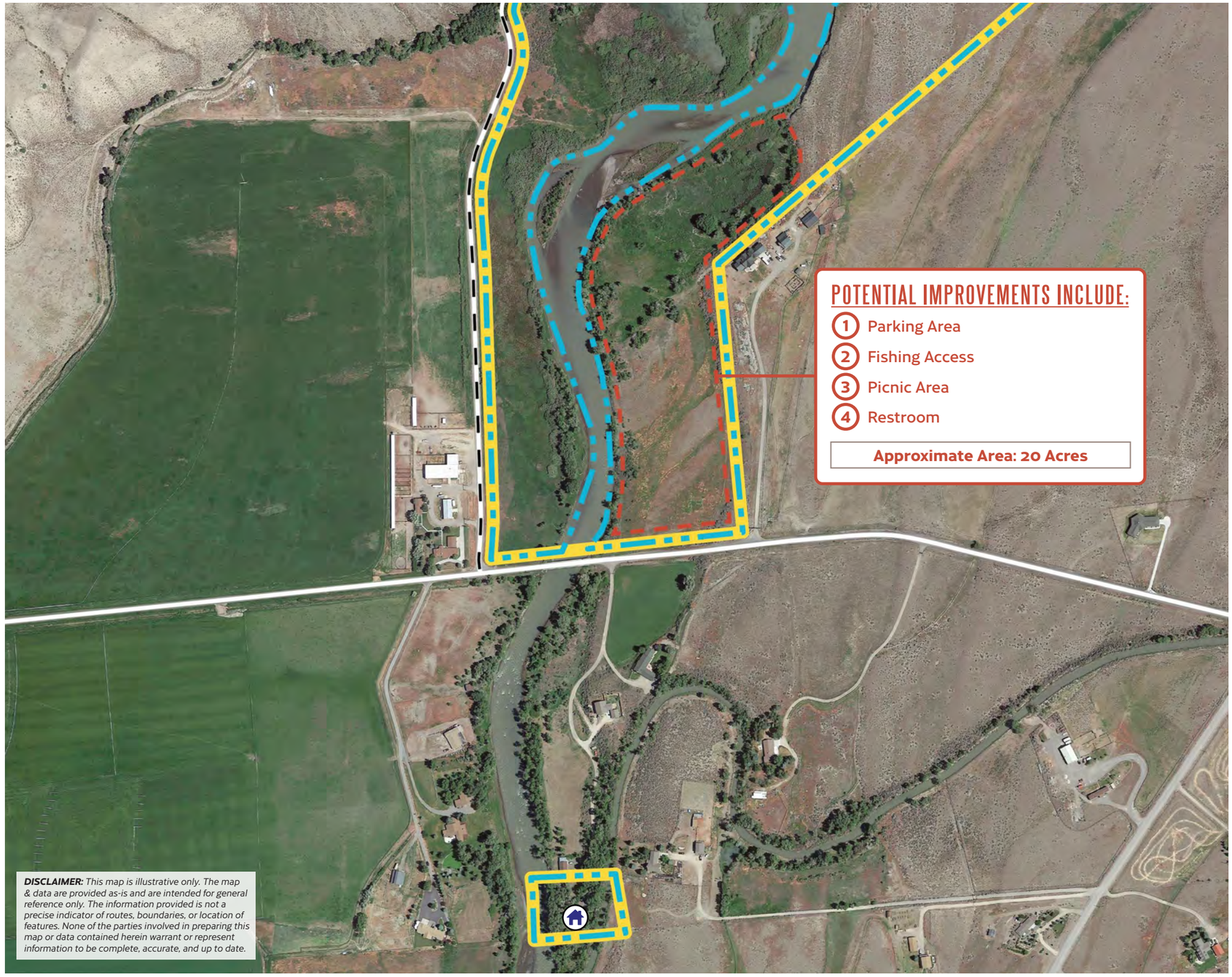


BUFFALO BILL RESERVOIR AND STATE PARK | SHIRLEY'S POND

SOUTH FORK

The 1988 Buffalo Bill State Park Master Plan recommended a small picnic area, restroom, parking for a few cars and river access for fishing. These same low-impact program improvements are being considered for this master plan update. South of this area is an existing residential site used for staff housing. This may continue to be used for permanent or seasonal staff in the future.

1988 South Fork Plan | Image: 1988 Buffalo Bill State Park Master Plan



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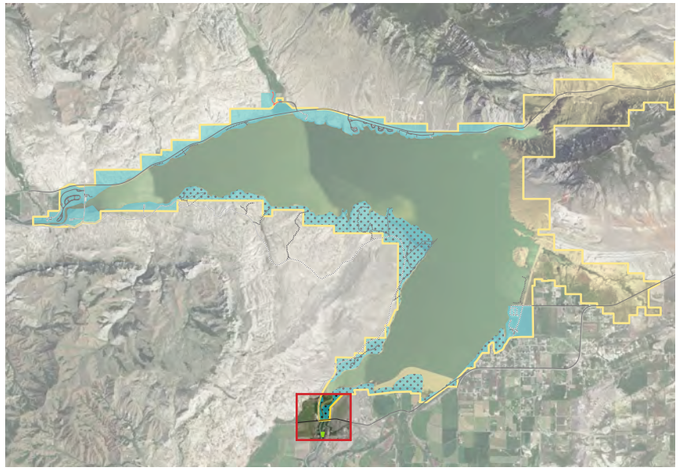
LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Approximate Area of Proposed Improvements
- Existing Asphalt Road
- Existing Gravel Road
- Existing Staff Housing

REFERENCE MAP



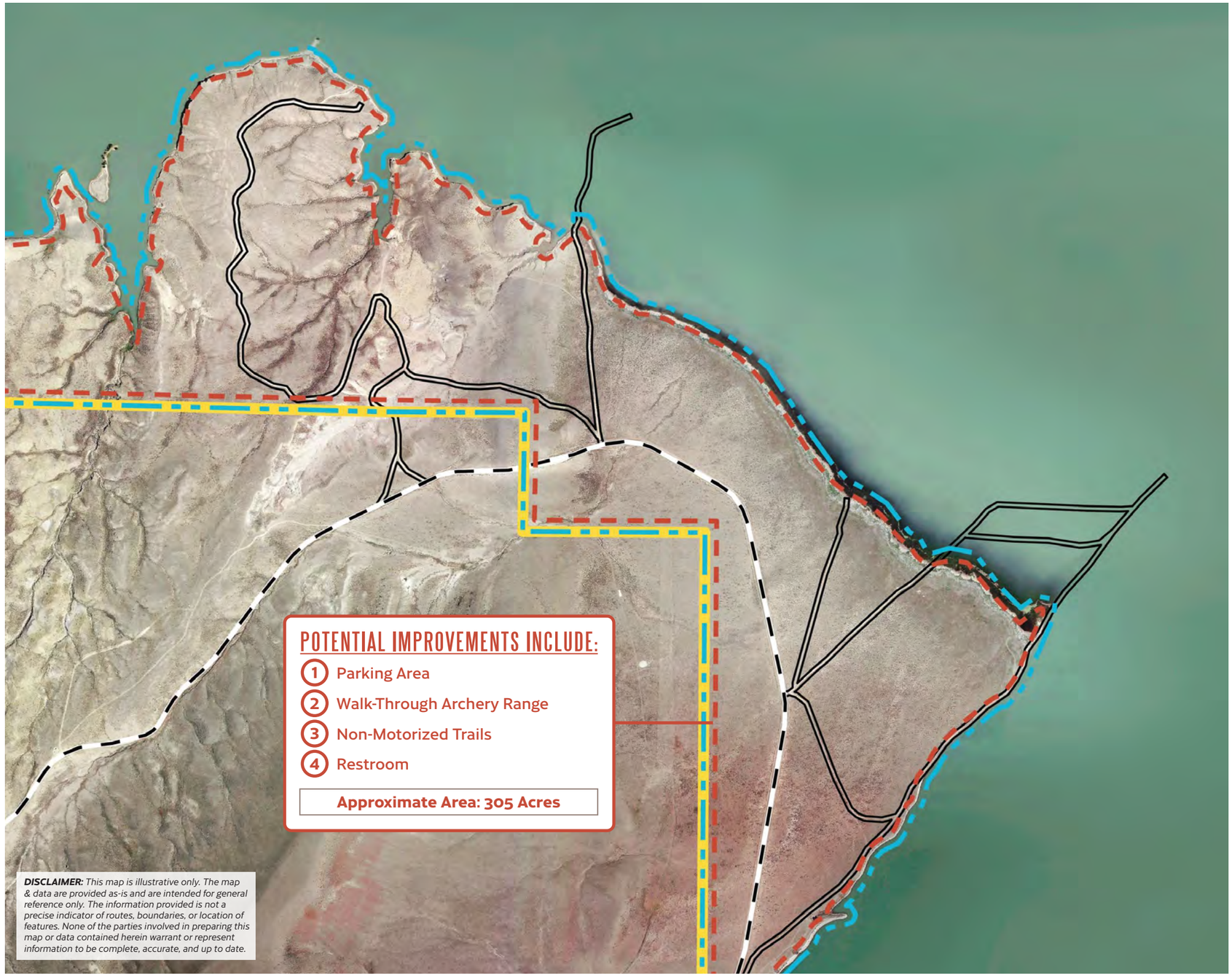
BUFFALO BILL RESERVOIR AND STATE PARK | SOUTH FORK

CENTRAL SHORES

This unimproved area is seeing heavy use by people that are familiar with the existing informal access points. A four-wheel drive with high clearance is required to access most of the areas and when the area is wet vehicles often get stuck on the undeveloped routes to the water's edge. Fishing is a common use on the west side of this area.

Initial thoughts for improving the area are listed below and include the development of a small parking area, development of a simple, non-motorized trail system, and possibly a walk-through archery range.

Stagecoach Trail (a county road) is the only access to improvements along the south side of the reservoir. Stagecoach Trail is an unimproved, gravel road that has access and safety issues when wet. Improvements along Stagecoach Trail need to be coordinated with county and adjacent landowner partners and timed to support park improvements along the south edge of the reservoir to ensure that reasonable access is available to any new improvements. Additional signage would be helpful in this area and along the south shore of the reservoir to better describe trail and road conditions for visitors not familiar with the area.



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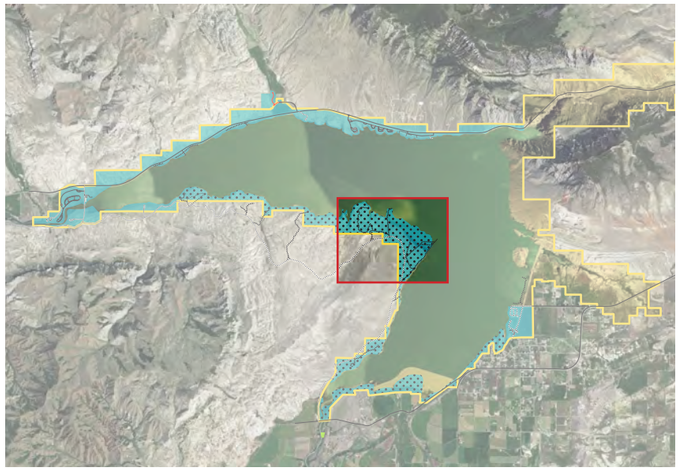
LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Gravel Road
- Existing Two-Track Road
- Approximate Area of Proposed Improvements

REFERENCE MAP



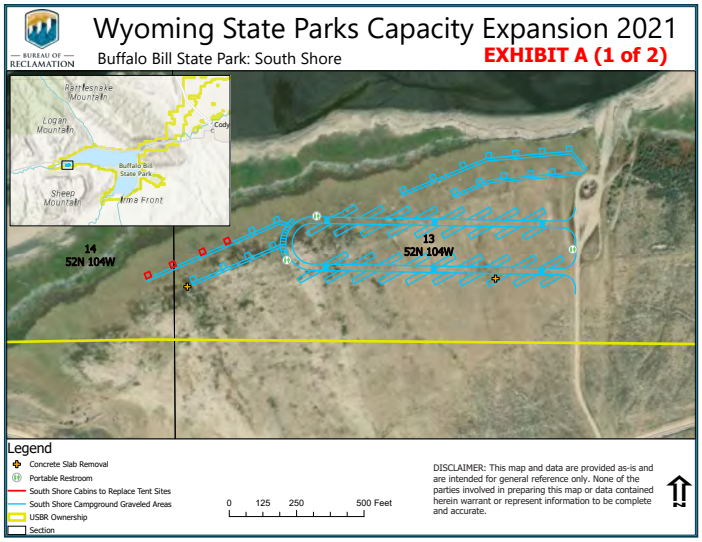
BUFFALO BILL RESERVOIR AND STATE PARK | CENTRAL SHORES

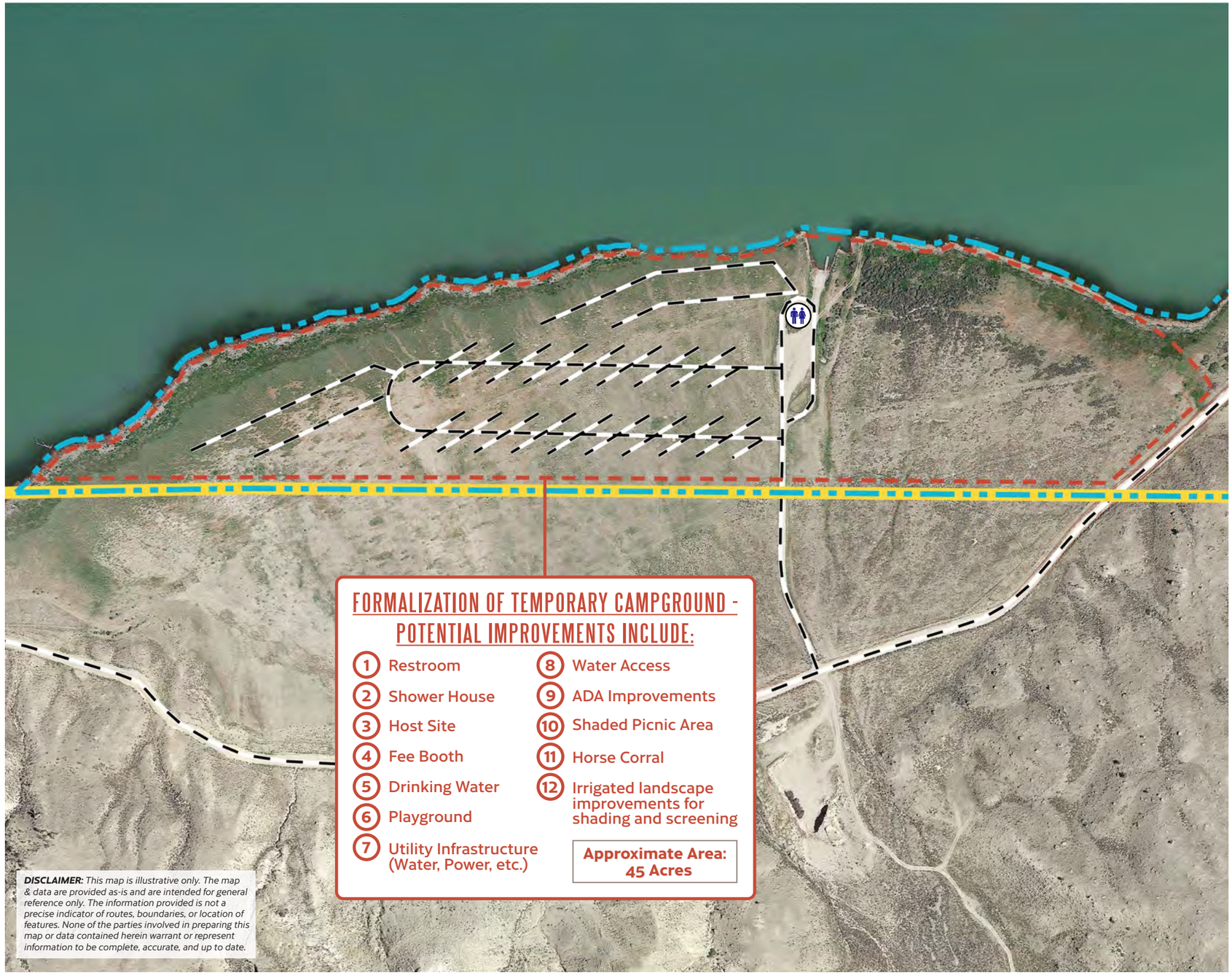
STAGECOACH

This area was also referenced in the 1988 Buffalo Bill State Park Master Plan. The concept drawings in that document show a variety of camping options with associated amenities and a boat launch. During the pandemic, State Parks began to develop this site and have added some roads, camp sites and several Camp Shacks.

The next phase of work will include formalization and build-out of the existing campground improvements (shown in the diagram) to a level similar to other campground sites at the park. A full list of improvements will be completed after the master plan update during public engagement and concept design for this area. Coordination with the Bureau of Land Management (BLM) may be needed at that time to facilitate continued access to adjacent trails and other overlaps of uses.

Additionally, coordination with the county and BLM may also be needed to improve vehicular access to this area and connect this site with utilities and other needed infrastructure. Currently there is no power or water infrastructure serving this site.





FORMALIZATION OF TEMPORARY CAMPGROUND - POTENTIAL IMPROVEMENTS INCLUDE:

1. Restroom
2. Shower House
3. Host Site
4. Fee Booth
5. Drinking Water
6. Playground
7. Utility Infrastructure (Water, Power, etc.)
8. Water Access
9. ADA Improvements
10. Shaded Picnic Area
11. Horse Corral
12. Irrigated landscape improvements for shading and screening

Approximate Area: 45 Acres

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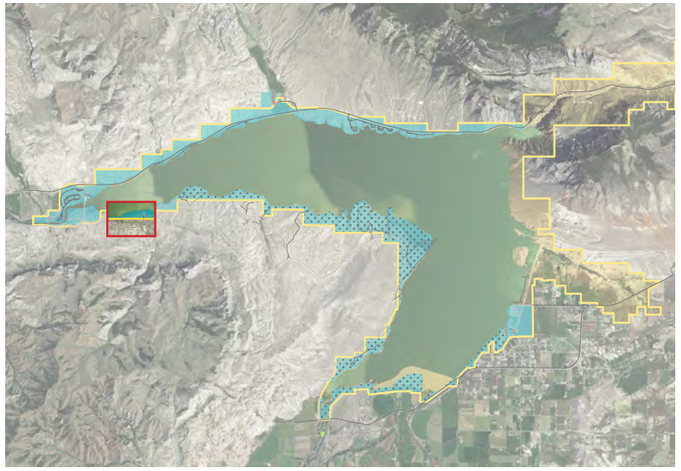
LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Gravel Road
- Existing Pit/Vault Toilet
- Approximate Area of Proposed Improvements

REFERENCE MAP



CAMPGROUND ENHANCEMENTS CONCEPT PERSPECTIVE

CONCEPT PLAN

PROPOSED IMPROVEMENTS

- Planted windbreak along northern shoreline / visual screen from Highway to the North.
- Enhanced camp amenities (log bench seating, fire ring, boulders, trees, shrubs, etc.)
- Additional tree and vegetation plantings similar to other campsites in the park.

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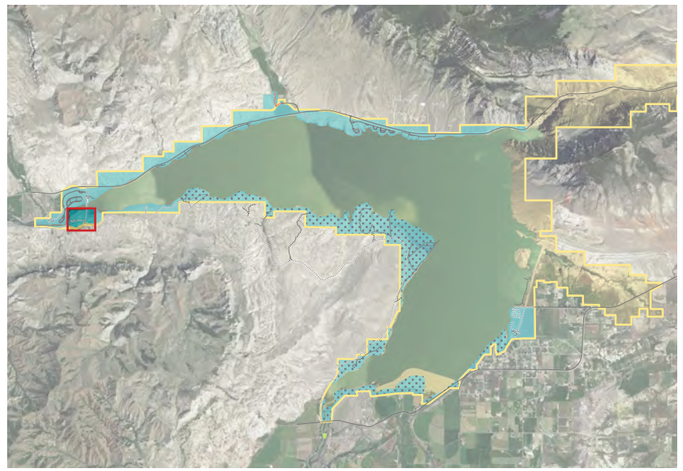
SHEEP MOUNTAIN

Due to the increased demand for camping, expanded camping is being considered in the Sheep Mountain area of the park. The exact configuration and type of camping is yet to be determined. It could include RV, Camp Shack, tent camping or group camping facilities. The final campground is expected to be similar to existing camping facilities at the park. Additionally, a dog park is being proposed for this area. See the general development envelopes shown on the diagrams on this page. Additionally, the existing staff housing area shown here is being considered for renovation and improvements to provide permanent and seasonal staff housing.

LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Gravel Road
- Existing Storage
- Approximate Area of Proposed Improvements
- Existing Volleyball Court
- Existing Basketball Court
- Existing Baseball Diamond
- Existing Playground
- Existing Picnic Shelter
- Existing Pit/Vault Toilet
- Existing Staff Housing

REFERENCE MAP

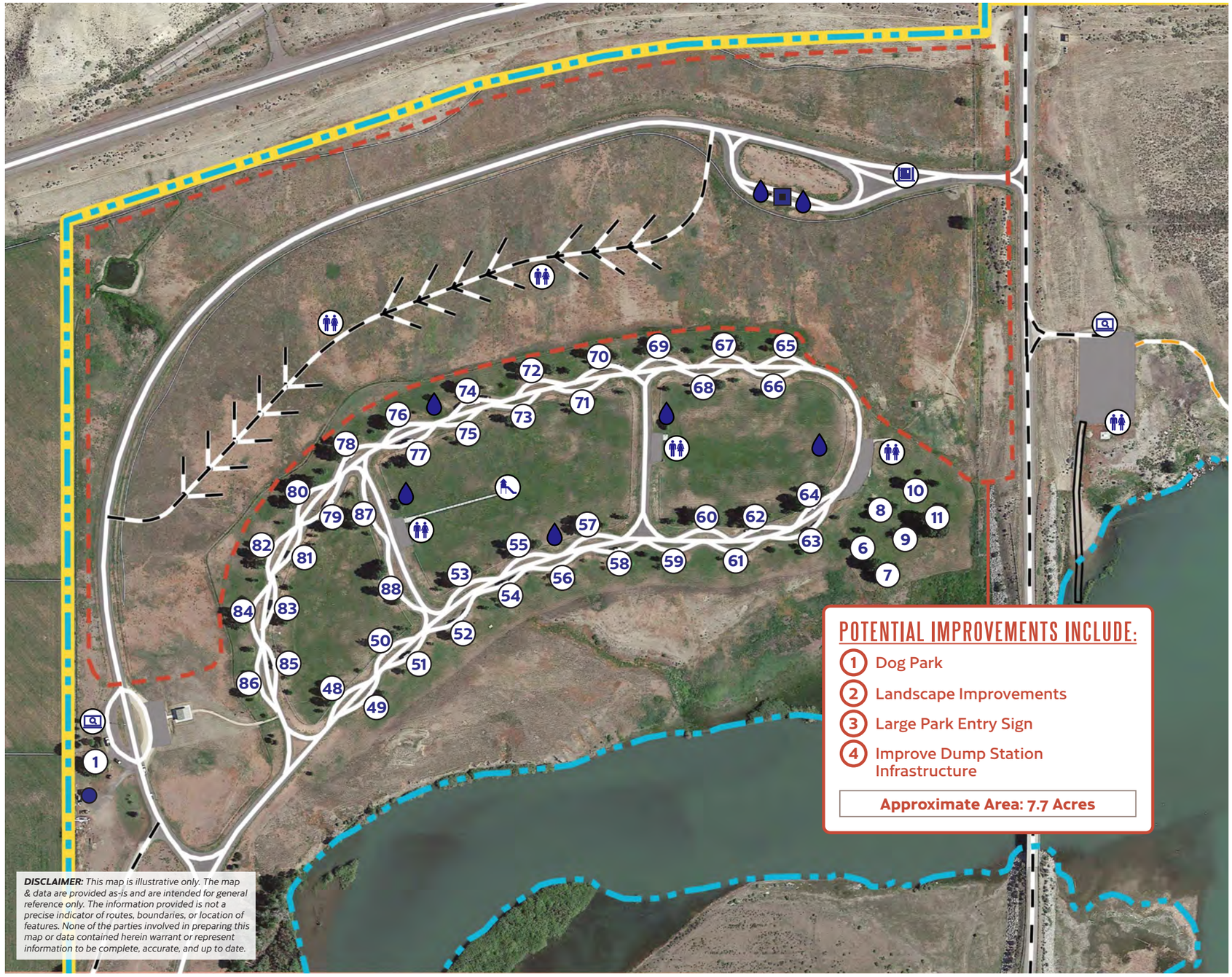


NORTH FORK

North Fork is the largest campground site at the state park with two separate looped areas: one large loop higher and closer to the highway and another smaller loop nestled along a bend in the North Fork of the Shoshone River. These facilities are at the westernmost end of the park and offer some of the better shade and micro-climatic conditions in the park.

During the pandemic, State Parks expanded the large loop of the existing campground to the north to pick up some additional sites in an expansion area that was identified in the 1988 Master Plan. The next phase of work proposed in this area will include formalization of the temporary campground expansion.

This will include, at minimum, irrigated landscape improvements to provide shading and screening, improved RV and tent camping sites as well as dump station improvements and walking trails. A full list of improvements will be completed after the master plan update during public engagement and concept design for this area. The intent is to bring the new campsites up to a level that is a similar quality to the older existing campsites in this area. Additionally, a small dog park and park wayfinding, branding and identity signs are being considered for this area. This area could also include more visitor information and resources. This could include equipment rental and possibly food services and concessions, though other areas are also being considered.



POTENTIAL IMPROVEMENTS INCLUDE:

1. Dog Park
2. Landscape Improvements
3. Large Park Entry Sign
4. Improve Dump Station Infrastructure

Approximate Area: 7.7 Acres

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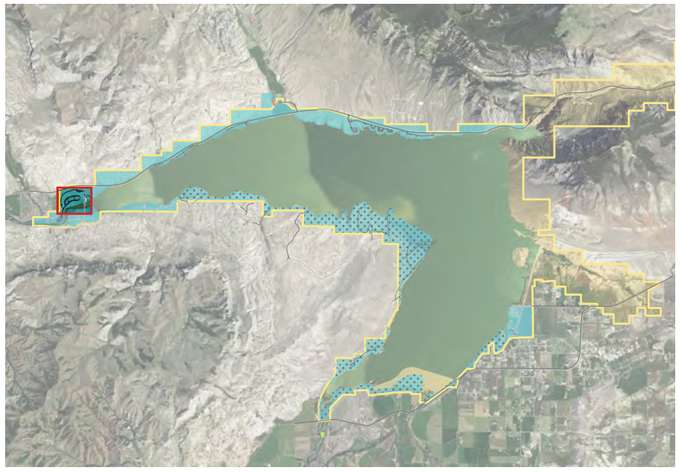
LEGEND

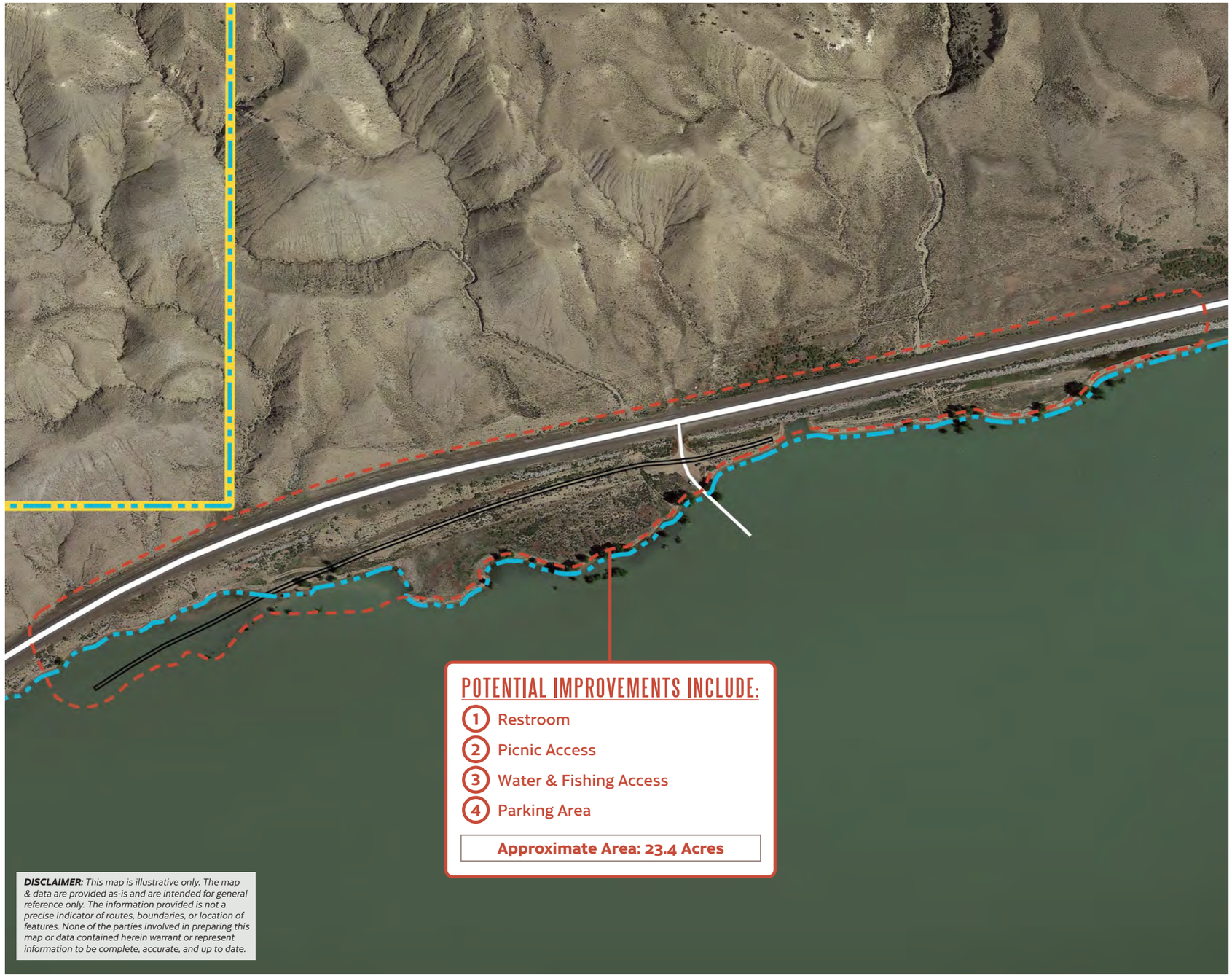
- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Parking Lot
- Existing Asphalt Road
- Existing Gravel Road
- Existing Two-Track Road
- Existing Sand Road
- Approximate Area of Proposed Improvements
- Existing Campsite
- Existing Playground
- Existing Fee Booth
- Existing Interpretive
- Existing Pit/Vault Toilet
- Existing Water Facility
- Existing Storage
- Existing Dump Station

REFERENCE MAP



NORTH SHORE WEST

North Shore West is not formally listed on any park maps and does not currently include any improved facilities. This area sees heavy informal use due to the easy access to the water's edge. The existing facilities here are underdeveloped and need to be improved to handle increasing day use in this area. Parking, water access improvements, picnic areas and restroom improvements are being considered. Vehicular access should be studied, improved, and formalized to allow safe ingress and egress along the busy highway corridor



POTENTIAL IMPROVEMENTS INCLUDE:

1. Restroom
2. Picnic Access
3. Water & Fishing Access
4. Parking Area

Approximate Area: 23.4 Acres

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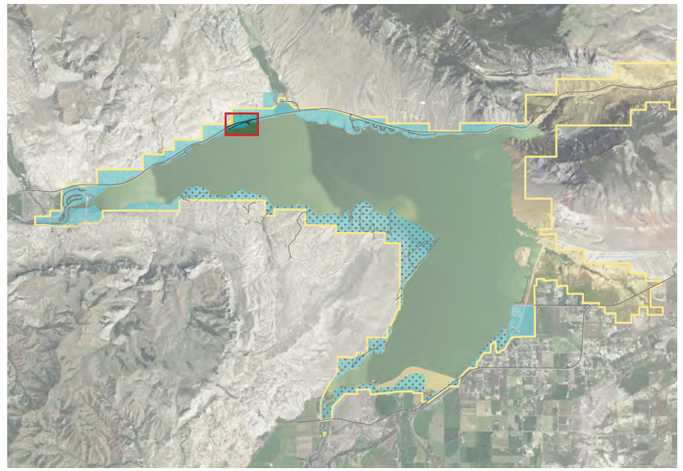
LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Asphalt Road
- Existing Two-Track Road
- Approximate Area of Proposed Improvements

REFERENCE MAP



BUFFALO BILL RESERVOIR AND STATE PARK | NORTH SHORE WEST

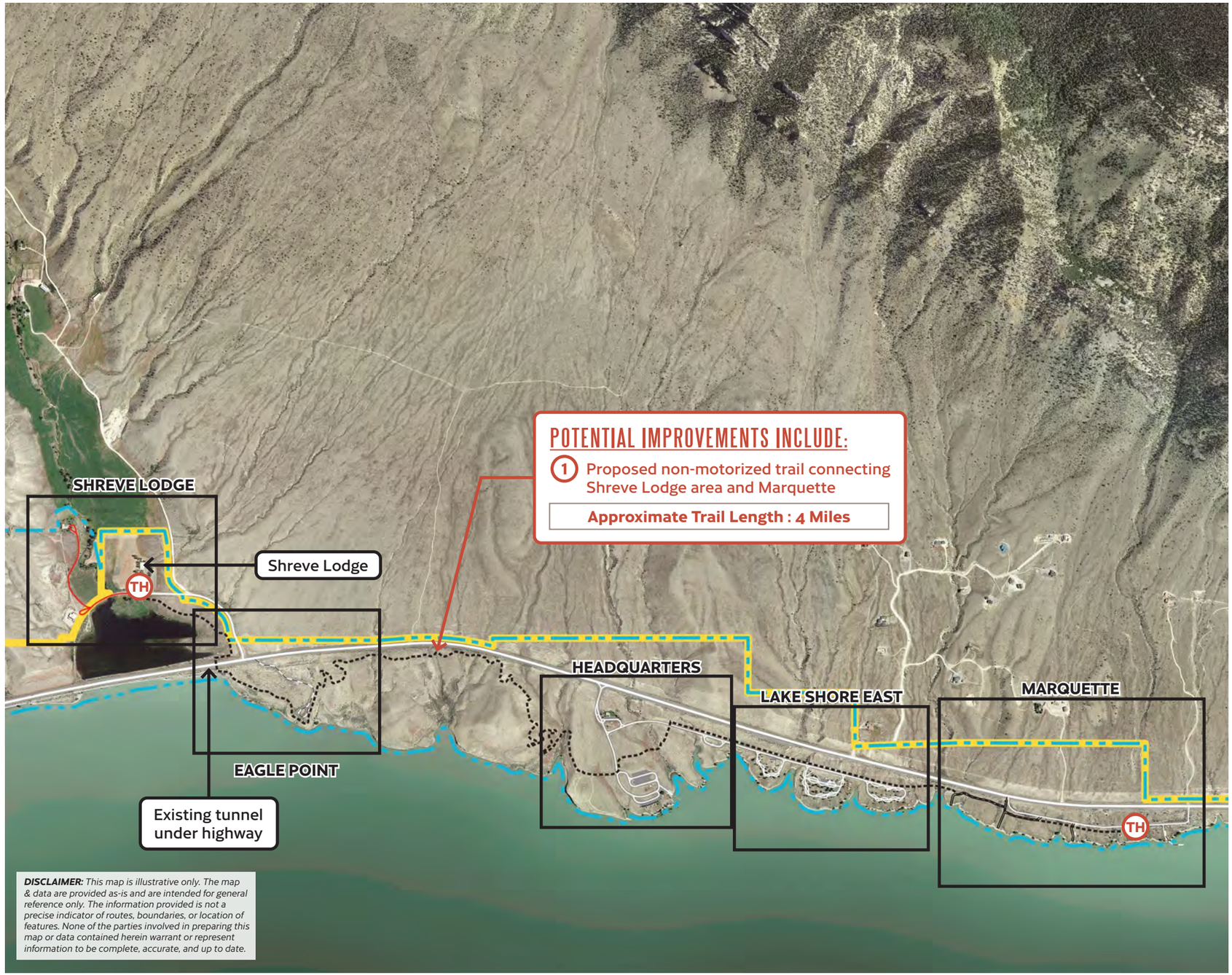
NORTH FORK TRAIL

The concept of a North Fork Trail was conceived and developed by a park staff member. This non-motorized trail will link many of the existing amenities along the north shore of the reservoir and will provide needed trails and access points on this side of the park. Parts of the trail follow the old stagecoach route (the Old Yellowstone Highway) that existed before the current highway was constructed. Many experts cite 1910 as the year that automobiles finally outnumbered horses and buggies. That was also the year of the first documented accident between a horse drawn carriage and a vehicle on the Old Yellowstone Highway.

In addition to the trail itself and trailhead improvements, it is anticipated that this project would include signage and interpretation of the site's history.

This overall map shows the extent of the proposed trail. Maps following this key map show how the trail could be routed at specific site locations to the east. A more detailed overview of the proposed trail system, developed by parks staff, is provided in the appendix.

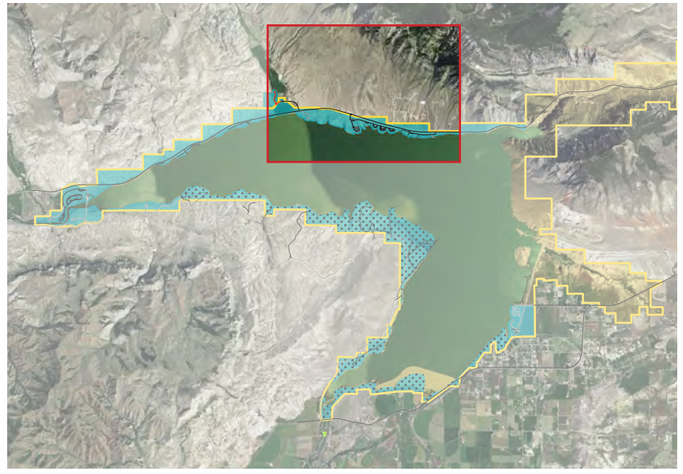
First auto wreck at 7 curves, 1910.



LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Parking Lot
- Existing Asphalt Road
- Existing Gravel Road
- Proposed Non-Motorized Trail (Approximate Location)
- TH Proposed Trailhead

REFERENCE MAP



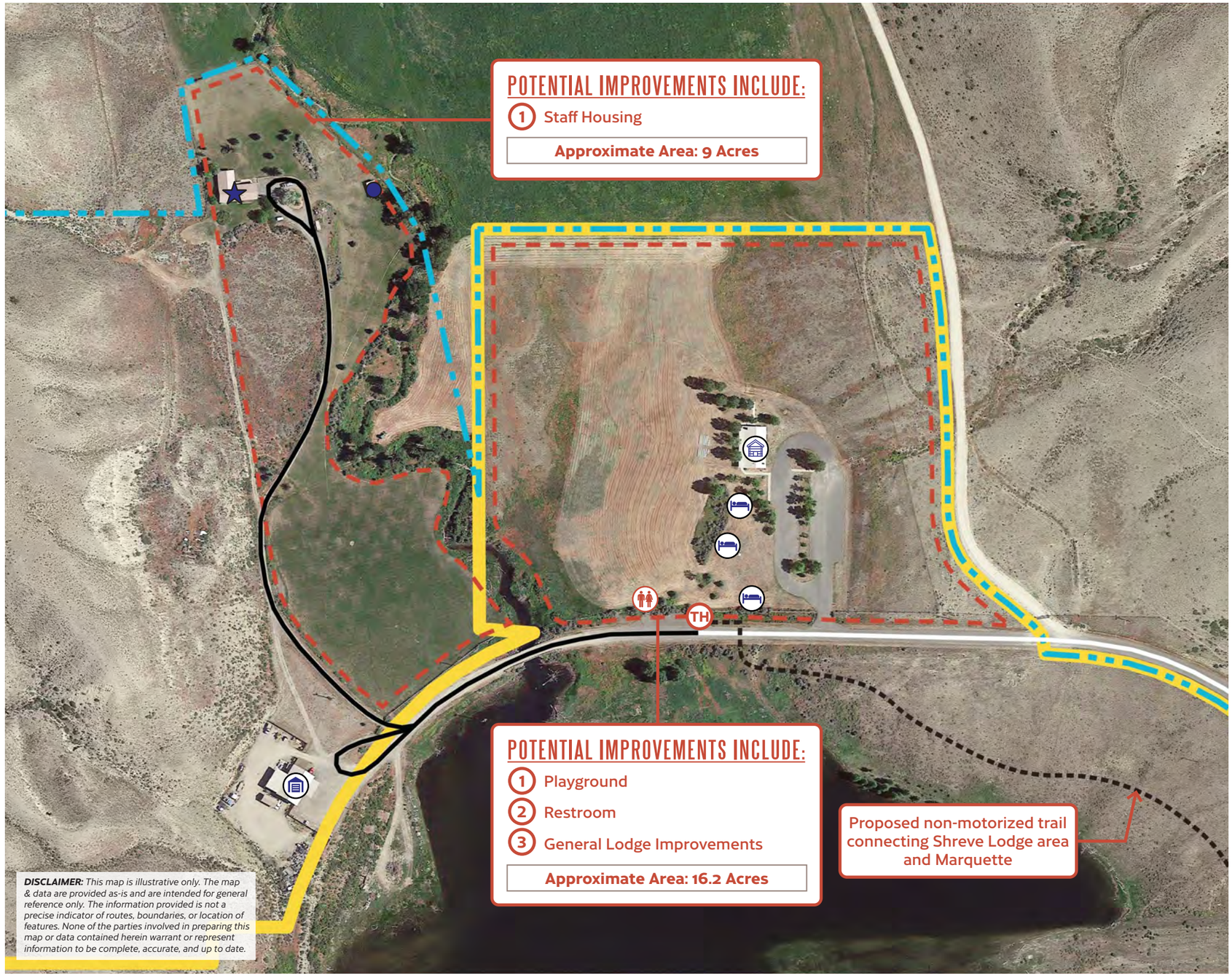
BUFFALO BILL RESERVOIR AND STATE PARK | NORTH FORK TRAIL

SHREVE LODGE

The Shreve Lodge is currently used by visitors for group meetings and gatherings. The building includes a kitchen and other resources that allow the space to be scheduled for events such as weddings, scout meetings, and business meetings. Proposed improvements include general lodge upgrades to support these and other similar programmatic functions. Preliminary ideas include technology and kitchen upgrades as well as a playground for use in family gatherings. There are three Camp Shacks at the site. These overnight accommodations are used to support the existing programmatic uses.

This area will be the west terminus of the proposed North Fork Trail and existing parking at the lodge can also serve as trailhead parking. A new restroom facility is proposed near the trailhead for use by trail users.

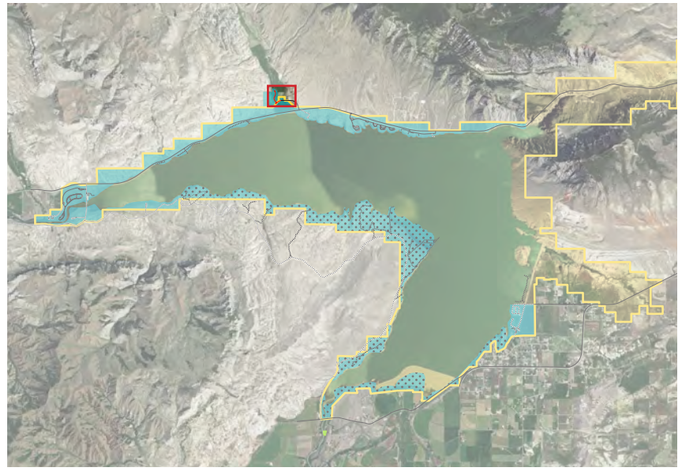
Northwest of the lodge is a residence currently used for state park staff housing. The area around the residence will be studied further as a location to address potential future staff housing needs (both permanent and seasonal).



LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Authorized Use Only
- Existing Asphalt Road
- Approximate Area of Proposed Improvements
- Proposed Non-Motorized Trail (Approximate Location)
- Existing Camp Shack
- Existing Lodge
- Existing Storage
- Existing Pit/Vault Toilet
- Existing Superintendent House
- Existing State Parks Maintenance Shops
- Proposed Trailhead (TH)

REFERENCE MAP



BUFFALO BILL RESERVOIR AND STATE PARK | SHREVE LODGE

EAGLE POINT

Eagle Point is a popular day use area with several covered picnic sites and restroom facilities. This area gets its name from the stunning views from this promontory point. No significant changes are anticipated for Eagle Point other than the routing of the North Fork Trail through this area. The diagram on this map shows a preliminary trail routing concept. Further routing information can be found in the North Fork Trail study developed by State Parks staff. The full study is included as an appendix.

In addition to ongoing maintenance of day-use assets, some attention should be given to the shoreline and the water-side edge of the activity area. There is a reasonable drop from the activity area down to the water's edge and there are currently several areas that have significant sloughing and erosion that will likely need stabilized in years to come. Additionally, the existing railings and other safety features should be upgraded and improved to increase safety in the area.

As with other areas along the north shore of the reservoir, vehicular access should be studied, improved, and formalized to allow safe ingress and egress along the busy highway corridor. Currently it is challenging to get in and out of this area during high traffic times on the busy highway to Yellowstone. This could include the addition of center turn lanes as well as acceleration and deceleration lanes. Coordination and partnering with WYDOT for these improvements will be essential to the success of these efforts.

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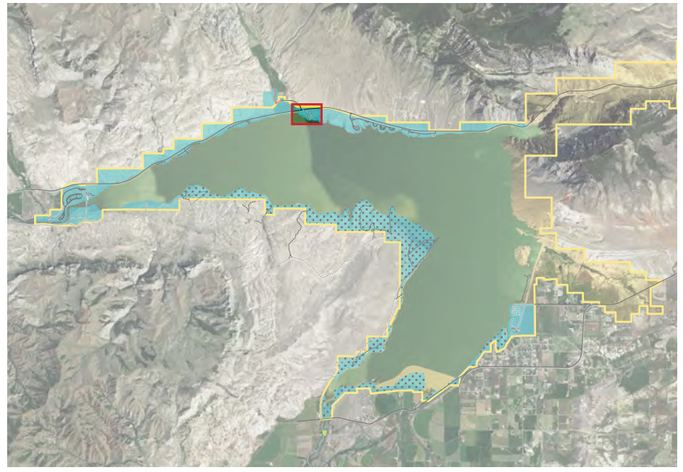
LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Asphalt Road
- Existing Pit/Vault Toilet
- Existing Gravel Road
- Proposed Non-Motorized Trail (Approximate Location)

REFERENCE MAP



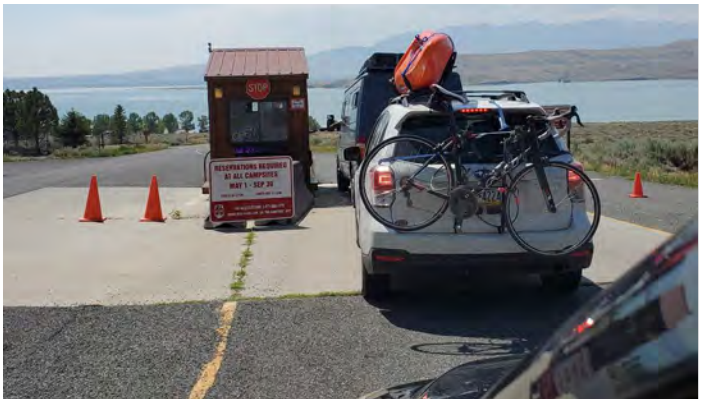
BUFFALO BILL RESERVOIR AND STATE PARK | EAGLE POINT

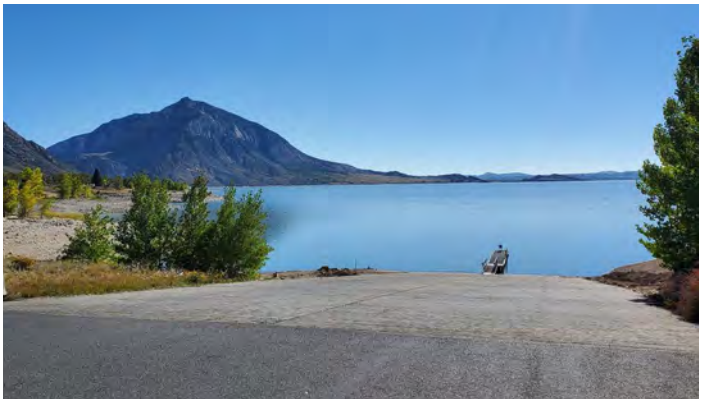
HEADQUARTERS

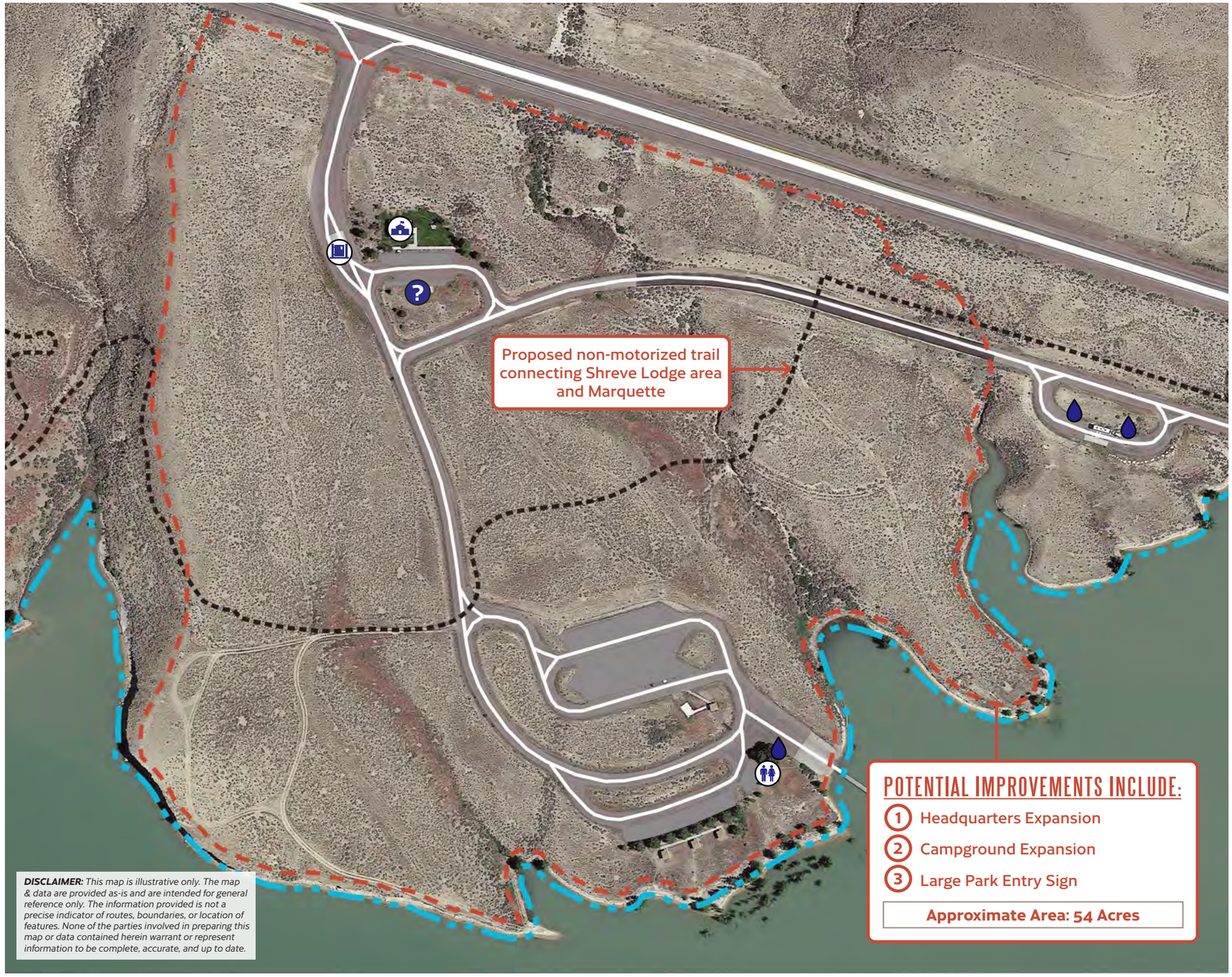
The central area along the north shore of the reservoir east of the Lakeshore Campground is home to what is most likely recognized by the public as the park headquarters. This area includes a number of day-use assets such as an entrance sign and fee booth, boat ramp, picnic areas, and the park headquarters building.

Due to staffing limitations and building size, the existing headquarters building in this area currently functions more as a staff office than a resource to visitors. There is a desire to expand the program function in this area to also include more visitor information and resources. This could include expanded interpretive and educational elements, camping supplies, equipment rental and possibly food services and concessions, though other areas are also being considered. There is also potential for expanded campsite facilities in this area. This may also be an appropriate spot for electric vehicle charging station. Exact program and locations will be studied during later public engagement and concept development.

As with other areas along the north shore of the reservoir, vehicular access should be studied, improved, and formalized to allow safe ingress and egress along the busy highway corridor. Additionally, expansion and improvement of the existing park monument signage will be considered in this area.



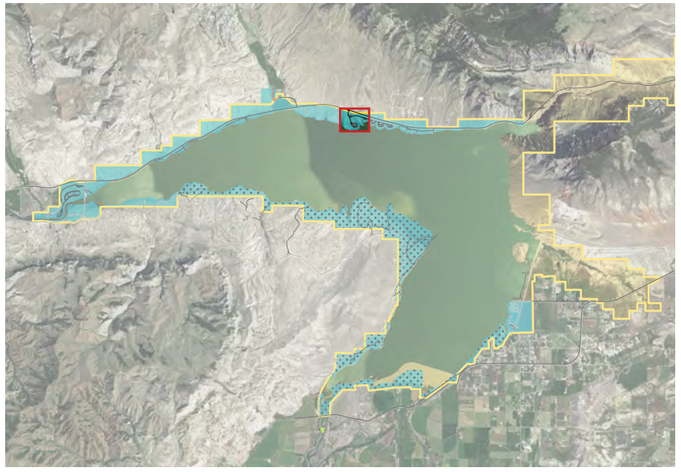




LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Parking Lot
- Existing Asphalt Road
- Approximate Area of Proposed Improvements
- Proposed Non-Motorized Trail (Approximate Location)
- Existing Headquarters
- Existing Fee Booth
- Existing Pit/Vault Toilet
- Existing Information Kiosk
- Existing Water Facility

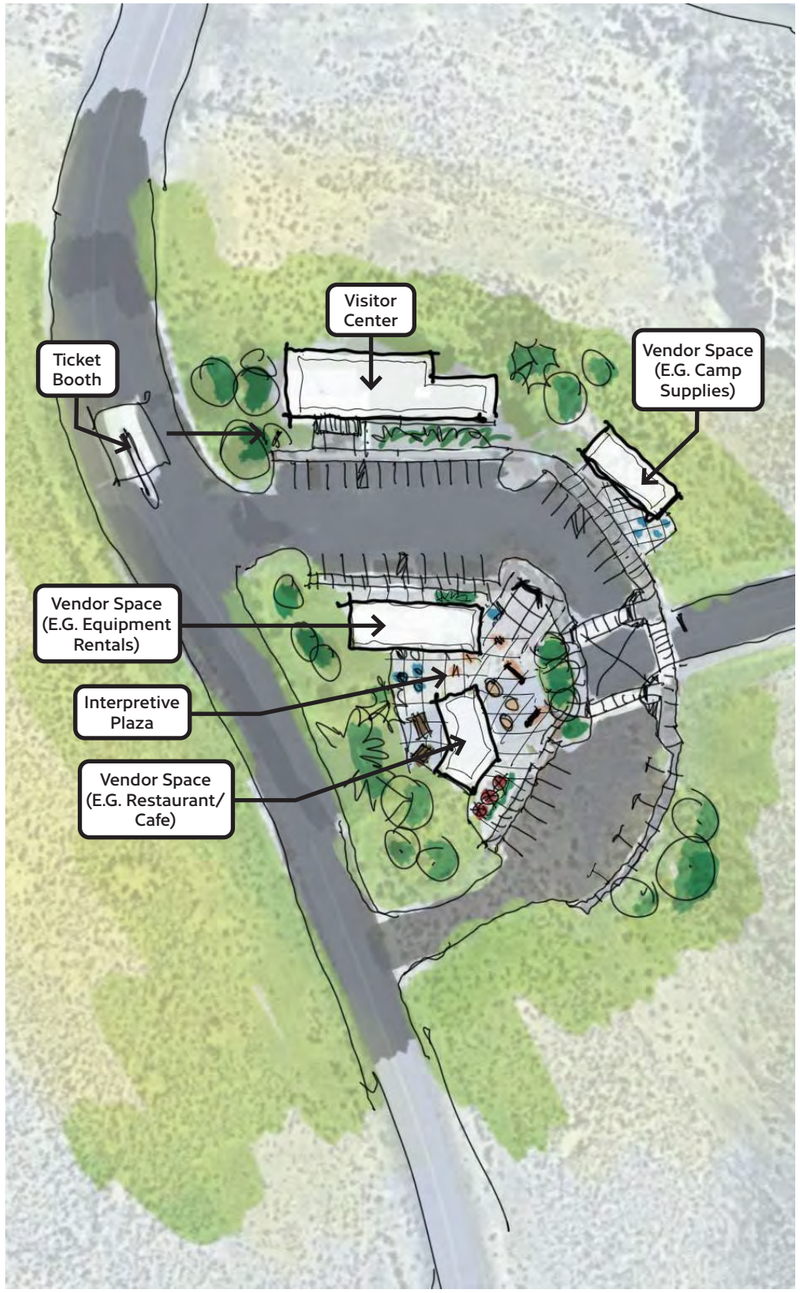
REFERENCE MAP



BUFFALO BILL RESERVOIR AND STATE PARK | HEADQUARTERS

CONCEPT PERSPECTIVE

CONCEPT PLAN



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LAKE SHORE EAST

The Lake Shore Campground is on the north shore of the reservoir and offers visitors a broad view of the reservoir as well as a striking view of the mountains to the south. This campground, with both RV and tent camping sites, also offers some good access to the water's edge in a few locations.

There are no significant changes anticipated for Lake Shore Campground other than the general maintenance and minor infrastructure upgrades outlined in other sections of this report. The proposed North Fork Trail will extend through this area using some of the existing trails in place. Signage is recommended in this area (and at key points throughout the full extent of the trail) to provide information on the overall North Fork Trail route. Existing trail segments may need to be reworked to provide improved trail surface and good separation from vehicular uses.

A new non-motorized trail will be needed east of the campground to connect this existing section to other existing trail sections at Marquette. The diagram on this map shows an initial concept for trail routing.

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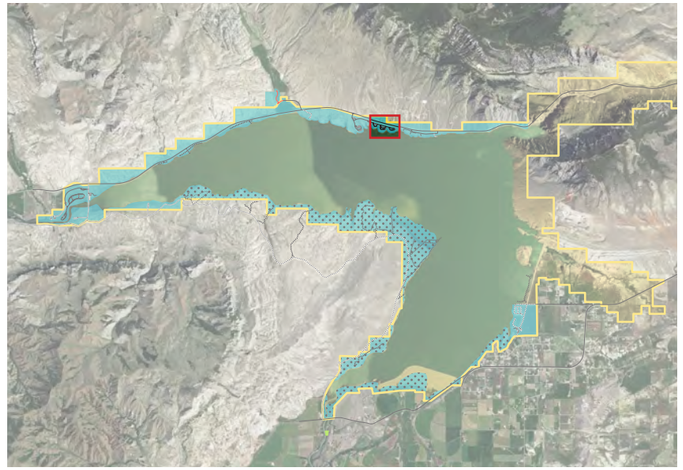
LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Parking Lot
- Existing Asphalt Road
- Existing Water Facility
- Existing Pit/Vault Toilet
- Existing Campsite
- Proposed Non-Motorized Trail (Approximate Location)

REFERENCE MAP



BUFFALO BILL RESERVOIR AND STATE PARK | LAKE SHORE EAST

MARQUETTE

Marquette is a popular day use area with good access to the water's edge in several locations. The area also has three large picnic shelters, a small parking area and a toilet facility. Like the Lake Shore Campground loops, it offers excellent views of the reservoir and mountain ranges to the south.

There are no major improvements planned for the existing facilities in this area other than the North Fork Trail. Marquette will be the eastern terminus of the trail with the western terminus at Shreve Lodge. The diagram on this map shows the current concept for trail routing.

Appropriate signage and trailhead information will need to be developed at Marquette to orient users to the overall trail context and routing. It also may be a good location for additional interpretive signage related to the historical significance of the trail and possibly other interpretive opportunities such ecological or cultural topic matter (to name a few).

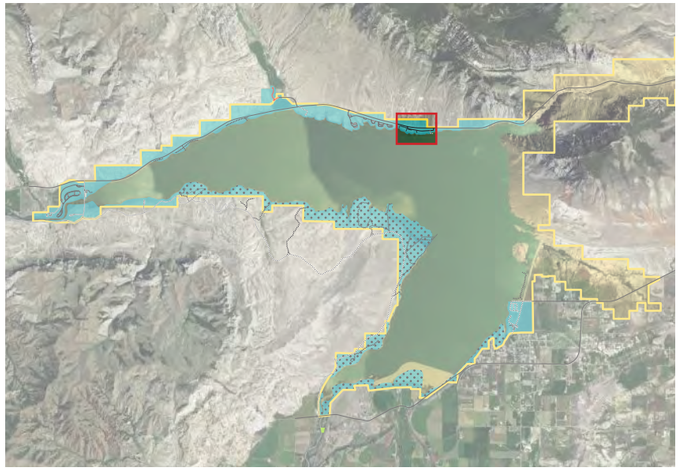
As with other areas along the north shore of the reservoir, vehicular access should be studied, improved, and formalized to allow safe ingress and egress along the busy highway corridor.

DISCLAIMER: *This map is illustrative only. The map & data are provided as-is and are intended for general reference only. The information provided is not a precise indicator of routes, boundaries, or location of features. None of the parties involved in preparing this map or data contained herein warrant or represent information to be complete, accurate, and up to date.*

LEGEND

- Bureau of Reclamation Management Boundary
- State Park Management Boundary
- Existing Asphalt Road
- Existing Two-Track Road
- Existing Pit/Vault Toilet
- Existing Gravel Road
- Proposed Non-Motorized Trail (Approximate Location)
- Proposed Trailhead (TH)

REFERENCE MAP



BUFFALO BILL RESERVOIR AND STATE PARK | MARQUETTE

NEXT STEPS

IMPLEMENTATION PROCESS

Master Planning Process

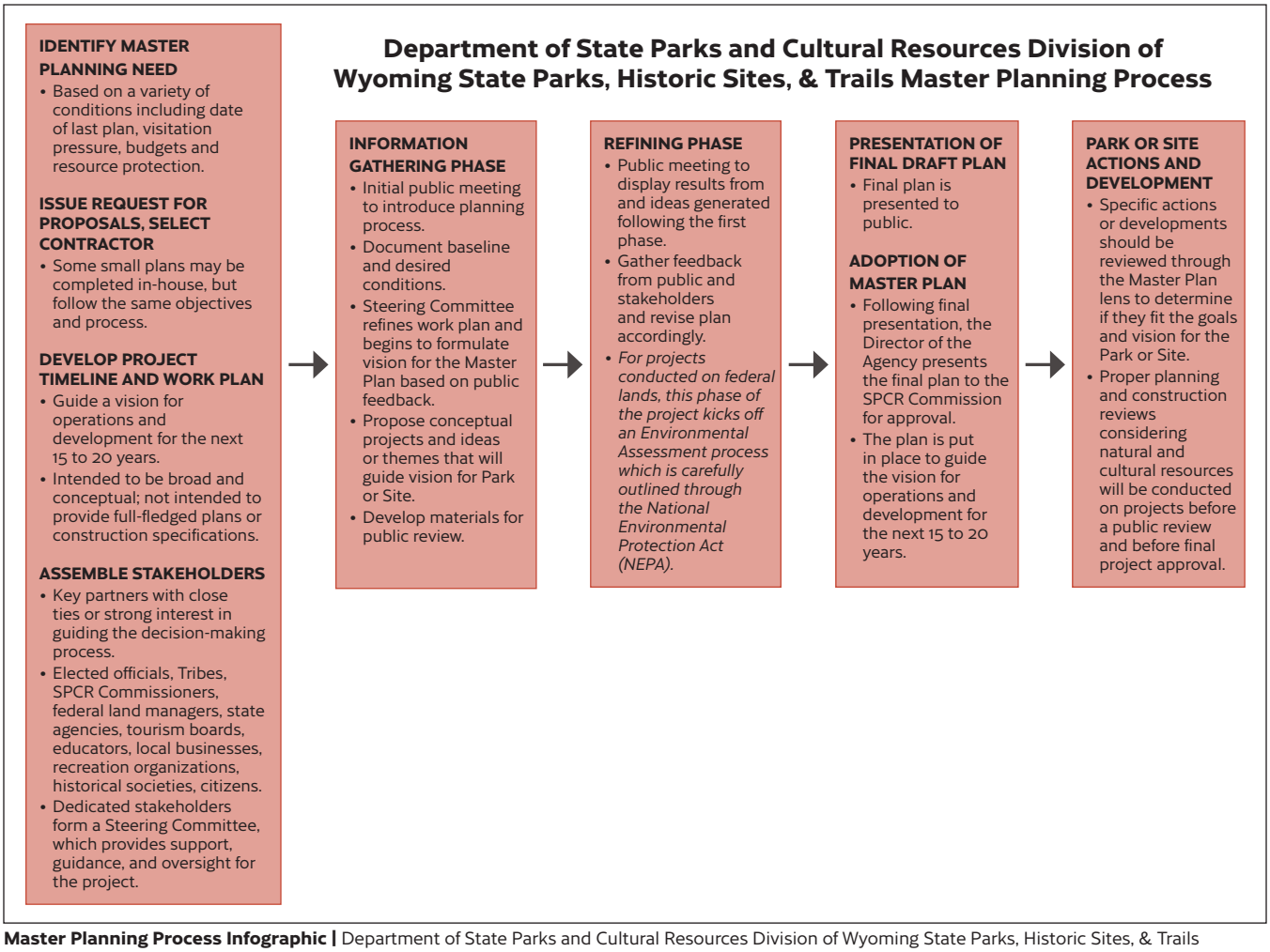
The Buffalo Bill Reservoir and State Park Master Plan, like all other Wyoming State Park plans, adheres to a standardized process developed by the Department of State Parks and Cultural Resources Division of Wyoming State Parks, Historic Sites, & Trails. Their description of this process is as follows:

"As the state agency charged with the protection, preservation, management, and development of the State's recreational, cultural, and historic resources we must continually be striving to improve, expand, and enhance the opportunities and experiences that we provide for our resident and non-resident visitors.

The process begins with an internal review, including identifying the need for a Master Plan, selecting a contractor, developing a project timeline, and assembling stakeholders. The project timeline, work plan, and the development of a steering committee is finalized during the Information Gathering phase.

After information relevant to the development of a Master Plan is gathered and the public is informed on the project process, a draft report is prepared for another round of public comment in the Refining Phase. Comments received in that phase are used to finesse the final draft plan, which is presented again to the public before approval by the SPCR Commission and the SPCR Director. We value the public engagement process and host no fewer than two public meetings and an online platform for these planning efforts; most plans require several more meetings to adequately consider public and stakeholder feedback.

Master Plans are intended to be conceptual, guiding documents. Any specific actions or developments should be reviewed through the lens of the Master Plan, but will require a separate public process. Proper reviews will be conducted before project approval."



Master Planning Process Infographic | Department of State Parks and Cultural Resources Division of Wyoming State Parks, Historic Sites, & Trails

Path to Construction

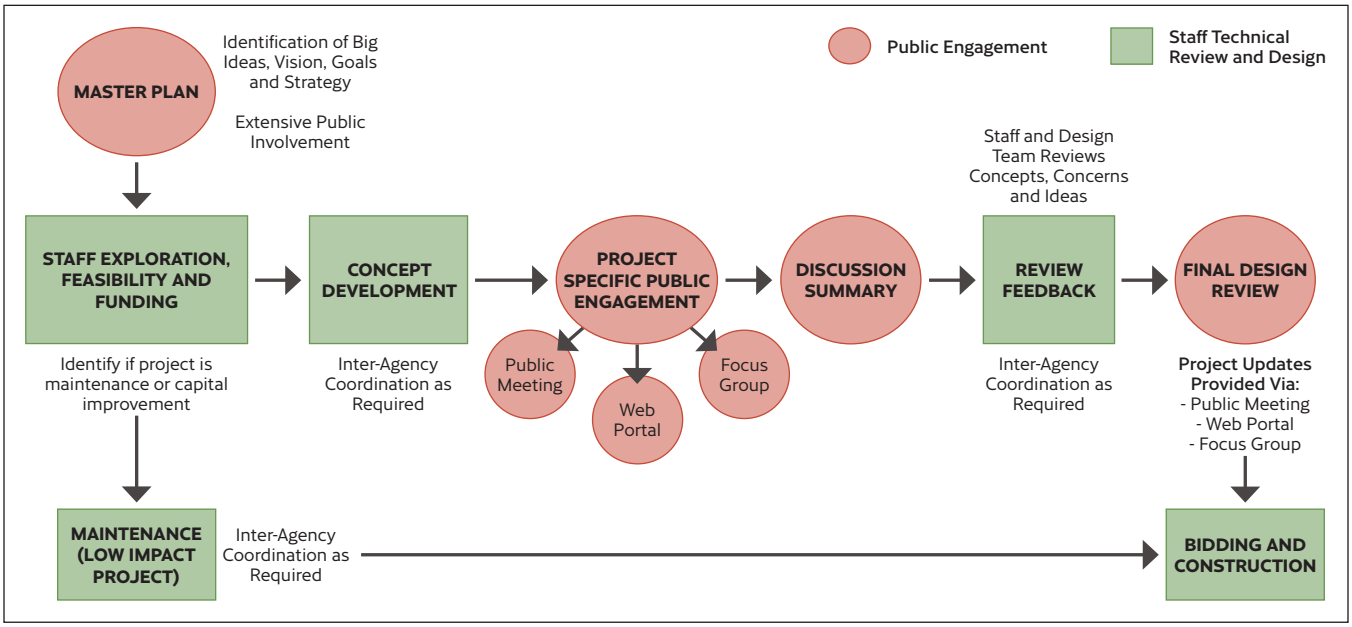
This Master Plan update outlines the vision, big ideas, goals, and strategies for Buffalo Bill Reservoir and State Park. Beyond its initial creation, the life cycle of the master plan extends to include an implementation process. During this phase, the outlined strategies are put into action, ensuring that the park's development aligns with the established goals.

The implementation process begins with staff exploration, where the park staff will research and test the feasibility of the proposed improvements. This includes assessing existing conditions and determining the resources required to implement the changes. ADA standards, existing utilities, and existing infrastructure must be considered. If park staff identify a proposed improvement as a simple maintenance project, the implementation process is streamlined. The maintenance project goes straight to bidding and construction. On the other hand, if the proposed improvement is identified as something more involved than a maintenance replacement, it may be more appropriately completed as a capital improvement project. If the project is more involved and impacts visitor experience, several steps remain before being sent to bidding and construction.

Capital improvement projects will be sent to concept development, where big ideas can be refined into more concrete and detailed design solutions. Projects may require inter-agency coordination and outside consultants to be hired. The conceptual design will then be reviewed by stakeholders, including the public, to ensure that the strategies proposed are appropriate. It is important to offer a variety of options and engagement formats to collect a comprehensive collection of the public's opinion. Some examples of engagement formats include in-person public meetings, virtual meetings, focus groups, and more.

Following each public engagement meeting, the design team will summarize the feedback received and identify common themes. Park staff and the design team should work together to review and refine the concepts based on public input. Once a final design is reached, it will be sent back to the project team and public stakeholders to be reviewed and approved. Finally, it will be sent to bidding and construction.

Typically, the life cycle of a Master Plan spans approximately 10 years. Over this period, the plan serves as a guiding framework to new improvements. However, as the decade draws to a close, it becomes essential to revisit and reassess the plan. Therefore, after these ten years, it is recommended to initiate the development of a new Master Plan alongside an updated RMP/EA. This cyclical approach ensures that Buffalo Bill Reservoir and State Park continue to evolve sustainably, adapting to changing needs, environmental factors, and community aspirations.



Implementation Process Infographic | State Park Master Plan Projects

Appendix 1: Project 101 Flier

This appendix includes the Project 101 Flier distributed to attendees of public workshops #1, #2, and #3.

Buffalo Bill Reservoir & State Park

Resource Management Plan & Environmental Assessment

ABOUT THE PROJECT

Wyoming State Parks and Cultural Resources is working in cooperation with the United States Bureau of Reclamation to develop a Resource Master Plan and Environmental Assessment for Buffalo Bill Reservoir and State Park.

WHY IS A PLAN NEEDED...?

The last plan was completed in 1988 prior to major updates to the Reservoir and Park. Since then, outdoor recreation preferences have changed, and Parks wants to be responsive to current needs. Buffalo Bill State Park is also seeing record numbers of guests. This level of increased visitation has put added pressure on park infrastructure as well as the natural and cultural resources that we all value for health and recreation.

TIMELINE

State Parks staff kicked off the project with Ayres Associates. This project will be a multi-year process and is anticipated to run through **December of 2024**.

GET IN TOUCH

Dan Marty, Park Superintendent
Wyoming State Parks & Cultural Resources
dan.marty@wyo.gov

Project information will be provided at:
https://wyoparks.wyo.gov/index.php/places-to-go/buffalo-bill

WHAT WILL THE PLAN DO...?

- Provide a planning framework for decision making at the park that balances the development of amenities with the preservation of natural and cultural resources.
- Inventory and document current resources and the public's desires for future development.
- Review and evaluate current recreation practices.
- Develop and assess recreational opportunities for the facility.
- Create an amenity plan to address the needs of increasing numbers of local and out of state visitors.
- Establish strategies for monitoring and mitigating impacts to wildlife, erosion, and recreation use.
- Address facility maintenance and construction opportunities to maximize funding and minimize operations and maintenance costs.
- Review current and potential community partnerships to build support, advocacy, and volunteerism.
- Identify and prioritize park projects to be implemented as funding and other resources become available.
- Comply with local, state, and federal requirements, including the National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA).

AN OPPORTUNITY TO WORK WITH YOUR COMMUNITY

Our world over that past few years has changed in many ways and the face of recreation is also changing. A recent Penn State study found that nearly half of the adults in the United States now participate in outdoor recreation on at least a monthly basis, and approximately 20% may be new to outdoor recreation since 2019. With more and more folks heading outdoors it is critical to hear from a wide variety of parks users during the development of this plan to best address natural and cultural resource management in balance with recreation needs.

This process will be a unique opportunity to work with other users, both local and out-of-state, to guide and impact the vision and direction of the park plan. The goal of this project is to collaborate with the full breadth of stakeholders and make sure that everyone has an opportunity to heard and to become involved if they wish and how they are able.

INTERESTED IN BEING INVOLVED? LET US KNOW!.....

To find out more about the project, the process and to get involved please go to the following locations:

Wyoming State Parks: https://wyoparks.wyo.gov/index.php/news-updates-buffalo/1872-buffalo-bill-reservoir-and-state-park-embarking-on-planning-process

Facebook: https://www.facebook.com/BuffaloBillStatePark

Survey: https://docs.google.com/forms/d/e/1FAIpQLSfMxGlsHTCKPWjl0pBcjlxAFCefGlaPs95wO5v3CdaRTdyQfg/viewform

HELP PROVIDE THE VISION FOR THE FUTURE OF BUFFALO BILL STATE PARK !

Appendix 2: Public Engagement Summaries

This appendix includes the summary reports generated after the 1st, 2nd, and 3rd public workshops.

Buffalo Bill State Park Master Plan Update - Workshop #1 Vision and Values

Overview

Wyoming State Parks held a community open house at the Park County Public Library for the Buffalo Bill State Park Master Plan update on November 14, 2022 from 6:00-8:00 pm. The open house contained various stations that prompted participants to provide feedback on activities they enjoyed, places they frequented, and things they would change in the Park. The stations culminated in attendees creating a 5-minute master plan for the Park and sharing their biggest idea(s) for Buffalo Bill.

The public meeting was attended by 13 residents from Cody. Based on the number of participants, the project team was able to get more in-depth with each individual participant to discuss their thoughts on the Park's current condition and their opinions on how the Park may be improved. The feed back received from the participants is summarized in this report and categorized into activities or places that are currently enjoyed by users and suggestions received at the Public Meeting.

The following pages serve as a summary of the Public Meeting. This summary report will overview:

- Public Notification and Press Coverage
- Preliminary Survey Results
- Activities and Locations Currently Enjoyed
- Suggestions for Changes in the Park
- Major Themes Discussed
- Ideas for Next Steps

The November 14 Open House was a successful first step in engaging the community for the Buffalo Bill State Park Master Plan. The feedback received will be collated and incorporated into future public engagement efforts for the Plan, ultimately serving as a basis for Plan recommendations.

Public Notification and Press Coverage

The Wyoming Division of State Parks put significant effort into press coverage for the public meeting. The efforts included advertisements in the local Powell Tribune and social media posts, such as the one depicted below.

The efforts resulted in moderate attendance for the event. The press releases also contained a QR code for residents to complete a survey with their impressions of the State Park, which will be overviewed in the following section. Copies of the local newspaper coverage are available in the appendix of this document. Mark Davis of the Powell Tribune attended the event and completed an article overviewing the content of the meeting, shown in the following pages.

POWELL TRIBUNE

Planning for the next generation

Buffalo Bill State Park begins process by asking users what they want

(https://delta.creativecircledn.com/powell/original/20221117-091312-State-Park.jpg)

Buffalo Bill State Park Superintendent Dan Marty discusses ideas for the next generation in the park with Evan Bennett while meeting in the Grizzly Room on Monday night at the Park County Library.

TRIBUNE PHOTO BY MARK DAVIS

Posted Thursday, November 17, 2022 8:10 am

By Mark Davis (mailto:mark@powelltribune.com)

The expectation by many for Monday night's planning meeting was to hear what Buffalo Bill State Park management envisions for the next two decades. Instead, the park offered no plans — there wasn't even an opening speech — and concentrated solely on what the park's local users want.

The Buffalo Bill Reservoir and State Park Resource Management Plan is intended to be a 20-year plan for the park, providing the foundation for decision-making to accommodate recreation and visitor amenities in balance with the preservation of recreation, setting, and natural and cultural resources. Attendees moved through a series of displays manned by park employees and were allowed to make suggestions on the direction of the park.

The suggestions didn't fall on deaf ears. Instead, each suggestion was written directly on detailed maps of the park which is on Bureau of Reclamation land but managed by the state for recreation.

"While the great ideas are going to come from the citizens, the community and stakeholders, our job is to put them all together in a package that can stand the test of time, and hopefully be implemented long term," said Matt Ashby, vice president of Ayres Associates Development Services Division.

Ayres Associates has been selected to facilitate the planning process. It's a multidisciplinary company that includes planning and engineering, community development and resource planning. It's been involved in a number of different Wyoming State Parks and Historical Sites Department projects, including the Sinks Canyon Master Plan recently, and bridge inspections along backcountry trails.

"We are really excited to be involved in planning the future of Buffalo Bill," Ashby said as the meeting kicked off.

Over the next year, the Ayres and the state park team will be collecting information, feedback, and ideas about ways to both enhance the visitor experience at the park and "preserve its resources for future generations to enjoy."

"This is the first step," Ashby said. "It's going be a long process. It'll be about two years, wrapping up 2024."

The final Resource Management Plan will be subject to a federal environmental assessment, but the first part of the process is identifying the community's vision for the park and coming up with the view for the future.

"This is a great way to involve people," said Wes Allen, co-owner of Sunlight Sports and steering committee member of the Park County Outdoor Recreation Committee. "Having an open ended, kind of a sandbox for people to come in and give their ideas like this is the perfect way to start the process."

Buffalo Bill Dam, constructed on the Shoshone River 6 miles upstream from Cody, was completed in 1910, creating Buffalo Bill Reservoir. The dam is listed on the National Register of Historic Places and is also a National Historic Civil Engineering Landmark.

Much of the area was designated a state park in 1957. The park offers fishing, camping, picnicking and a variety of water sports. The last major overhaul of the park was in the 1990s.

The park currently has three boat ramps, nine developed day use areas, two group shelters and 11 picnic shelters, and 100 campsites in two campgrounds which can be reserved through the State Parks Reservation System. Shreve Lodge, which hosts up to 200 and has a large kitchen, is also available to rent for day use.

Community attendees discussed hiking, lodging, parking and facilities, as well as uses for available land that could offer a more broad list of recreational activities.

"I think that one of the biggest opportunities here is for the state and other land managers to kind of partner up to make sure that the recreational experience is a little bit more cohesive and a little bit better supported," Allen said.

Park supervisor Dan Marty said his priority for the park is how it serves the local communities. Marty has spent his entire career working for or leading Buffalo Bill and Boysen state parks. He graduated from Cody High School and spent two years at Northwest College in Powell before finishing his studies at the University of Wyoming. He started in the park as a seasonal employee in 1982 and became the assistant superintendent in 1999. He became the Buffalo Bill State Park superintendent in 2016.

"As everybody knows, the North Fork Highway is a gateway to Yellowstone. So we get a lot of tourists. I lean towards local folks, so I'm trying to advocate things for the community," Marty said.

The public is invited to complete an initial survey about the park and planning process, and to sign up to receive more information at wyoparks.wyo.gov/index.php/news-updates-Buffalo (https://wyoparks.wyo.gov/index.php/news-updates-Buffalo).

For more information and to stay up to date with events and amenities at Buffalo Bill State Park: wyoparks.wyo.gov/index.php/places-to-go/buffalo-bill (https://wyoparks.wyo.gov/index.php/places-to-go/buffalo-bill) or or call Superintendent Dan Marty at 307-587-9227.

Preliminary Survey Results

At the time this document was created, the survey had 28 responses. The survey requested information including the participants name, Park County residency, Buffalo Bill State Park visitation frequency, interest in Buffalo Bill State Park, and whether or not they are a day-user, camper, or both. The survey also inquired the depth of the participant's community engagement and if there was anything else they would like to share. A screenshot of the survey platform can be seen to the right.

The results of the survey show that 93% of those that took the survey were Park County residents. In addition to this 86% of those that took the survey identified as solely day users. Three (3) of the 28 participants noted that they camp in addition to day use. This information shows the dichotomy of local versus non-local use of the Park. Residents of Cody and Park County are unlikely to camp in the Park due to the close proximity to the community. The participants of the survey noted a wide array of interest in the Master Planning process, ranging from maintaining interest because of the close distance of the Park from where they live to wanting active involvement in overall Park management. Users requested a variety of engagement options, but it must be noted that there were requests for virtual public participation options ONLY.

Survey results varied on the final question, which prompted "Is there anything else you'd like to share with us?" Highlights from the responses include:

- We love the park and the new cabins. Thank you for making it a special place to visit.
- Need to make South Fork dock bigger and deeper. Heard there might be another doc put over on Cedar Mountain.
- Interested in the reservation data for the last three years and how people can reserve the shacks on Stagecoach Campground.
- Please no more camping sheds. I pass the park daily as a Northfork resident the entire new area on Stagecoach was empty all summer.

These responses couped with those from the Public Meeting will be incorporated into the Final Document.

Activities and Locations Currently Enjoyed

The following items were expressed as activities or places currently enjoyed in the Park.

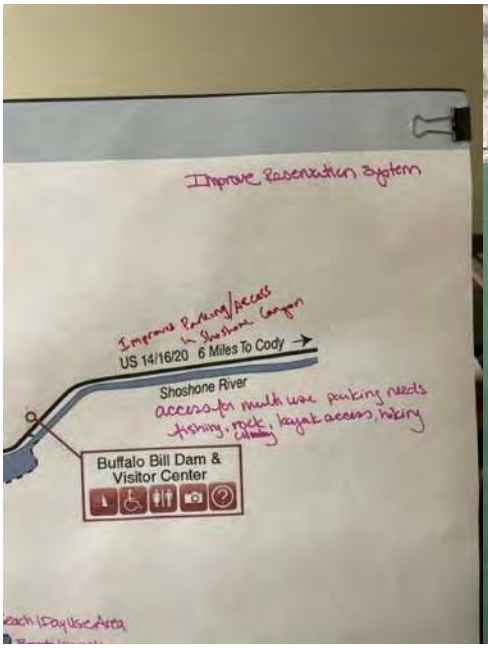
- **Hiking at Sheep Mountain**
- **Camping and Natural Features at North Fork**
- **Fishing – Mostly Boating**
- **Boating**
- **Shreve Lodge gatherings and facility**
- **Taking dogs out to the lake**
- **North Fork below the Dam**
- **Dam visitors center**
- **Easily accessible park – proximity to Cody and right off the highway**
- **New pay system, digital pay**

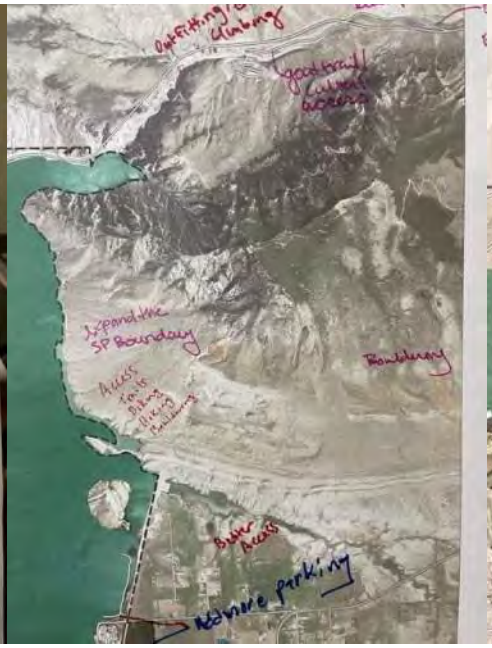
Suggestions for Changes in the Park

The following items were expressed as proposed changes for the Park. Excerpts from the Board and Five-Minute Master Plans can be seen on the following page.

- **More hiking in the Canyon below the Dam, more access**
- **Pay station screens can be difficult to read with the sunlight**
- **Annual auto-renew on yearly pass**
- **Improve statewide reservation system**
- **Trail along north shore**
- **Additional signage and wayfinding**
- **Overall identity of Park community ownership v tourist destination (Big Picture)**
- **Monument entrance**
- **Access and turn lanes, safety at various locations. Dam being a major safety point**
- **Access and safety improvements to the canyon in General**
- **Park visitor's center**
- **Eagle Point subsiding – erosion and safety issues**
- **Resource concerns with lack of road signage and designated routes**
- **Issues with dumping and illegal fires**
- **More hiking**
- **Off-road opportunities in South Shore area**
- **Cedar Mountain access – camping, boating, hiking, caving (more bear safe) expansion of State Park**
- **Access of Diamond Creek Area**
- **Concern with Stagecoach Campground**
- **Adding placemaking features to the shacks – architecture, pergolas, etc.**
- **No fees on the South side**
- **Improvement of Stagecoach Road by County for Hazard Mitigation Planning**
- **Wildness of the South side**
- **Education and Safety with Paddle boarding (PFD Loaner)**
- **Lack of ranger capacity (only one individual can write tickets) – as the park grow and sees more visitors we should look to expand**
- **Defining back country v front country**
- **Bear boxes at the North Fork**
- **Assistant Superintendent – another full time ranger on the other side**
- **Boat Rentals (Kayaks and Paddleboards)**
- **Food concession – maybe food truck situation**

Suggestions for Changes in the Park





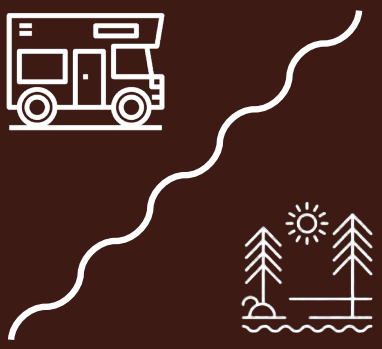
Further Feedback

After the November 14 meeting, the project team left several boards from the public meeting at the Library for further input. The images below show that there was significant input received while the boards were left at the library. Ayres believes distributing public information about the plan update at the library may be a good way to garner additional public input.

The additional information illustrates that the Park is enjoyed in a variety of ways; with wildlife viewing, shooting and archery, fishing, hiking, and tent camping being the most prevalent activities enjoyed. On the “Features You Love,” board the public added thoughts such as implementing a lifetime senior pass, more legal fire pits, providing geocaching spots, creating mountain biking trails, and creating a dog park. This represents only a handful of responses and all responses will be made available in future plan appendices.

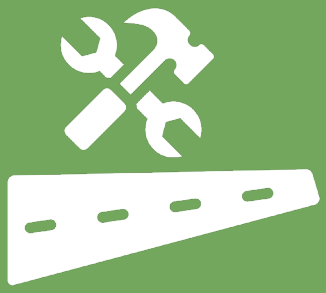
Major Themes Discussed

Based on discussions with Park County residents, the following themes emerged as overarching topics the plan will likely need to address.



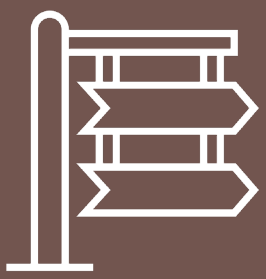
Two Sides of the Park

A common theme discussed included the difference between improvements along US 14 and those along Stagecoach Trail. The two represent the differences in levels of improvement between the front country and back country in Buffalo Bill State Park.



Road Improvement

Various roadways in Buffalo Bill State Park need improvements. These include improvements with US 14 access management, signage improvement for roadway access, improvements along Stagecoach Trail for emergency management, and further road designation delineation on the South Shore.



Park Identity/Wayfinding

Buffalo Bill State Park does not have any monument signage or other destination signage that is common in other Wyoming State Parks. This, a long with being a pass-thru for Yellowstone National Park, leads to a lack of identity for the Park. Increased placemaking and park signage will lead to a stronger park identity and community ownership over its amenities.

Cedar Mountain Access

Several participants noted the abundant recreational opportunities on Cedar Mountain on the eastern edge of the Park. These opportunities include hiking, mountain biking, camping, and sight seeing. Offering Cedar Mountain access will allow for more local Park use and more connectivity between the Dam and South Shore.

Ideas for Next Steps

Based on the participation levels of the Public Meeting, the consultant team would like to come up with various scenarios for further public input. In general, those that participated in the Public Meeting were in favor of more signage, more trails, increased camping and hiking opportunities, and increased access on the South shore of the reservoir. However, those that attended the Public Meeting represent a small segment of the overall community and a limited perception of improvements that may be made to the Park.

Prior to creating full established recommendations, the consultant team would like to engage the community on visual preference surveys and short options surveys in strategic locations to garner more community input and support. The surveys may be in the form of web-based surveys or quick engagements at popular local establishments; such as super markets, post offices, or other frequented government institutions. These tactical engagements will further refine concepts, design considerations, and access options that were expressed in the Public Meeting. This option can be further discussed at future steering committee meetings.

The November 14 Public Meeting was successful in engaging an interested segment of the Park County community. Future engagement efforts will offer more refined ideas for the Park, which will likely incite more community interest in the process. These opportunities will serve to reinforce or refine ideas discussed at the preliminary Public Meeting

Buffalo Bill State Park Master Plan Update
Workshop #2 - Options & Explorations (June 1-2, 2023)

Overview

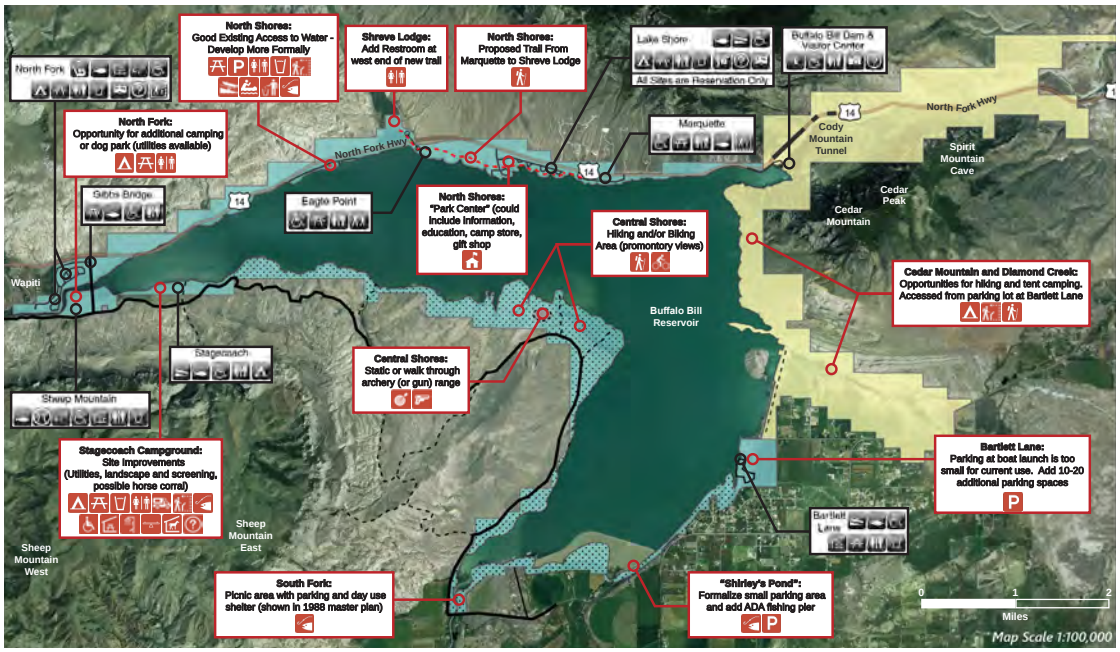
Wyoming State Parks held a series of open house listening sessions on June 1st and 2nd, 2023 in Cody, Wyoming to continue to gather additional input from the public regarding the park master plan update. Meetings were held at three separate locations and times to connect with a broad range of the public and provide engagement opportunities that were convenient and accessible. The open house format included various stations that prompted participants to provide feedback on specific improvement concepts proposed for the park.

All three meetings were well attended by a diverse group of local community members with over 30 participants taking part in the activities and providing their thoughts and ideas. State Parks and the consultant team received a wealth of valuable feedback and comments. This report provides a summary and overview of these meetings and includes:

- Copies of the activity boards:
  - Concepts and Opportunities (Overview Map)
  - Cedar Mountain / Diamond Creek (Area Map)
  - South Fork Enlargement (Area Map)
  - Central Shores Enlargement (Area Map)
  - West Park Enlargement (Area Map)
  - North Shores Enlargement (Area Map)
- Comment Highlights
- Major Themes

Activity Boards

CONCEPTS AND OPPORTUNITIES

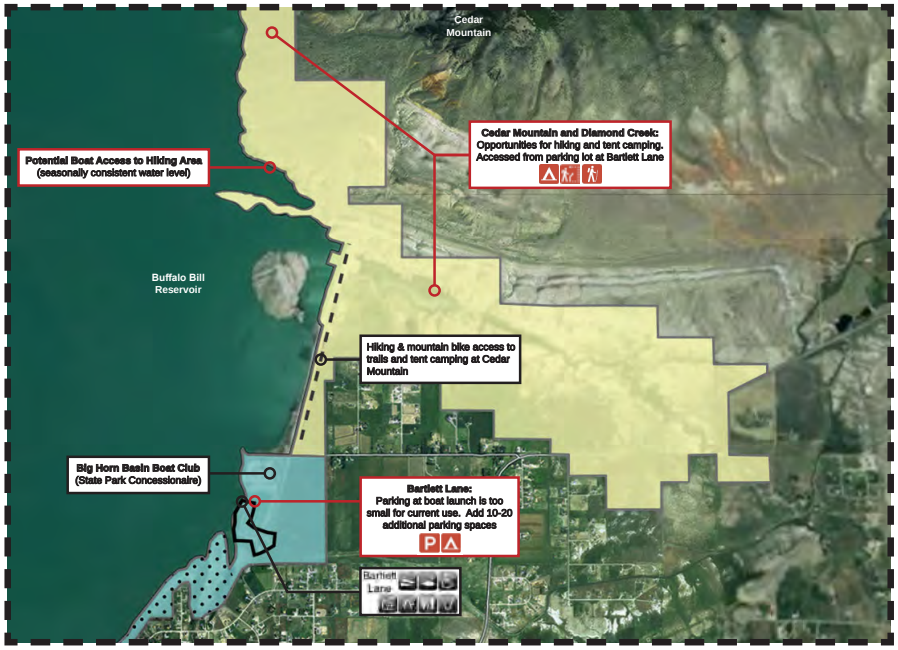


LEGEND

- Outside Current State Park Boundary
- Water
- Within Current State Park Boundary
- No Park Fee
- Concepts and Opportunities
- Existing Amenities

The concepts and improvement ideas shown here were generated in previous meetings with the public, Steering Committee, staff and through community surveys. More detailed information on these areas is found on subsequent presentation boards.

CEDAR MOUNTAIN / DIAMOND CREEK ENLARGEMENT

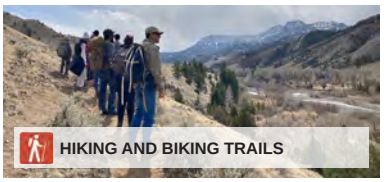


LEGEND

- Outside Current State Park Boundary
- Water
- Within Current State Park Boundary
- No Park Fee
- Concepts and Opportunities
- Existing Amenities

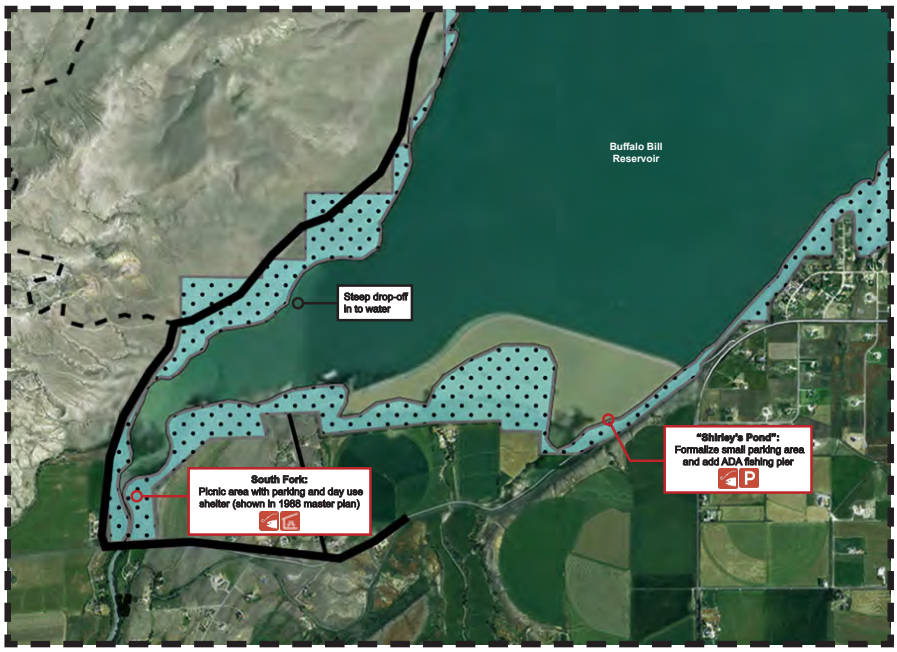
KEY MAP

WHAT IS THE CHARACTER OF THIS AREA OF THE PARK (DEVELOPED WILDLAND, BACKCOUNTRY, LOCAL)? WHAT TYPES OF USES AND SCALE/INTENSITY OF USES ARE MOST APPROPRIATE? HERE ARE A FEW IDEAS FROM PREVIOUS MEETINGS (WHAT DO YOU THINK?)



Activity Boards

SOUTH FORK ENLARGEMENT

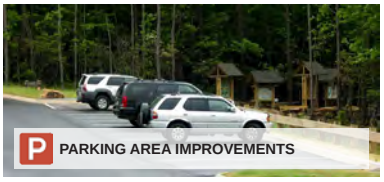


LEGEND

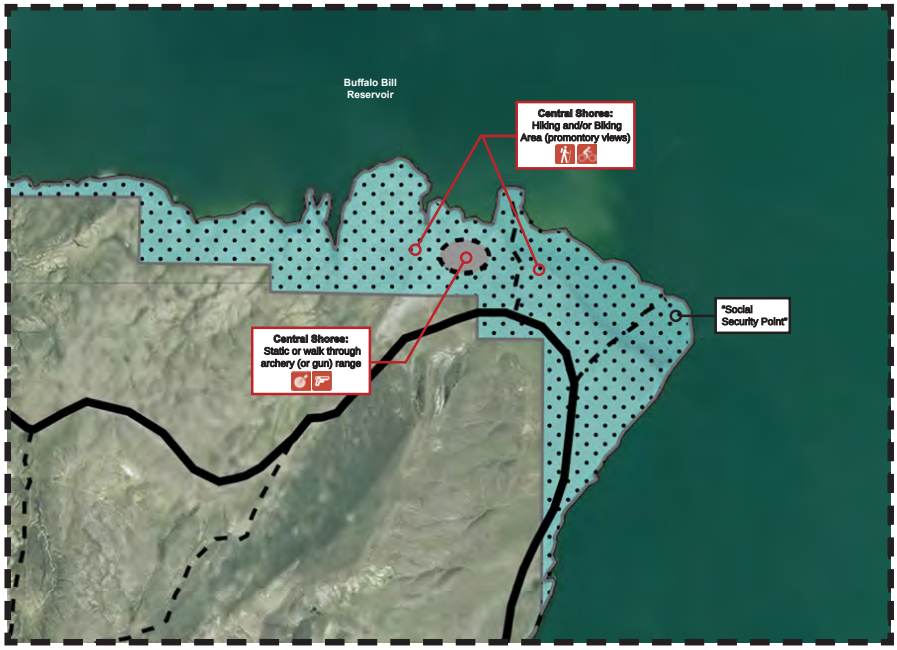
- Outside Current State Park Boundary
- Within Current State Park Boundary
- Concepts and Opportunities
- Water
- No Park Fee
- Existing Amenities

KEY MAP

WHAT IS THE CHARACTER OF THIS AREA OF THE PARK (DEVELOPED WILDLAND, BACKCOUNTRY, LOCAL)? WHAT TYPES OF USES AND SCALE/INTENSITY OF USES ARE MOST APPROPRIATE? HERE ARE A FEW IDEAS FROM PREVIOUS MEETINGS (WHAT DO YOU THINK?)



CENTRAL SHORES ENLARGEMENT

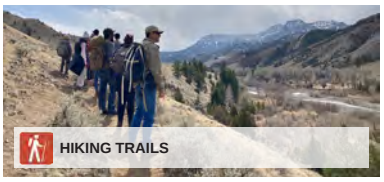


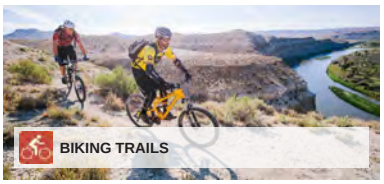
LEGEND

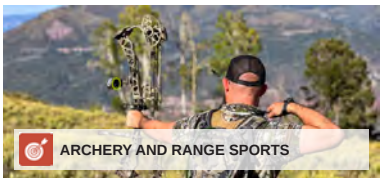
- Outside Current State Park Boundary
- Within Current State Park Boundary
- Concepts and Opportunities
- Water
- No Park Fee
- Existing Amenities

KEY MAP

WHAT IS THE CHARACTER OF THIS AREA OF THE PARK (DEVELOPED WILDLAND, BACKCOUNTRY, LOCAL)? WHAT TYPES OF USES AND SCALE/INTENSITY OF USES ARE MOST APPROPRIATE? HERE ARE A FEW IDEAS FROM PREVIOUS MEETINGS (WHAT DO YOU THINK?)

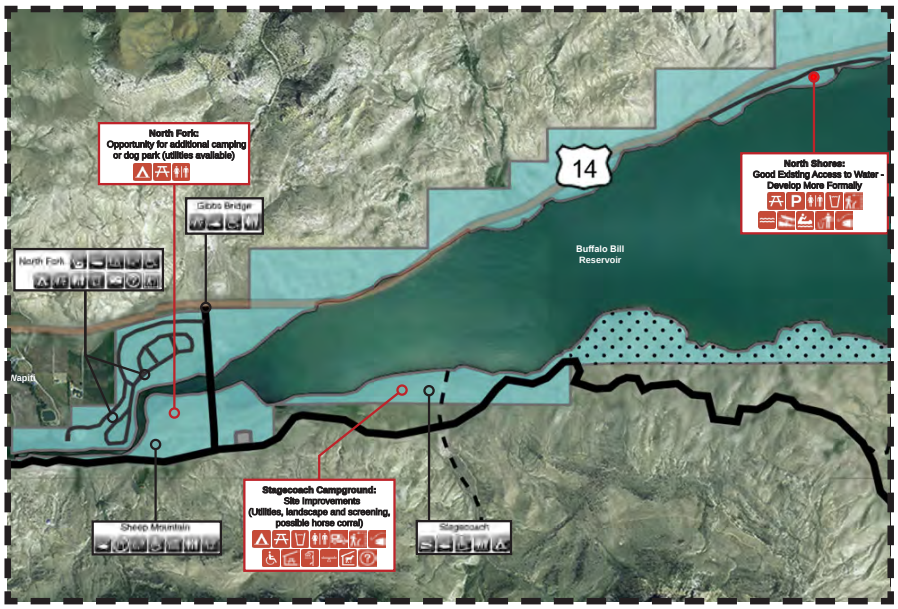






Activity Boards

WEST PARK ENLARGEMENT



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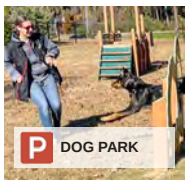
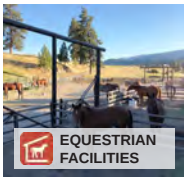
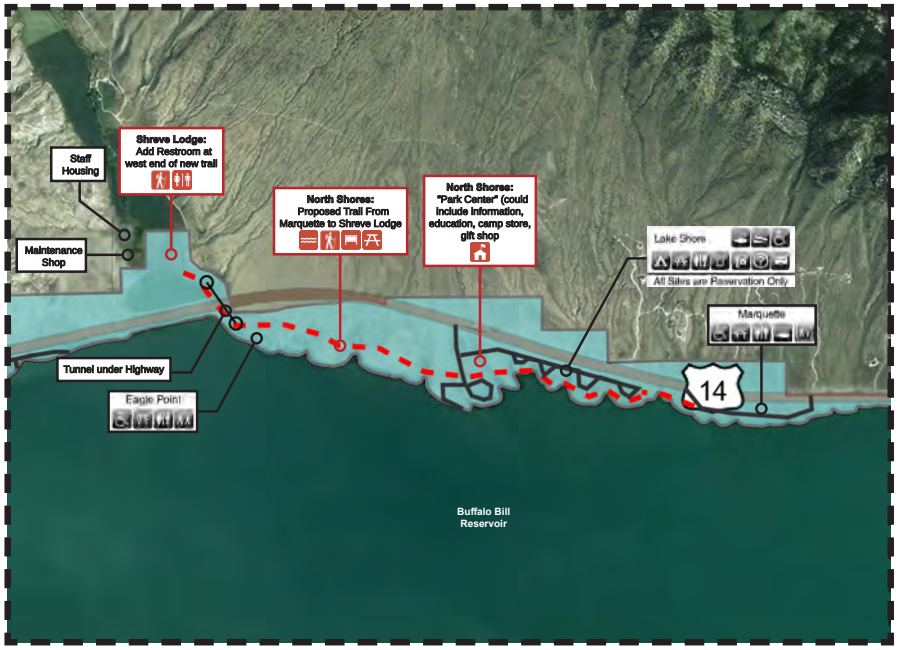




NORTH SHORES ENLARGEMENT



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- Outside Current State Park Boundary
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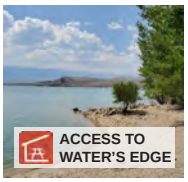
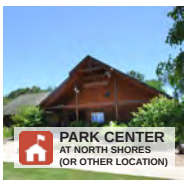
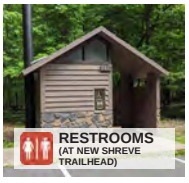






Activity Boards

WHY IS A PLAN NEEDED...?

The last plan was completed in 1988 prior to major updates to the Reservoir and Park. Since then, outdoor recreation preferences have changed, and Parks wants to be responsive to current needs. Buffalo Bill State Park is also seeing record numbers of guests. This level of increased visitation has put added pressure on park infrastructure as well as the natural and cultural resources that we all value for health and recreation.

PARK VISITATION

1992 - 20,508
2000 - 48,833
2006 - 81,737
2019 - 91,000
2020 - 124,000
2021 - 178,000

PROJECT TIMELINE

Winter 2022/23	Spring 2023	Summer 2023	Fall 2023	Winter 2023	2024
Values and Vision	**Explore**	**Navigate**	**Launch**	**Draft**	**Final**
Kick off and Inventory and Assessment	Options	Preferred Direction	Formalizing RMP and Strategies	Resource Management Plan and Environmental Assessment	RMP, EA, and FONSI
	WE ARE HERE!				

WHAT WILL THE PLAN DO?

Provide	• Provide a planning framework for decision making that balances the development of amenities with the preservation of natural and cultural resources.
Inventory and Document	• Inventory and document current resources and the public's desires for future development.
Review and Evaluate	• Review and evaluate current recreation practices.
Develop and Assess	• Develop and assess recreational opportunities for the facility.
Create	• Create an amenity plan to address the needs of increasing numbers of local and out of state visitors.
Establish	• Establish strategies for monitoring and mitigating impacts to wildlife, erosion, and recreation use.
Address	• Address facility maintenance and construction opportunities to maximize funding and minimize operations and maintenance costs.
Review	• Review current and potential community partnerships to build support, advocacy, and volunteerism.
Identify and Prioritize	• Identify and prioritize park projects to be implemented as funding and other resources become available.
Comply	• Comply with local, state, and federal requirements, including the National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA).

Comment Highlights - Overall Plan

VISITOR CENTER

- *Camp store at South Fork to get basic goods*
- *Careful not to compete while still providing essential services (Visitor Center vs. Camp Store)*
- *Visitor Center may not be necessary*
- *Update Park HQ*
- *Big vending machine instead of camp store*

GENERAL

- *Understanding the "Business Friendly" of Permitting (Using "similar terms" would help)*
- *Hold a "Riverfest" in August*
- *Reduce highway speed limits*
- *Ensure no fireworks in the park*
- *We're not used to seeing a government agency like State Parks going out to the people to ask what we think…*
- *Wi-Fi availability*
- *Vendors would be great but not viable*
- *Issue – concern about reservations overlapping and booking 3-4 days (had to call 3-4 people for reservation)*
- *Downhill mountain bike trail / pump track*
- *Rotating "Menu Style" interpretation signs (change seasonally)*
- *More interpretation*
- *Need low water launch access especially for larger boats (no space at Bartlett)*


TEXACO
Mobil


919

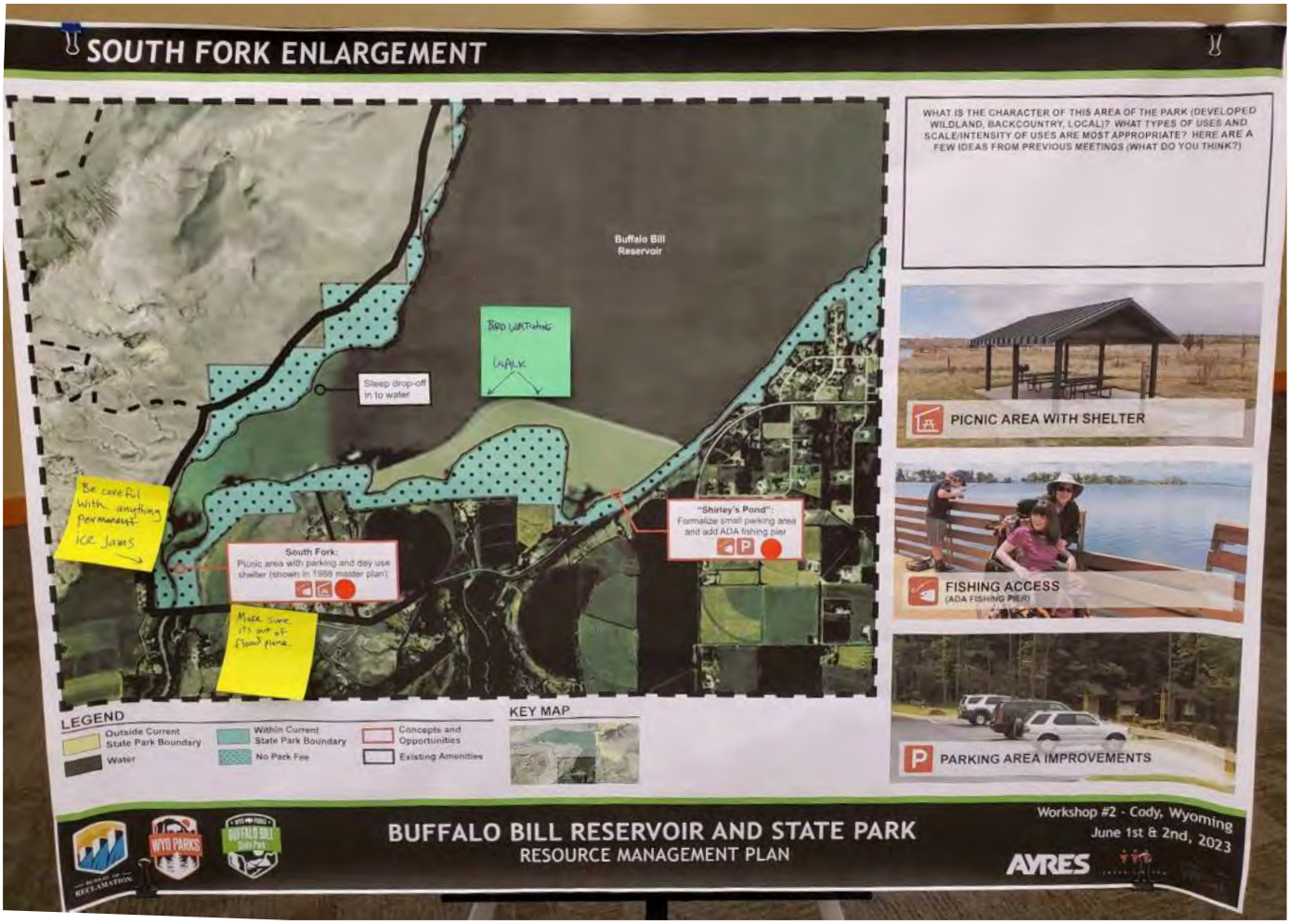

CODY CRAFT
BREWING
1732 Sheridan Ave.

Comment Highlights - Cedar Mountain/ Diamond Creek / Bartlett Lane

CEDAR MOUNTAIN / DIAMOND CREEK / BARTLETT LANE

- *Bank protection*
- *Tough area to access in emergency*
- *Intersection improvements needed at the intersection of Bartlett Ln and Southfork Rd*
- *Make Boat Club area more inviting to the public*
- *Public boat slips are not used by Boat Club members. The public doesn't know they can use this....*
- *More formal camp options on beach?*
- *Picnic pavilion at Bartlett lane not used extensively*
- *Hiking up is steep + rattlesnakes*
- *Boat launch at Diamond Creek*
- *Additional bike trails*
- *Cedar Mountain might be better for archery or shooting range*
- *Biking at Cedar Mountain*
- *Public access points at Bartlett*
- *Include BLM land in the park boundary*
- *More backpacking and hiking*
- *Lots of snakes*
- *Archery range at Diamond Creek*
- *No campers or RVs*
- *Youth fishing pond*
- *Access*

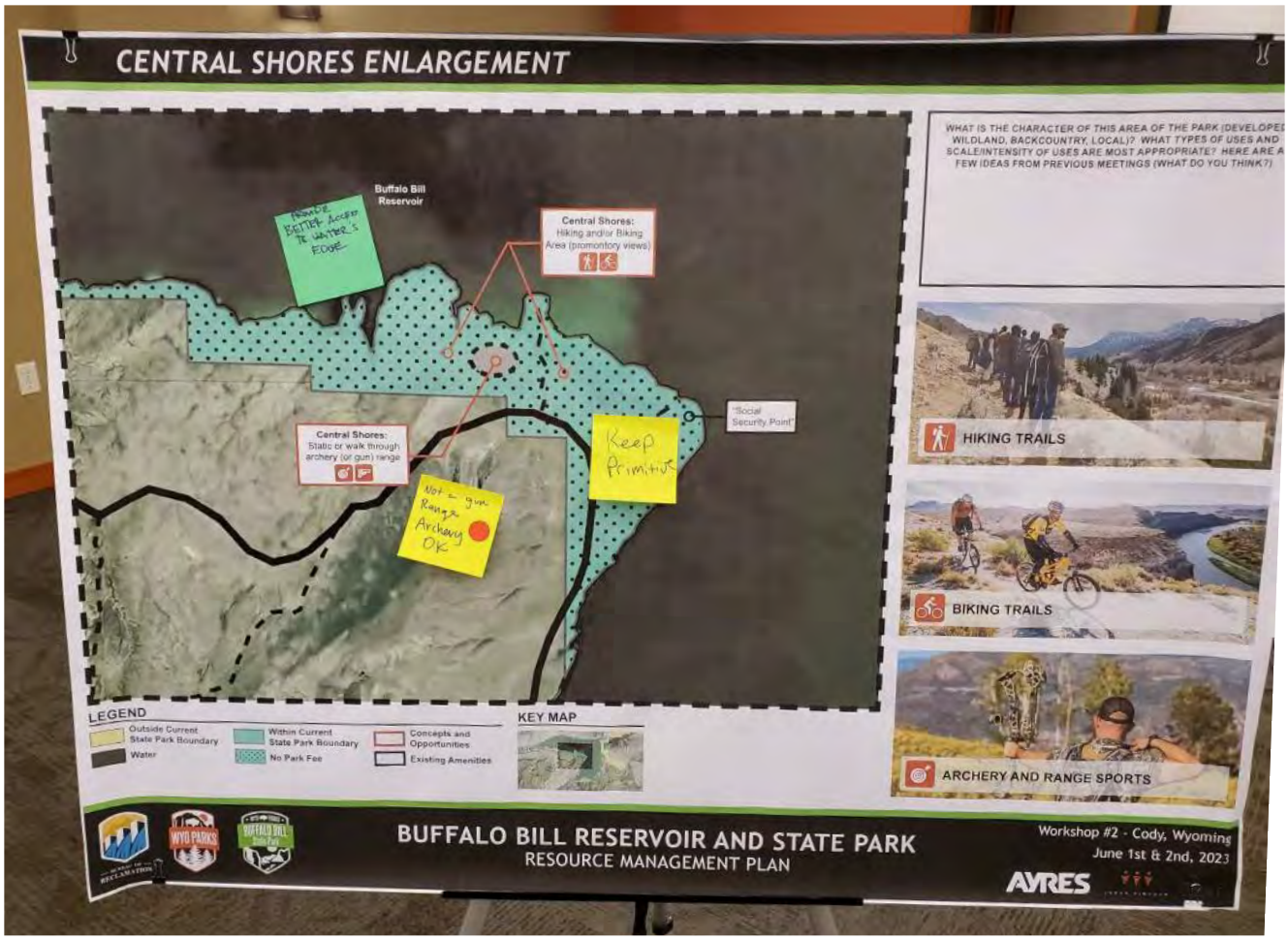
Comment Highlights - South Fork



SOUTH FORK

- ***Bird watching opportunities at Shirley's pond and surrounding area***
- ***Picnic area at South Fork should be out of flood plain***
- ***Be careful of ice jams at south fork***
- ***Keep South Shores local (no fee / minimal amenities)***
- ***Dredge to fix ice flows***

Comment Highlights - Central Shores



CENTRAL SHORES

- ***Not a gun range – archery is ok…***
- ***Keep primitive***
- ***Provide better access to the water's edge***
- ***Don't overdevelop***
- ***Archery would be great***
- ***Develop infrastructure along south shore***
- ***Drainage east of Sheep Mountain has a shooting range***

Comment Highlights - West Park

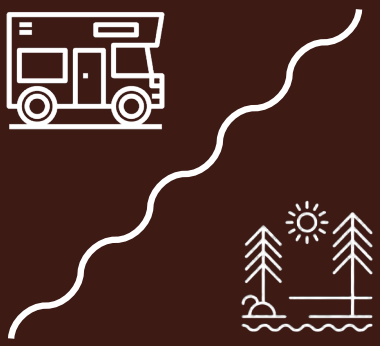
WEST PARK

- ***Appreciate the wind baffles for tents***
- ***Prohibit use of "cliff area" swimming (parking issue and unsafe)***
- ***Shade sails and outdoor kitchens at Stagecoach campground***
- ***Formalize Stagecoach Campground***
- ***Improve existing playgrounds***
- ***Seasonal housing***
- ***Good shore fishing at Spring Creek***

Comment Highlights - North Shores

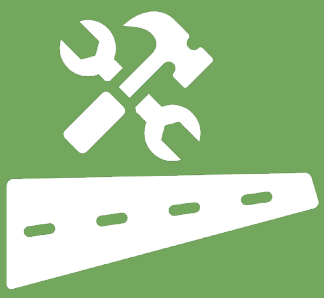
NORTH SHORES

- ***Variable speed limits for boats based on season (summer volume)***
- ***New trail – YES!***
- ***Hiking and bicycling – trail needed to stop visitors from going up Canyon View Estates Road***
- ***Yurts or cabins off Eagle Point***
- ***Concession rental near headquarters (example…pontoon boats)***
- ***Highway bike path similar to Jackson and Teton***
- ***Add swim beach at North Shores***
- ***Intersection improvements for traffic pulling off of HW 14 (turn lanes and acceleration lanes)***



Two Sides of the Park

A common theme discussed included the difference between improvements along US 14 and those along Stagecoach Trail. The two represent the differences in levels of improvement between the front country and back country in Buffalo Bill State Park. Shoreline connectivity, hiking and archery were suggested for the south side of the park while updates to existing infrastructure and additional trails were recommended for the north.

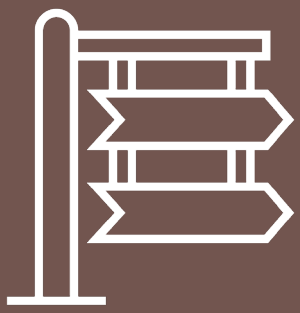


Road Improvement

Various roadways in Buffalo Bill State Park need improvements. These include improvements with US 14 access management, signage improvement for roadway access, improvements along Stagecoach Trail for emergency management, and further road designation delineation on the South Shore.

Cedar Mountain Access

Participants continued to voice their support for improvements in this area and noted the abundant recreational opportunities on Cedar Mountain on the eastern edge of the Park. These opportunities include hiking, mountain biking, camping, and sight seeing.



Park Identity/Wayfinding/ Interpretation

Buffalo Bill State Park does not have any monument signage or other destination signage that is common in other Wyoming State Parks. This, along with being a pass-thru for Yellowstone National Park, leads to a lack of identity for the Park. Increased placemaking and park signage will lead to a stronger park identity and community ownership over its amenities. Additionally, there were also comments about providing signage that helps interpret the unique features of the park for visitors.

Buffalo Bill State Park Master Plan Update
Workshop #3 - Public Scoping (September 28 & 29, 2023)

Overview

Wyoming State Parks held a series of open house listening sessions on September 28th & 29th, 2023, in Cody, Wyoming to continue gathering input from the public regarding the park master plan update. Meetings were held at three separate locations and times to connect with a broad range of the public and provide engagement opportunities that were convenient and accessible. The open house format included various stations that prompted participants to provide feedback on specific improvement concepts proposed for the park.

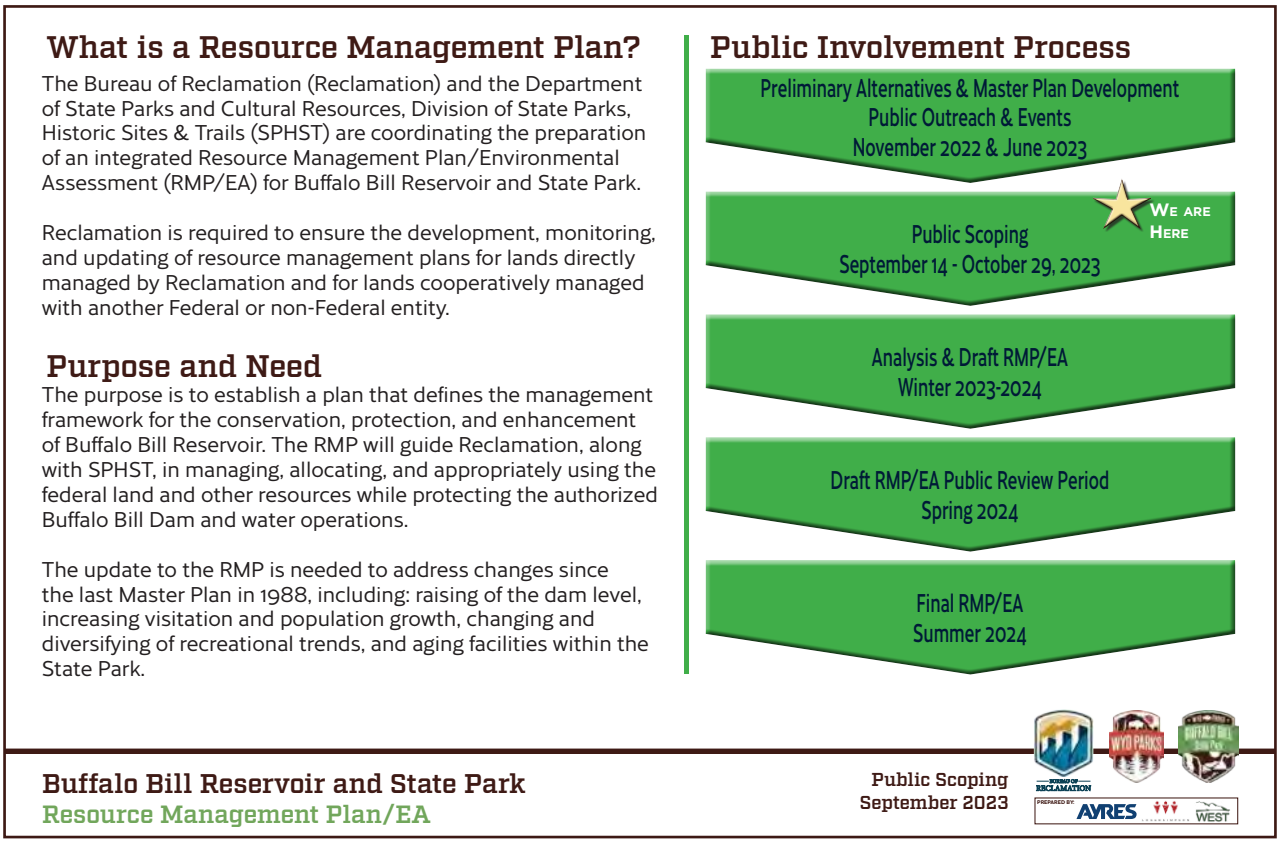
All three meetings were well attended by a diverse group of local community members with over 25 participants providing their scoping comments as well as additional thoughts and ideas for improving the park. State Parks, Bureau of Reclamation, and the consultant team received many detailed scoping comments and facilitators had the opportunity to speak in detail with many community members to answer specific questions about the proposed park improvements. This report provides a summary and overview of these meetings.

- Cody Auditorium Building - 1240 Beck Ave. (Cody Club Room)
  9/28/23 (2:30pm to 4:30pm)
- Sunlight Sports - 1131 Sheridan Ave.
  9/28/23 (5:00pm to 8:00pm)
- City Brew – 1562 Sheridan Ave.
  9/29/23 (10:00 am to 12:30pm)

Scoping Boards

The following boards were displayed at the open house sessions. The resource management planning and public engagement processes were presented graphically on several boards. Additionally, facilitators were available to discuss the larger purpose and need for these required federal processes and to answer participant's questions about this phase of the project. Management goals and objectives for the new plan were also presented and discussed. Participants were encouraged to identify issues and criteria that should be considered during the environmental assessment analysis. Example issues were provided to promote discussion and comment:

- Erodible Soils
- Wildlife Habitat
- Fisheries and Aquatic Invasive Species
- Vegetation
- Recreation Amenities and Visitor Services
- Cultural Interest
- Visual Resources
- Recreation Management
- Fee Structure



Scoping Boards

How to Comment During Public Scoping:

Comment In Person During the Public Meetings:

- Comment on the various boards around the room
- Submit a comment form

Comment Online or by Mail:

- E-mail: CarlyAnn.Carruthers@wyo.gov
- Regular Mail:
  Carly-Ann Carruthers, Planning and Grants Manager
  Wyoming State Parks and Cultural Resources
  2301 Central Avenue
  Cheyenne, WY 82002
- Visit the State Park's Website to learn more and provide comments in a Google Form:
  https://wyoparks.wyo.gov/index.php/buffalo-bill-master-plan

Comments are due by October 29, 2023.

How to provide effective comments

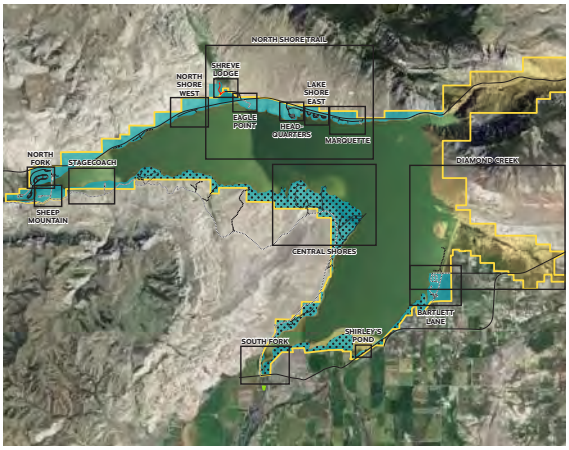
Provide comments that will help inform the analysis of the preliminary alternatives in the RMP/EA.

Tell us:
- Where do you go? Why do you go there? What types of conflicts do you see?
- What resource concerns should be considered during the analysis?
- Any other information that should be used to consider in the impact evaluation of the alternatives.

Tips:
- Be as specific and concise as possible.
- Focus your comments on specific areas and their opportunities and/or issues.
- Present information that has not been considered or raise an issue or concern with regards to public land resources.
- Include justification and supporting data.
- Expand on any reasoning, not just including a statement in favor or against an action.

Buffalo Bill Reservoir and State Park
Resource Management Plan/EA

Public Scoping
September 2023



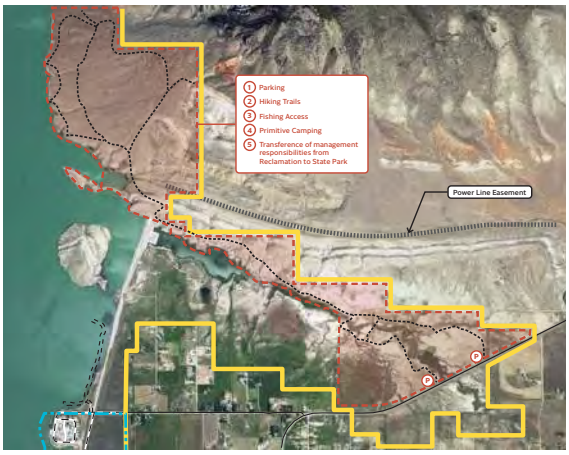
Overview

This map view shows the overall Bureau of Reclamation boundary surrounding Buffalo Bill Reservoir and identifies the sections of this Reclamation land currently managed by Wyoming State Parks. This map also serves as a key for the zoomed-in sections of the park on the following pages. These closer-in views describe the proposed master plan improvements in more detail for those specific locations. All proposed improvements and proposed management boundary changes shown in this report will be subject to a specific site criteria review process at each location prior to implementation.

LEGEND:
- Managed by Bureau of Reclamation
- Managed by State Park
- Existing Area without Park Fee

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023



Diamond Creek

The area around Diamond Creek and north to the shoreline west of Cedar Mountain is in the Bureau of Reclamation boundary but is not currently part of the State Park management area. This area is not currently designated for us by the public; however, many locals walk and run on the wildlife paths via access from several informal locations. To keep the area clean, safe, and well-functioning, it needs to be actively monitored & maintained. This can best be accomplished by transferring management responsibilities from Bureau of Reclamation to the State Park. Proposed improvements within this draft management boundary change are intended to be non-motorized, low impact and would include the addition of approximately 6-10 miles of trail, water access areas, and possibly several primitive camping locations. Specific locations and final quantities of each proposed amenity within the area defined here will be further developed during future public engagement and concept development phases.

LEGEND:
- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Asphalt Road
- Existing Gravel Road
- Existing Two-Track Road
- Proposed Trail
- Proposed Parking Area
- Proposed Improvements Area

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Scoping Boards

Bartlett Lane

The existing informal parking area at the public boat launch sees a heavy amount of traffic at key points throughout the year. Since there is not a formal layout for parking, drive paths, and pedestrians flows; visitors can easily park in a way that limits access and reduces the number of available parking spaces. This can affect the efficiency, flow, and safety of the space. Proposed improvements include redesigning the parking area to develop better vehicular and pedestrian movements and increase the amount of parking. Additionally, the irrigated area east of the Boat Club and Public Boat Launch is being considered as a potential grazing pasture for Forest Service pack horses

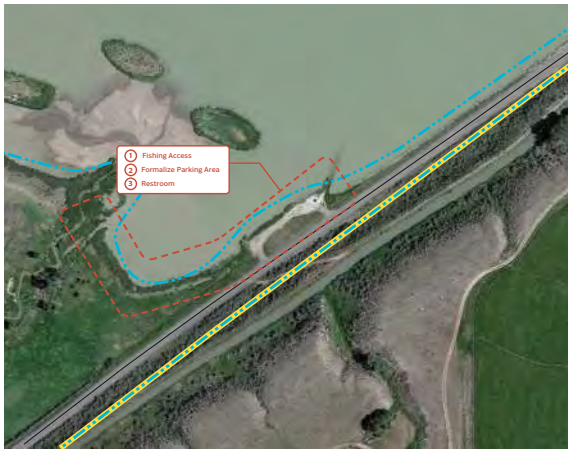
LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Parking Lot
- Proposed Improvements Area
- Existing Asphalt Road
- Existing Gravel Road
- Existing Two-Track Road
- Existing Pit/Vault Toilet

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023



Shirley's Pond

This area is currently being used informally as a parking area and access point for fishing and wildlife viewing. Proposed improvements in this area include formalization of parking, fishing access and possibly a vault toilet or portable toilet. Location for these improvements will be finalized with a site-specific analysis and public review process prior to implementation.

LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Asphalt Road
- Proposed Improvements Area

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

South Fork

The 1988 Buffalo Bill State Park Master Plan identified a small picnic area, restroom, parking for a few cars and river access for fishing. These same low-impact program improvements are still being considered for this master plan update. South of this area is an existing residential site used for staff housing. This may continue to be used for permanent or seasonal staff in the future.

LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Proposed Improvements Area
- Existing Asphalt Road
- Existing Gravel Road
- Existing Staff Housing

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Scoping Boards

Central Shores

This unimproved area is seeing heavy use by people that are familiar with the existing informal access points. A four-wheel drive with high clearance is required to access most of the areas and when the area is wet vehicles often get stuck on the undeveloped routes to the water's edge. Fishing is common use on the west side of this area. Initial thoughts for improving the area are listed below and include the development of a small parking area, development of a simple trail system, and possibly a walk-through archery range. Stagecoach Trail (a county road) is the only access to improvements along the south side of the reservoir. Stagecoach Trail is an unimproved, gravel road that has access and safety issues when wet. Improvements along Stagecoach Trail need to be coordinated, considered, and timed to support park improvements along the south edge of the reservoir to insure that reasonable access is available to any new improvements. Additional signage would be helpful in this area and along the south shore of the reservoir to better describe trail and road conditions for visitors not familiar with the area.

LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Gravel Road
- Existing Two-Track Road
- Proposed Improvements Area

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Stagecoach

This area was also referenced in the 1988 Buffalo Bill State Park Master Plan. The concept drawings in that document show a variety of camping options with associated amenities and a boat launch. During the pandemic State Parks began to develop this site and have added some roads, camp sites and several Camp Shacks. The next phase of work will include formalization and build-out of the existing temporary campground improvements (shown in the diagram) to a level similar to other campground sites at the park. A full list of improvements will be completed after the master plan update during public engagement and concept design for this area. Coordination with the Bureau of Land Management (BLM) may be needed at that time to facilitate continued access to adjacent trails and other overlap of uses. Additionally, coordination with the county and BLM may also be needed to improve vehicular access to this area and connect this site with utilities and other needed infrastructure. Currently there is no power or water infrastructure serving this site.

LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Gravel Road
- Existing Pit/Vault Toilet
- Proposed Improvements Area

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Sheep Mountain

Due to the increased demand for camping, expanded camping is being considered in the Sheep Mountain area of the park. The exact configuration and type of camping is yet to be determined. It could include RV, Camp Shack, tent camping or group camping facilities. The final campground is expected to be similar to existing camping facilities at the park. Additionally, a dog park is being proposed for this area. See the general development envelopes shown on the diagrams on this page. Additionally, the existing staff housing area shown here is being considered for renovation and improvements to provide permanent and seasonal staff housing.

LEGEND:

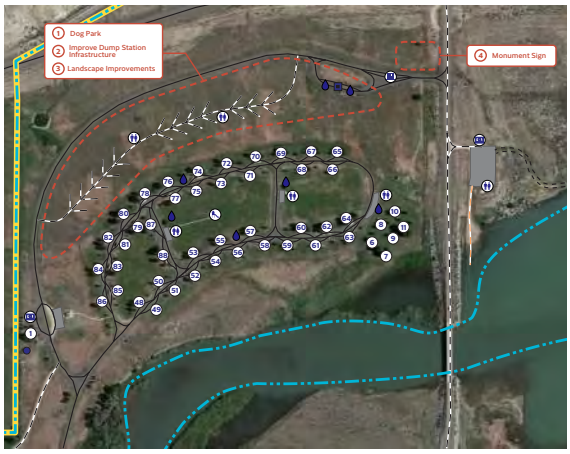
- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Gravel Road
- Existing Pit/Vault Toilet
- Existing Staff Housing
- Existing Storage
- Existing Volleyball Court
- Existing Basketball Court
- Existing Baseball Diamond
- Existing Playground
- Existing Picnic Shelter
- Proposed Improvements Area

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Scoping Boards



North Fork

During the pandemic State Parks expanded the existing campground north to pick up some additional sites. The next phase of work will include formalization of the temporary campground expansion. This will include, at minimum, irrigated landscape improvements to provide shading and screening. A full list of improvements will be completed after the master plan update during public engagement and concept design for this area. The intent is to bring the new campsites up to a level that is similar to older existing campsites at the park. Additionally, a small dog park and park wayfinding, branding and identity signs are being considered for this area.

LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Parking Lot
- Existing Asphalt Road
- Existing Gravel Road
- Existing Two Track Road
- Existing Sand Road
- Proposed Improvements Area
- Existing Campsite
- Existing Playground
- Existing Pit/Vault Toilet
- Existing Fee Booth
- Existing Interpretive
- Existing Water Facility
- Existing Storage
- Existing Dump Station

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

North Shore West

Currently this area sees heavy informal use for access to the water's edge. The existing facilities here are underdeveloped and need to be improved to handle increasing day use in this area. Parking, water access improvements, picnic areas and restroom improvements are being considered. Vehicular access should be studied, improved, and formalized to allow safe ingress and egress along the busy highway corridor.

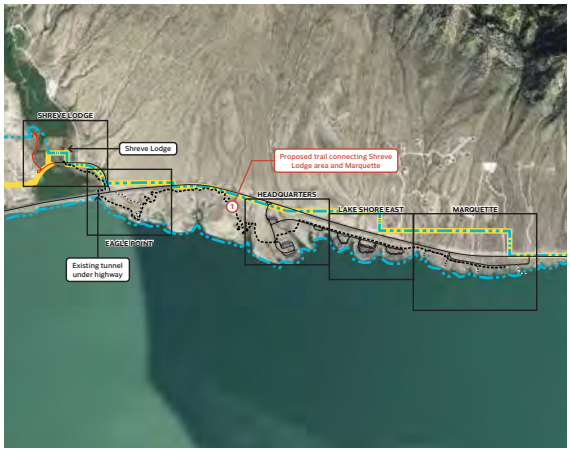
LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Asphalt Road
- Existing Two-Track Road
- Proposed Improvements Area

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023



North Fork Trail

The concept of a North Fork Trail was conceived and developed by a park staff member. This trail will link many of the existing amenities along the north shore of the reservoir and will provide needed walking trails and access points on this side of the park. Parts of the trail follow the old stagecoach route that existed before the highway was constructed. In addition to the trail itself and trail head improvements, it is anticipated that this project would include signage and interpretation of the site's history.

This overall map shows the extent of the proposed trail. Maps to follow show the trail in more detail at specific site locations.

LEGEND:

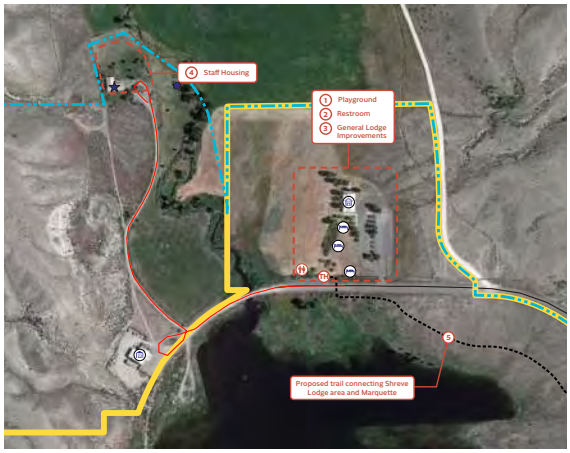
- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Parking Lot
- Existing Asphalt Road
- Existing Authorized Use Only Road
- Proposed Trail

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Scoping Boards



Shreve Lodge

The Shreve Lodge site is currently used for group meetings and gatherings. The building includes a kitchen and other resources that allow the space to be used for events like weddings and business meetings. Proposed improvements include general lodge upgrades to support these functions. Preliminary ideas include technology and kitchen upgrades as well as potentially a playground for use in family gatherings. Northeast of the lodge is a residence currently used for state park staff housing. This area will be studied further as a location to address potential future staff housing needs (both permanent and seasonal).

LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Authorized Use Only
- Existing Asphalt Road
- Existing Maintenance
- Existing Camp Shack
- Existing Lodge
- Existing Superintendent House
- Existing Storage
- Proposed Trail
- Proposed Improvements Area
- Proposed Trailhead

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Headquarters

The existing headquarters building in this area currently functions more as a staff office than a resource to visitors. There is a desire to expand the program function in this area to also include more visitor information and resources. This could include expanded interpretive and educational elements, camping supplies, equipment rental and possibly food services and concessions. There is also potential for expanded campsite facilities in this area. Several development envelopes are identified on this diagram. Exact program and locations will be studied during later public engagement and concept development. As with other areas along the north shore of the reservoir, vehicular access should be studied, improved, and formalized to allow safe ingress and egress along the busy highway corridor. Additionally, expansion and improvement of the existing park monument signage will be considered in this area.

LEGEND:

- State Park Management Boundary
- Bureau of Reclamation Management Boundary
- Existing Parking Lot
- Existing Asphalt Road
- Proposed Trail
- Existing Water Facility
- Existing Fee Booth
- Existing Pit/Vault Toilet
- Existing Headquarters/Shop
- Existing Information Kiosk
- Proposed Improvements Area

REFERENCE MAP:

Buffalo Bill Reservoir and State Park
Resource Management Plan

Alternatives
September 2023

Comment Highlights

GENERAL

- *Bear Awareness – fencing or programming video*
- *Accessible fishing and boating access*
- *Preserve hunting access*
- *Erosional control*
- *Need additional staffing, law enforcement and maintenance when adding new amenities*
- *Disc golf*
- *Dog beach*
- *Identify opportunities to connect trails with other trail systems or create them on BLM, USFS, State Trust, etc.*
- *ADA at Lakeshore – see "Pattan" Plan*
- *Floating Kayak dock – see Glendo*
- *Dam Board – 1990s history and relocation/transition of resources*
- *Downhill mountain bike trail / pump track*
- *Rotating "Menu Style" interpretation signs (change seasonally)*
- *More interpretation*
- *Need low water launch access especially for larger boats (no space at Bartlett)*

BARTLETT LANE

- *Work on silt dike that keeps getting bigger. The channel from the boat ramp gets too low for boats to get out. This may require yearly maintenance to keep open*

CENTRAL SHORES

- *Enhance trails south of and near "Social Security Point"*

STAGECOACH

- *Provide wayfinding signage to new campgrounds at Stagecoach*

SHEEP MOUNTAIN / GIBBS BRIDGE

- *Sheep Mountain – there was a note to leave this area "wild" and not develop new camping area or dog park here*
- *Provide upgrades to boat launch and facilities at Gibbs bridge (picnic area, shade, dog park, water access)*

MARQUETTE

- *Improve boat launch (worth improving). Shore launch/low water*

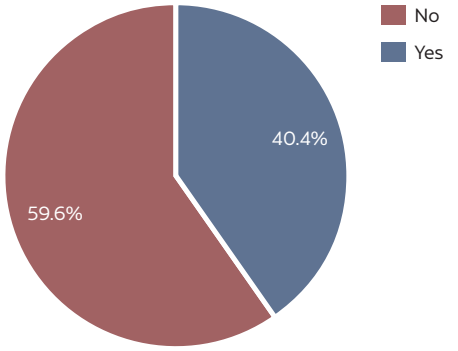

CODY CLUB ROOM
WYOPARKS.ORG
EXIT

Appendix 3: Survey Summary

This appendix includes the summary report from the online survey, compiled after being available to the public from October 2022 to September 2023.

In advance of the first Public Workshop on November 14, 2022, the Wyoming Division of State Parks distributed an online survey compromised of 7 questions to gather public opinion, information, feedback, and ideas about ways to both enhance the visitor experience at the park and preserve its resources. The survey was available on the State Park website and distributed from October 2022 to September 2023 through it's mailing lists, including to those who had reserved campsites at Buffalo Bill State Park. The survey garnered 394 responses. The responses are presented and qualitatively summarized below.

1. Are you a resident of Park County, Wyoming?

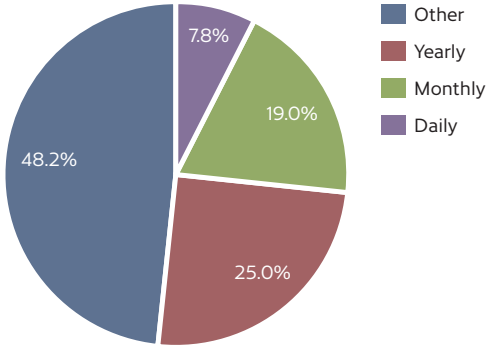


Park County residents: 159
Non-Park County residents: 235

159 respondents (40.4%), indicated they were residents of Park County and 235 (59.6%) indicated they were not residents of Park County.

Of the non-residents, there were 39 unique states recorded. The greatest number of out-of-state responses were recorded from Texas and Montana.

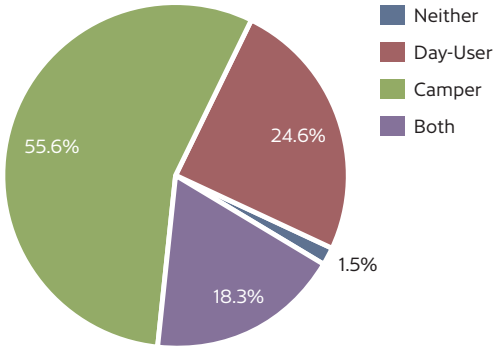
2. How often do you visit Buffalo Bill State Park?



Yearly: 71
Monthly: 54
Daily: 22

71 respondents (25%) said they visited at least once a year, 54 respondents (19%) said they visited at least once a month, and 22 respondents (7.8%) said they visited daily. The remaining 137 respondents (48.2%) said that they didn't fit into any category and indicated "Other."

3. Do you visit mostly as a day-user, a camper, or both?



Most Common: Camper

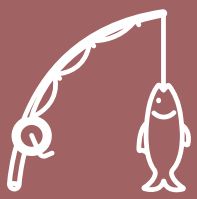
219 respondents (55.6%) said they visited mostly as campers, 97 respondents (24.6%) said they visited mostly as day-users, 72 respondents (18.3%) said they visited mostly as both, and 6 respondents (1.5%) said they mostly visited as neither.

4. Please describe your interest in Buffalo Bill State Park.

Responses were put into a "Word Cloud" shown below that provides a subjective look at these open ended responses, based on the frequency of words as they appear in this portion of the survey. Some of the key words and phrases had to do with camping, fishing and boating, proximity to Yellowstone National Park, and local residents.

Camping

Many respondents mentioned that they use the park for camping, either as a destination or as a stopover on their way to other places. Some of them praised the campgrounds, the facilities, the scenery, and the peacefulness. Camping was the most common interest among the respondents, with 142 mentions.



Fishing and Boating

Many respondents mentioned that they liked fishing and boating at the lake, either as a main activity or as a part of their visit. Some also mentioned their appreciation for swimming, kayaking, and other recreational water activities. This category was mentioned 79 times in the responses.

Proximity to Yellowstone

The park's location near Yellowstone National Park was a major attraction for many visitors. Respondents mentioned stopping by Buffalo Buffalo Bill State Park and Cody on their way to or from Yellowstone National Park. Some of them also mentioned other attractions in the region, such as Keystone, Glacier National Park, or Black Hills. This category was mentioned 67 times in the responses.

Local Resident

Some respondents identified themselves as local residents who live near the park, either on the lake, on the mountain, or in the community. Some expressed their support for the park and its management, others suggested some improvements or discounts for locals. This category was mentioned 63 times in the responses.

5. Describe your local community involvement.

Responses were put into a "Word Cloud" shown below that provides a subjective look at these open ended responses, based on the frequency of words as they appear in this portion of the survey. Two key groups emerged when anaylzing the data.

Group 1: Locals

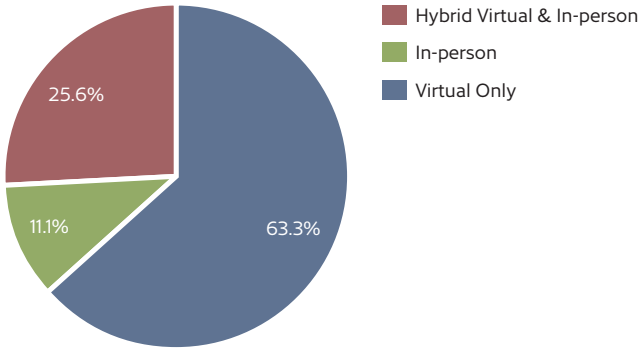
Many respondents are involved in the local community, either because they are long-time residents, business owners, employees, or volunteers who work or serve in various different sectors.

Group 1: Visitors

Many respondents are either tourists, visitors, or non-locals who do not have any significant involvement in the community, except for spending money at local businesses or enjoying the parks and museums.

Many respondents from both of the two key groups expressed interest in the issues affecting Buffalo Bill Reservoir & State Park and wished to be involved in planning and public meetings.

6. How would you prefer to participate in public workshops?



Most Common: Virtual Only
Least Common: In-person

223 respondents (63.3%), indicated interest in virtual only participation, 90 (25.6%) indicated interest in both virtual and in-person participation, and only 39 (11.1%) indicated interest in in-person only participation.

*Note that not all respondents chose to answer this question.

7. Is there anything else you'd like to share?

The responses revealed a wide range of suggestions and comments. The following themes emerged as important topics for future discussion.

Facilities, Amenities, and Services

Respondents expressed their satisfaction or dissatisfaction with the facilities and amenities available at the park, such as Wi-Fi, showers, restrooms, campsites, boat ramps, etc. Examples of comments include:

- Thank you to those who keep this park so clean and well groomed.
- The park just needs a Wi-Fi for folks who do not have a satellite connection. Several fellow campers lamented that they had to go to the Walmart in Cody to get cell reception.
- Showers within the camping area would be welcomed.
- A visitor center/General store would be a great idea for this park.
- The port a potties' color of blue was terrible. They need to be brown or tan to blend in.
- The two picnic shelters closest to the reservoir need new roofs.
- I think it would be nice if you build some more modern restrooms with showers. I didn't like the fact that there was only one shower for all of those people.
- We really appreciated the free firewood section and the library. It was nice and showed you all cared about your visitors. I don't remember who was working the check in station when we checked in and she was lovely and sweet. Thank you for such a great park. The only thing I would change is putting one more wind screen in the tent sites for the tents to get out of the wind. It felt like we were sleeping through a tornado so the extra screen would've been perfect.
- The park was beautiful. Only complaint was the restroom facilities were not convenient to campsites.

Recreation Activities

The survey responses note interest in various recreation activities, such as hiking, biking, boating, fishing, and disc golf. Examples of comments include:

- Adding some hiking trails would make the park better.
- Archeological studies are still being conducted along the south side of Cedar Mountain. I do not believe this area is suitable for hiking and biking paths or rock climbing. Too much of the area will be destroyed. Thank you for your consideration.
- I'd advocate for regular water releases from the dam to support whitewater tourism.
- Do work to boat ramps and access instead of catering only to tourists.
- Would love to see mountain biking trails around the Park.
- Please increase the availability of walking & hiking trails and parking with clear delineations of private property.
- I frequently fish the area near Lower South Fork Road, camp at Lake Shore and Northfork Campgrounds, and have hiked from Buffalo Bill Dam & Visitors Center around the shoreline to the South Fork Dike.
- I recently moved to Cody. I am from South Dakota - and Lewis and Clark state park was used by my friends and myself 2-3 times a week because of bike paths and the disc golf.
- Consider more walking trails and bike paths.
- Thank you for giving this park to public access. It's beautiful. More events would be fun. Perhaps Ranger Talks. Like animal tracks, star gazing, plants surrounding the reservoir, etc.
- Seemed to be a place just to sleep but maybe there's more (walk-in, biking, hiking) nearby to explore?

Camping and Lodging

Respondents expressed a wide variety of opinions and preferences about camping and lodging. Generally speaking, the park has a good reputation for having well-placed and spacious campsites, but some visitors would like to see more electric sites, cabins, or back-in camper spots. Some respondents expressed frustration regarding campground type & location. Examples of comments include:

- Perhaps there could be a few more back in camper spots with their own spaces.
- Great place to camp because sites are well placed and NOT on top of each other!
- I love this park and being able to reserve campsites in the advance. The extension toward the highway will almost double the size and if it was less primitive would allow more out of state "Yellowstone visitors."
- I don't think that campgrounds on the south side of the lake would be good because it isn't very accessible for the non-resident crowd. It would also create a dust and traffic issue for the Boat Club. Thank you in advance for your attention to these matters.
- I think several (maybe half or more) of the little cabins that were placed on the Sheep Mountain side should have been placed in the main North Fork campground. They would probably get used more often that way.
- Would like to see more spaces for camping and cabins to rent.
- We were tent camping and it was very loud being right there on the highway.
- I would love to see more electric camping spaces on the North Shore Campground. We live in Cody and hardly ever get a spot with electric as they are always booked!
- Would like to see more camp spots have electric.
- Too often, the concept of improvement can destroy the qualities of a peaceful place. Mind you, we always camp away from the lake on the west end. Please don't try to double the number of campsites, thanks.
- You need spots that are not reserve only. It is spot we like to go camping when just decide to go. It is makes it very hard to just show up and camp when you are not sure if there might be a spot.
- Plant natural mosquito deterrents and keep the camping areas spread out.
- Tent camping was wonderful here!
- DONT make new campgrounds. There is already plenty of public camping in park county.
- Hoping future plans include campground expansion.
- The first-come first-served spaces are pretty bleak!
- Make the camping area more appealing by planting 100s of evergreen and cottonwood trees along the highway and western edge of the campgrounds.
- The park is great! We particularly appreciate the more rustic options, without hookups etc. RV parks are not what we seek.
- Buffalo Bill state park is a beautiful park I just wish Wyoming would put more resources into it. I'm not talking about more campsites I'm talking about updating the campsites they already have.
- We would like to see more full RV hookups and availability.

Natural Environment & Conservation

Respondents expressed a preference for keeping the park as natural as possible and protecting the wildlife from development and human interference. Many noted issues with the eroding shoreline, sedimentation accumulation, and driftwood build-up. Examples of comments include:

- The surrounding wildlife and BLM and residential areas need to be left alone.
- The recreation in our community is incredible and we need to ensure it stays pristine for future generations to enjoy as well.
- I am passionate about preserving these wonderful natural resources.
- I would like to see the Southfork boat ramp areas dredged out so that the could be used longer. Right now it is limited to a few months because of the fluctuation of the water levels. It seems a waste of recreational space.
- I would like to see no further development of the park and prefer it as a naturally attractive area.
- The bank on the west side of the boat club is eroding and needs to be addressed. The access to the boat ramps on the south side of the lake is restricted because of the banks sluffing off. Some sort of dredging program should be a part of the Buffalo Bill plan.
- The lake has badly eroded the shore line near the picnic area closest to the reservoir. This high straight up and down drop-off poses a hazardous situation for park users especially children. I would like to see a sloped shoreline with reinforced rock rip rap to reduce this hazard.
- It would be wonderful to have better programs to take care the park, including planting more native vegetation.
- Limit development in the Bartlett Lane and south side of Cedar Mountain. The south Cedar Mountain area is fragile and at risk if developed, in my opinion.
- I'm familiar with the state parks around the country. We need more of a wildlife feel. Sadly, the prairie dog town that once made the park special was eliminated. The park should be a place where nature can be better appreciated.

Accessibility, Inclusivity, and Affordability

Respondents expressed a desire for the park to improve ADA accessibility, consider cultural diversity and respresentation, and review the pricing and fee structure of the park. Examples of comments include:

- Please include wheelchair campsites and ADA accessibility.
- I feel recreation.gov has become rather hard to navigate.
- I am a supporter of Native Americans being a part of our National Parks.
- Would love the availability to purchase day pass that I can move to my other vehicle. When family comes to visit, we take the big car, but if it's just us, we take the small one. We don't want to buy 2 passes
- Had to stay around Cody for 5 days until we could camp at Yellowstone. Your park was a more affordable option than commercial in town. Loved the views and the parallel parking was nice.

Personal Anecdotes

The park is loved and appreciated by many visitors for its beauty, cleanliness, convenience, and amenities. Many visitors expressed their gratitude and satisfaction with the park and its staff. Examples of comments include:

- My family and I use Buffalo Bill State Park on a near weekly basis year around.
- This was a great place to stay, please don't change too much. The people were very helpful, and we really liked the park.
- My grandfather and his brother created ranches on the land that is now the North Fork section of the park. My father was born there.
- We are vanlifers who love to travel. Buffalo Bill State Park is a great place to stay.
- Wonderful park and great community.
- Only spent one night there, but one of the most memorable of our trip - the view was breathtaking.
- We really enjoy the park! Spend a lot of time on the water.
- This is an exciting opportunity to develop the park in to meet the recreational needs of our growing community.
- It's a lovely park in a beautiful and convenient location. The hosts are always very very nice and helpful.
- Love Wyoming and want to make it a pleasant experience for both locals and visitors.
- The park was very clean and quiet. One of the nicest parks to stay in.
- As a tourist, we felt very safe and comfortable. The people who greeted us at the entrance were very friendly and helpful.
- Our last visit was two summers ago. Enjoyed it! Tent camped, multiple spots in the campground traveling as a family group. Explored the State Park and surrounding area.
- Please thank the park rangers. They have always been friendly and helpful.
- Great park - love the area and so much potential for more but I love it.
- From the safety for our boys to bike and play, to clean sights, to such a great scenery. Keep up the good work.
- I will definitely be back! Loved this state park!

Appendix 4: Preliminary Alternatives Considered but Dismissed

During the public outreach series hosted to gather information on the Master Plan in November 2022 and June 2023, the planning team heard a number of comments on potential improvements, including the desire for additional recreational opportunities identified on lands outside of the current State Park Boundary but within Reclamation ownership. The following alternatives have been dismissed because of legal, operational, or scope concerns.

Developed Camping at Cedar Mountain

WHY: Access crosses multiple ownership boundaries, impacts existing infrastructure, greater need for primitive camping, and would be cost prohibitive

Camping at Bartlett Lane

WHY: Increased traffic on Bartlett Lane and impacts to surrounding residential areas

Park Expansion East of the Dam

WHY: Limited public access due to security requirements around the dam, power plants, and associated infrastructure

Improvements Beyond Reclamation's Jurisdiction

(e.g., on BLM or private land)

WHY: Addressing assets outside of Reclamation's boundary is outside of the scope of this plan.

Fixing Stagecoach Road

WHY: It is a county managed road. Addressing assets outside of Reclamation's boundary is outside of the scope of this plan.

Dredging of the Reservoir

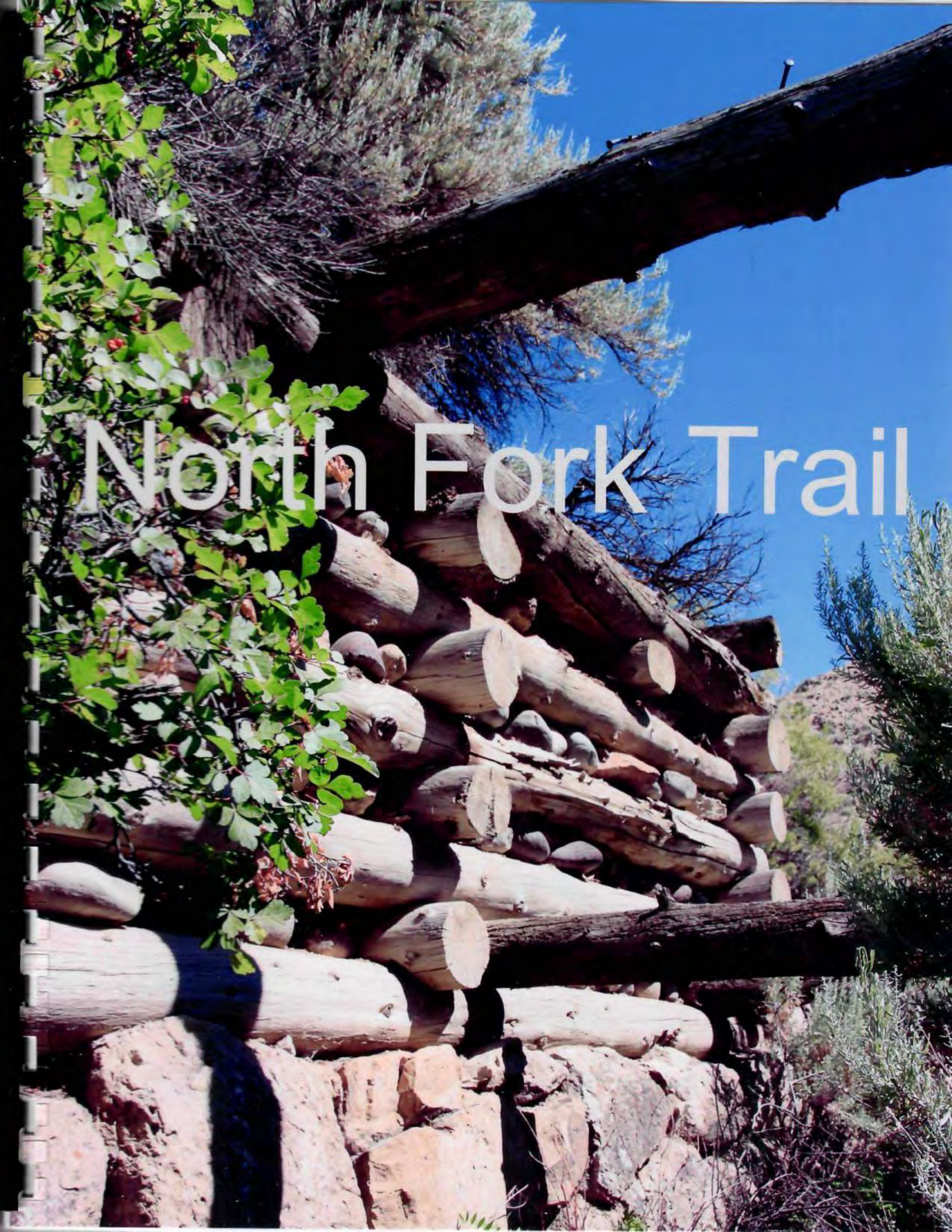
WHY: This would involve additional agency and operations management through a separate process.

Gun Range

WHY: Safety considerations

This Resource Management Plan (RMP) and Environmental Assessment (EA) will analyze additional lands that are outside of the current State Park boundary. However, per Wyoming State Statute, SPHST must complete a Site Criteria process evaluating if and when SPHST and /or State legislature approves taking on management of those lands. This includes gathering data, convening an evaluation team, consulting with the State Parks and Cultural Resources Commission, introducing the idea to the Travel, Recreation, Wildlife, and Cultural Resources Committee of the Legislature, and drafting a bill for introduction.

Appendix 5: North Fork Trail System Proposal


North Fork Trail

Attn: Wyoming State Parks

Buffalo Bill State Park

North Fork Historic Nature Trail

The original trail to the East Gate of Yellowstone National park is now under water in Buffalo Bill Reservoir. Buffalo Bill Dam was completed in 1910 and the reservoir started filling that year. Parts of the highway built to replace the original trail still exist today. Nothing has been done to preserve this bit of history and it is slowly fading away. It is important that we do what we can to preserve this little bit of the history of our nation's first national park.

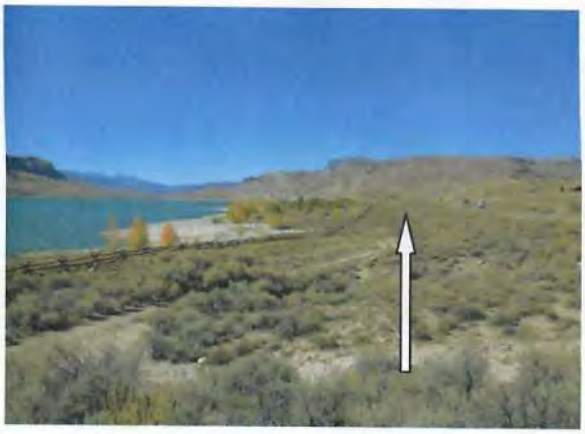
The logical starting place for the North Fork Historic Nature Trail would be at the Marquette Picnic Area just inside the eastern Buffalo Bill State Park boundary. This would provide parking, restrooms and a place to have a picnic before starting the 3 plus mile long trail through history.

By starting the trail at this location the first 250 yards of the trail is already in place as the passage between the picnic shelters. From that point trails would need to be constructed to connect to existing roads and trails.

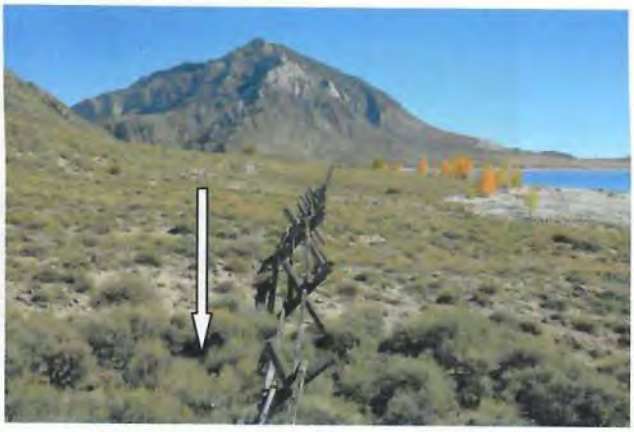
Start of trail at the Marquette Picnic Area parking lot

From the west end of picnic area proceed west to the dirt road

The trail would travel west to the North Shore Campground. Existing two track roads could be leveled and graveled to provide a good walking surface, provided they are a safe distance from the highway.



Looking west toward North Shore Campground



Looking east from above the loop C restroom in the direction of the trail origin

Proceeding west along the road to the north side of the North Shore Campground to the dump station would be a matter of judgement as to the best route to take. Would it be best to travel on the existing roadway or to make a path north of the roadway? Care would have to be taken to remain a safe distance from the highway.

Views looking west on the north side of the campground

To the west of the North Shore Campground is a dump station. It was from the west end of this location that the photo was taken of the first recorded automobile accident on the North Fork Highway. At this point information signage should be placed displaying the photo from then and now. This is an important historic event that would only be a picture in a book had I not been an employee of the park

and familiar with the location. I compared the picture with the setting, making sure the mountain peaks lined up with the foreground.

Location for interpretation of the first auto accident

The location of the accident, note the barely visible roadway

From the location of the accident the trail will follow in the historic roadway south and then west to the first bridge location.

Looking south along the North Fork Road at Cedar Mountain on the horizon

Looking west, Sheep Mountain is on the left.

The approach view

The hand placed stone support s for the bridge is truly breathtaking. These structures at over 100 years old!

The construction of bridges over the historic existing rock support walls should not in any way disturb the 100 year old "rock art". Metal arch bridges should be constructed. These bridges should have a deck made of expanded metal to allow the visitors to look through the bridge decks at the historic structure below. There are three of these structures on the historic road that should be preserved and made available for visitor's enjoyment. They will be among the most remembered things on a vacationer's trip to the "old west".

The next location on the trail will be the area of the North Shore Boat Ramp. This area will provide parking, a restroom and a picnic area. The picnic area and its adjoining parking have not historically been used very much. This could be an opportunity to get better use of existing facilities.

From the Boat Ramp area the trail will proceed to the west to the location for the major trail information kiosk. The existing two track road could be graded and graveled for easy travel. A parking lot could be provided on the picturesque point.

Road/trail to main historic portion of the day

Parking area

"Kiosk"

Location the main information kiosk

The information provided on the kiosk should be of historic nature. There should also be photos of plants and animals indigenous to the natural area they are about to be going through. "Do not approach" warnings should be included regarding the animals that may be encountered in the next mile of trail.

A large pile of dirt and gravel covers the start of the next part of the trail. This should be remover and a gate should be installed to insure only foot or bicycle traffic.

The second of the three historic stone bridge supports is in the canyon at the center of the image.

The second stone bridge support on the trail.

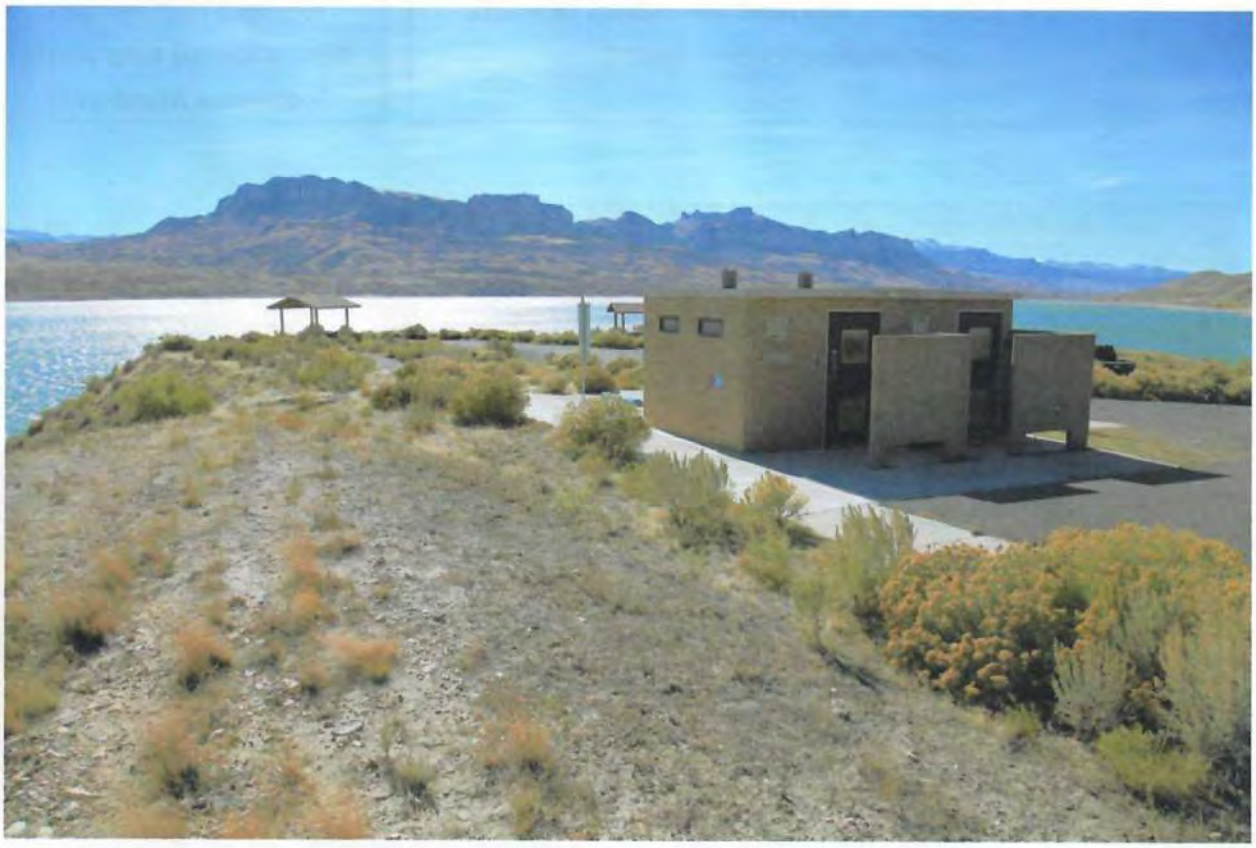
Construction of this bridge needs to be the same as the first. The brush growing from the stone walls should be cut off, not pulled out. The historic road continues around the point to northwest.

Beyond the point the mountain has started to show signs of movement to the south but is passable with use of care in placement.

The road to the final crossing on the trail goes from the right side of the image then up the canyon. Then after the crossing, goes from upper right out of sight to the left.

At this point the road has been sluffed off into the reservoir. A choice must be made as to the path to take to the Eagle Point Rest Area.

This is the view of the back side of the previous image. The terrain is quite steep and would be easier to construct a trail to the north side of this point. We are no longer on the original road and just need to get to Eagle Point by the easiest route.



We are now at the Eagle Point Rest area. The area provides restrooms, picnic shelters with tables and ample parking. There is also a wide asphalt trail starting at the restroom and proceeding to the tunnel under the highway. This point provides an excellent place to photograph Sheep Mountain, sunrises and sunsets.

Asphalt trail past the picnic area (needs a little sage brush trimming)

The trail continuing from the picnic area to the tunnel under the highway.

Image showing the exit from the tunnel and the existing trail from that point.

APPENDIX D: MAPS

Figure 1. Study Area and Land Management

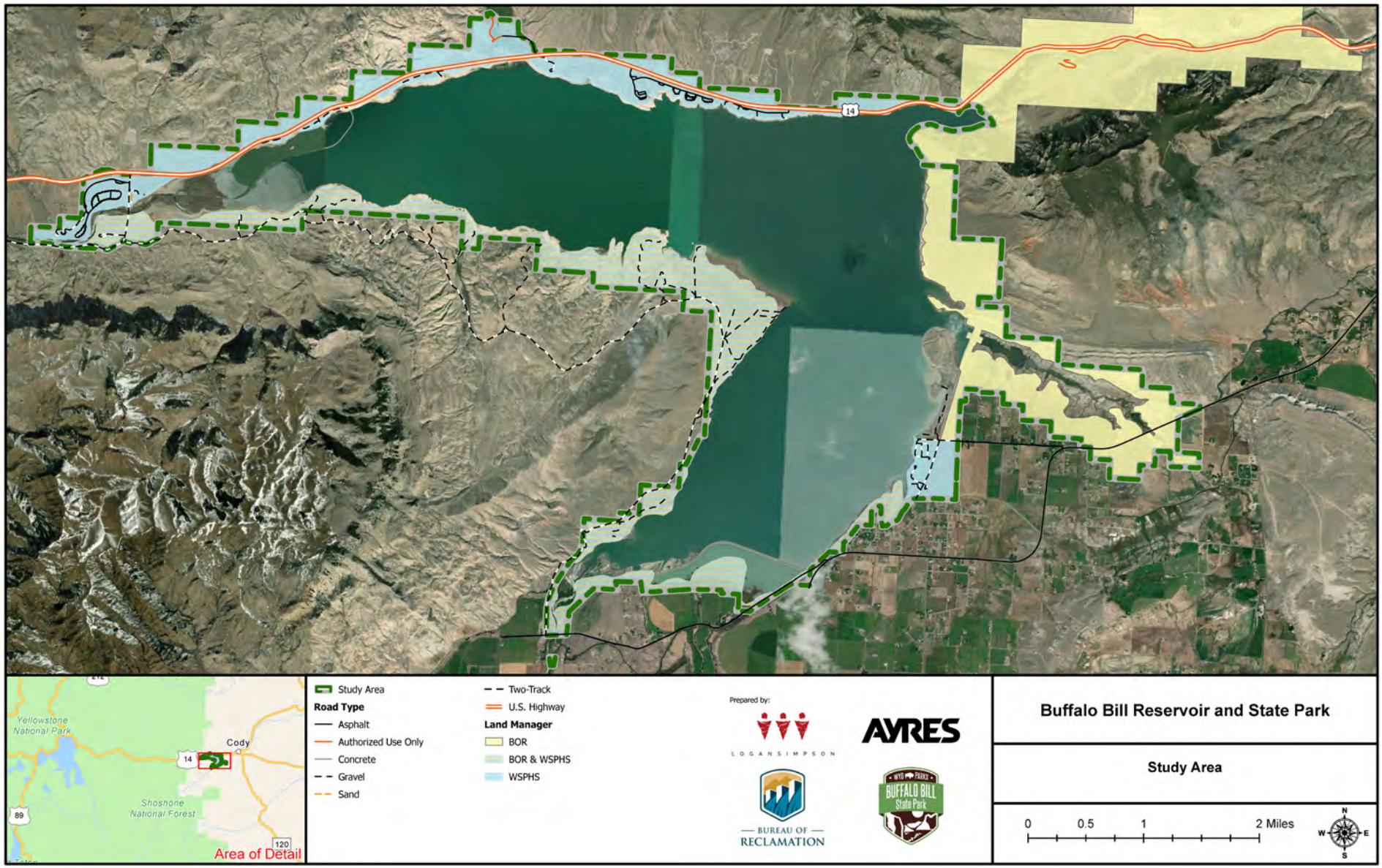


Figure 2. Existing recreational facilities

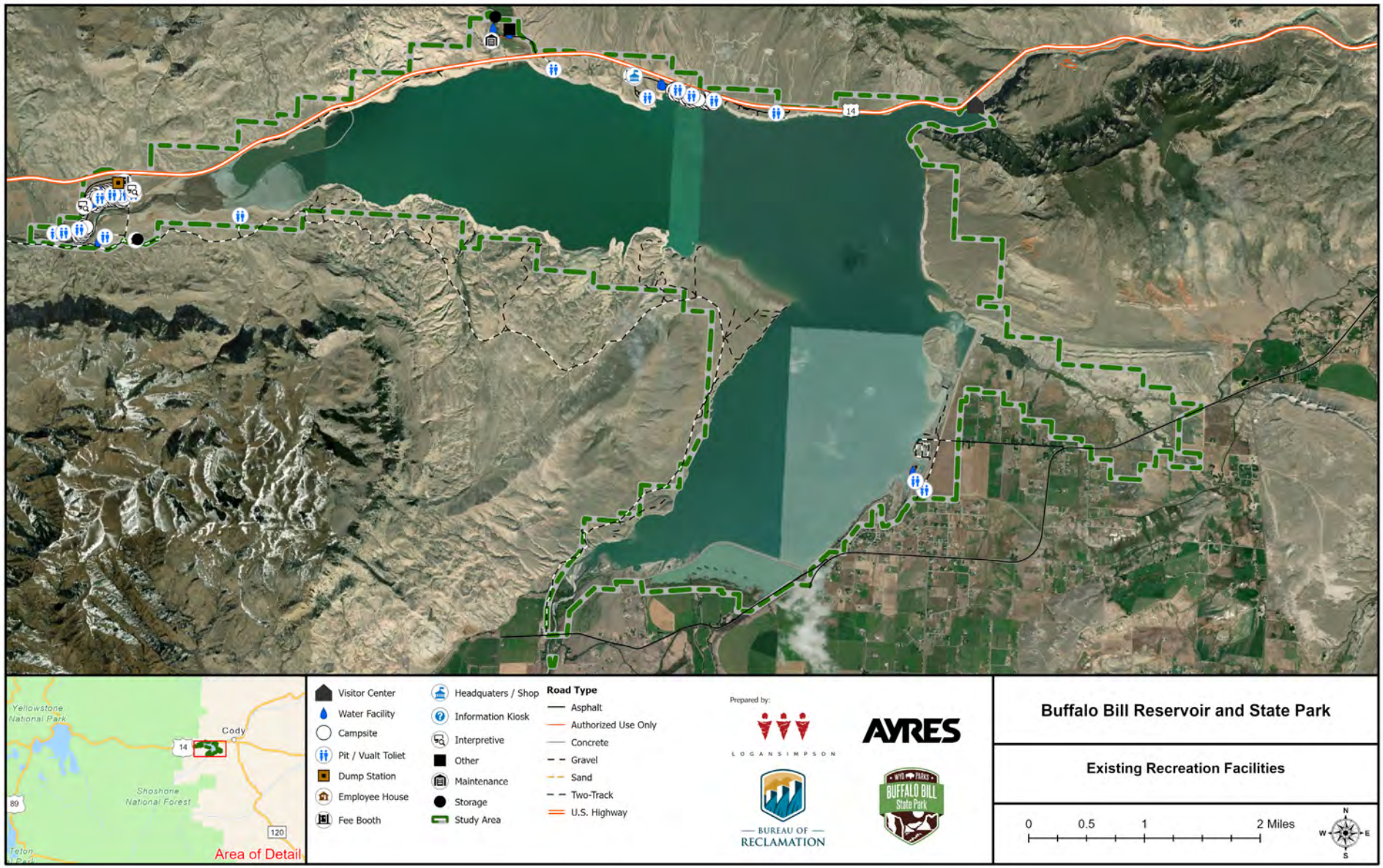


Figure 3. Land management within the Study Area

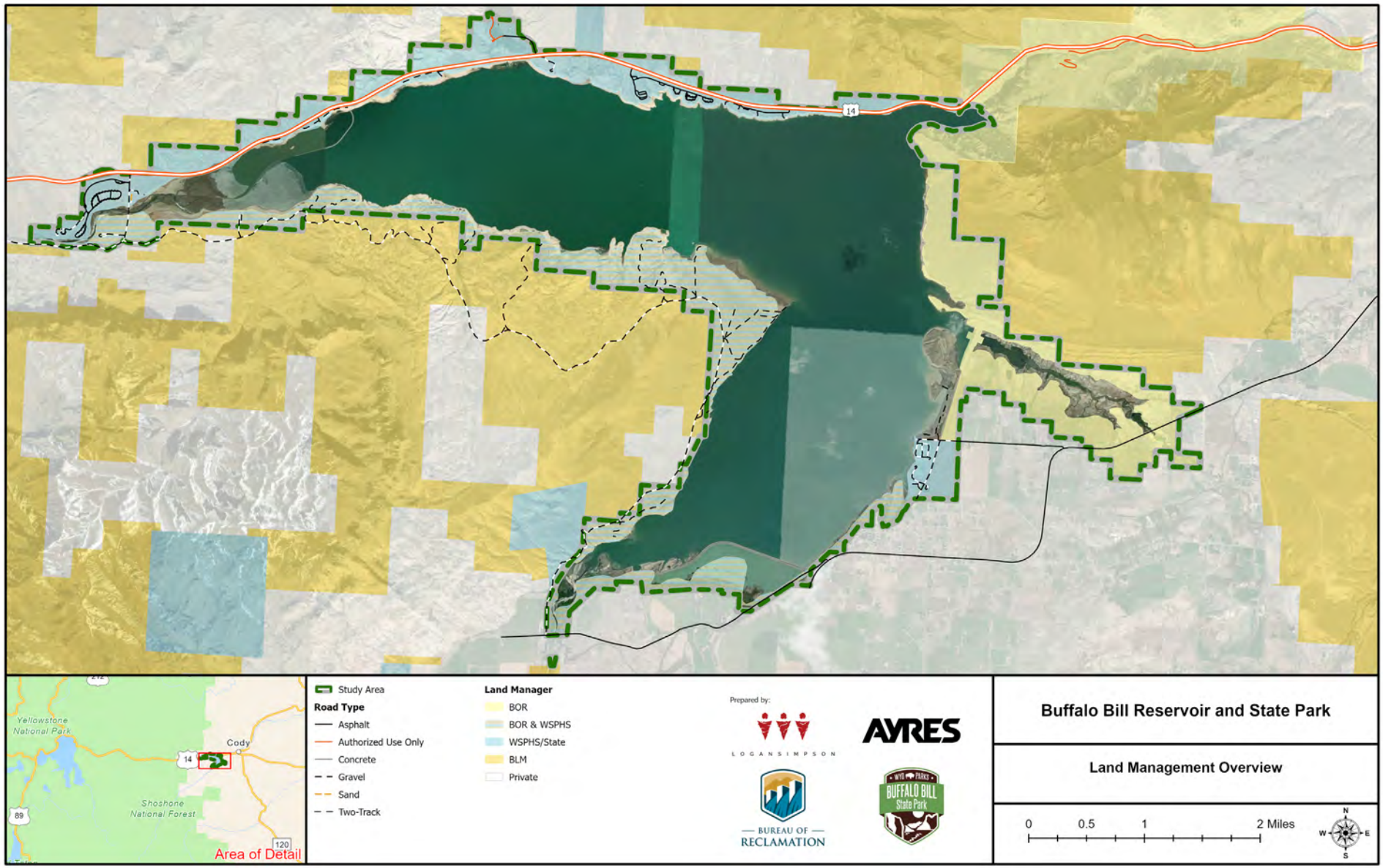


Figure 4. PFYC classes

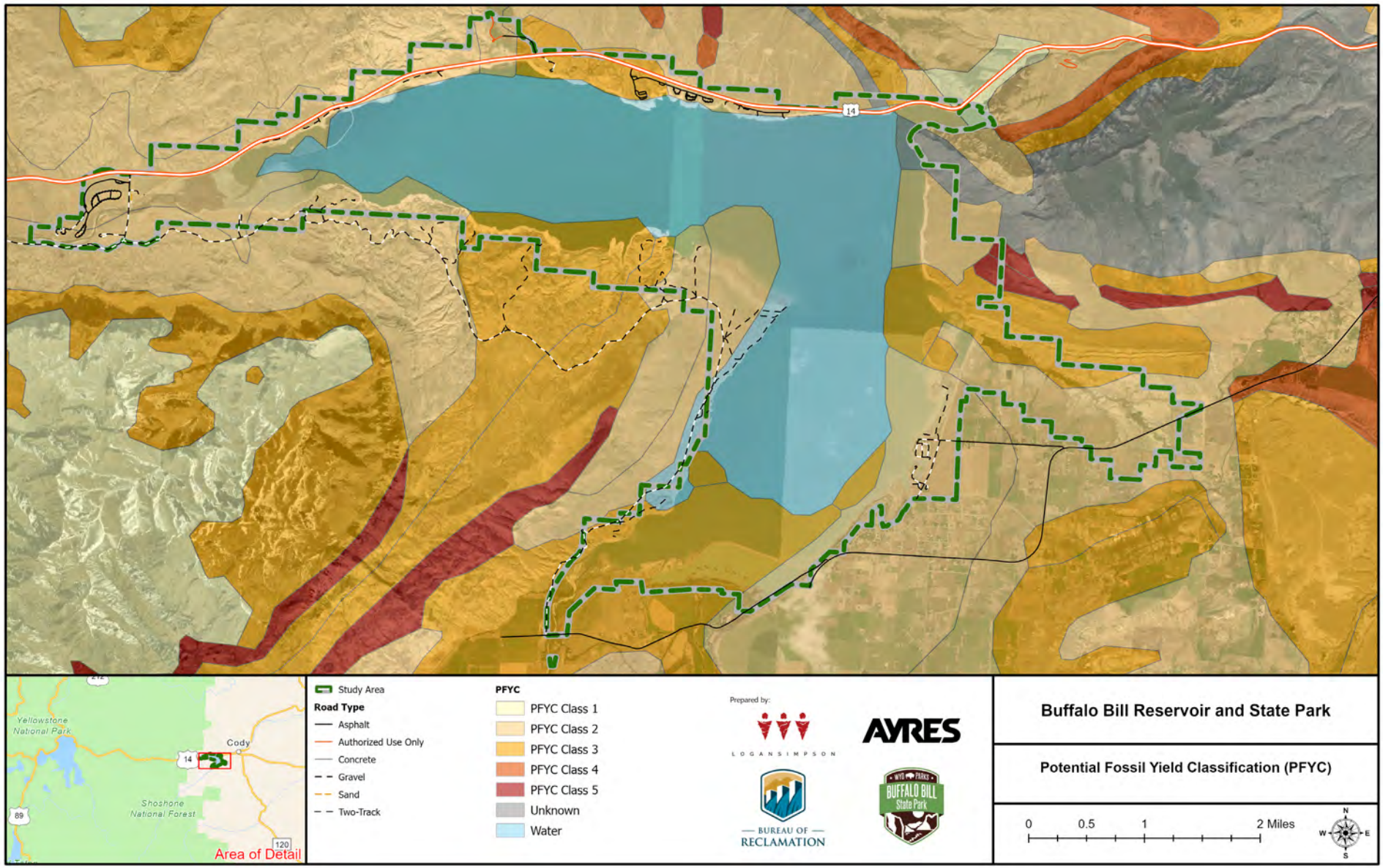


Figure 5. Visual Analysis from campsites

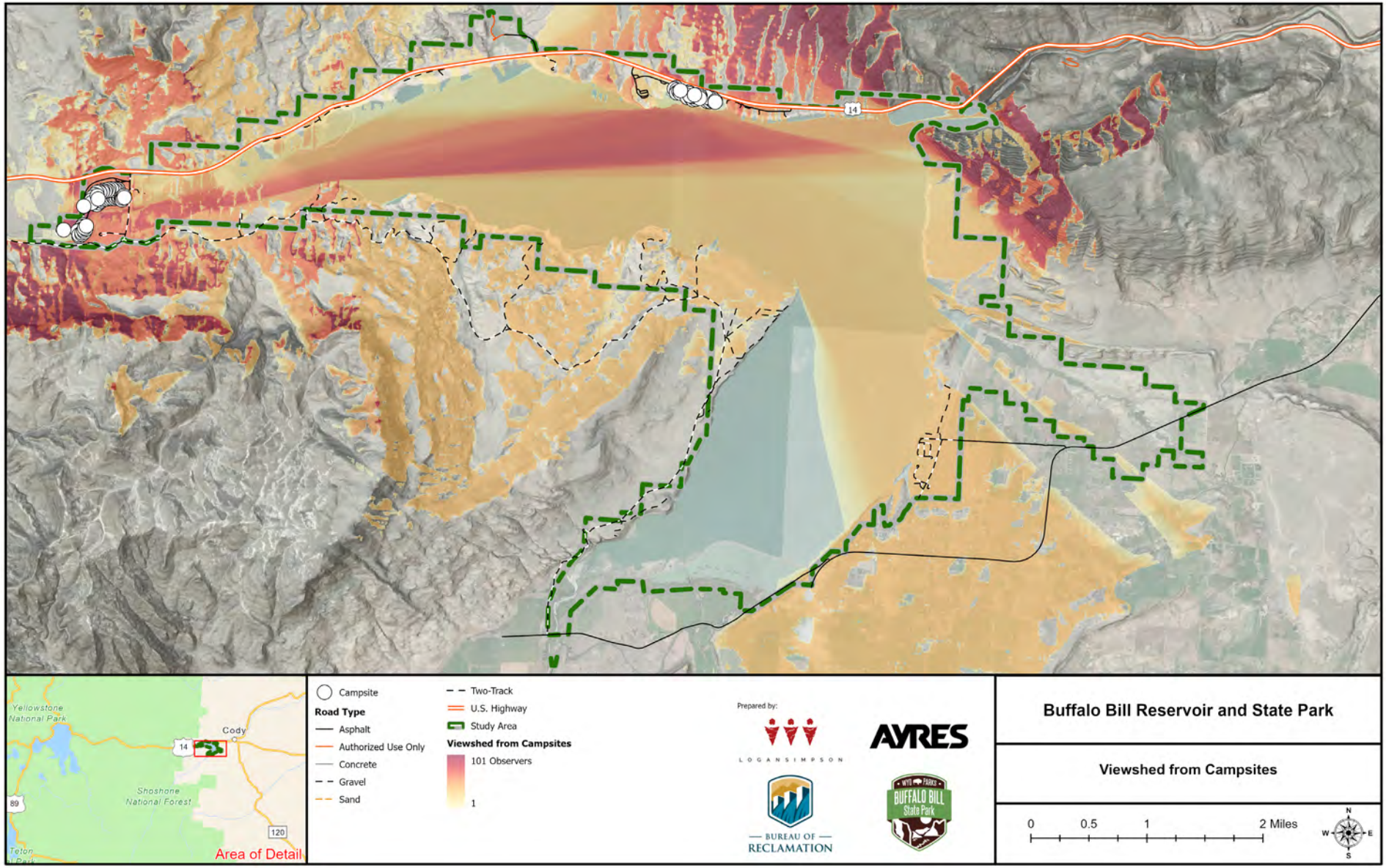


Figure 6. Visual Analysis from roads

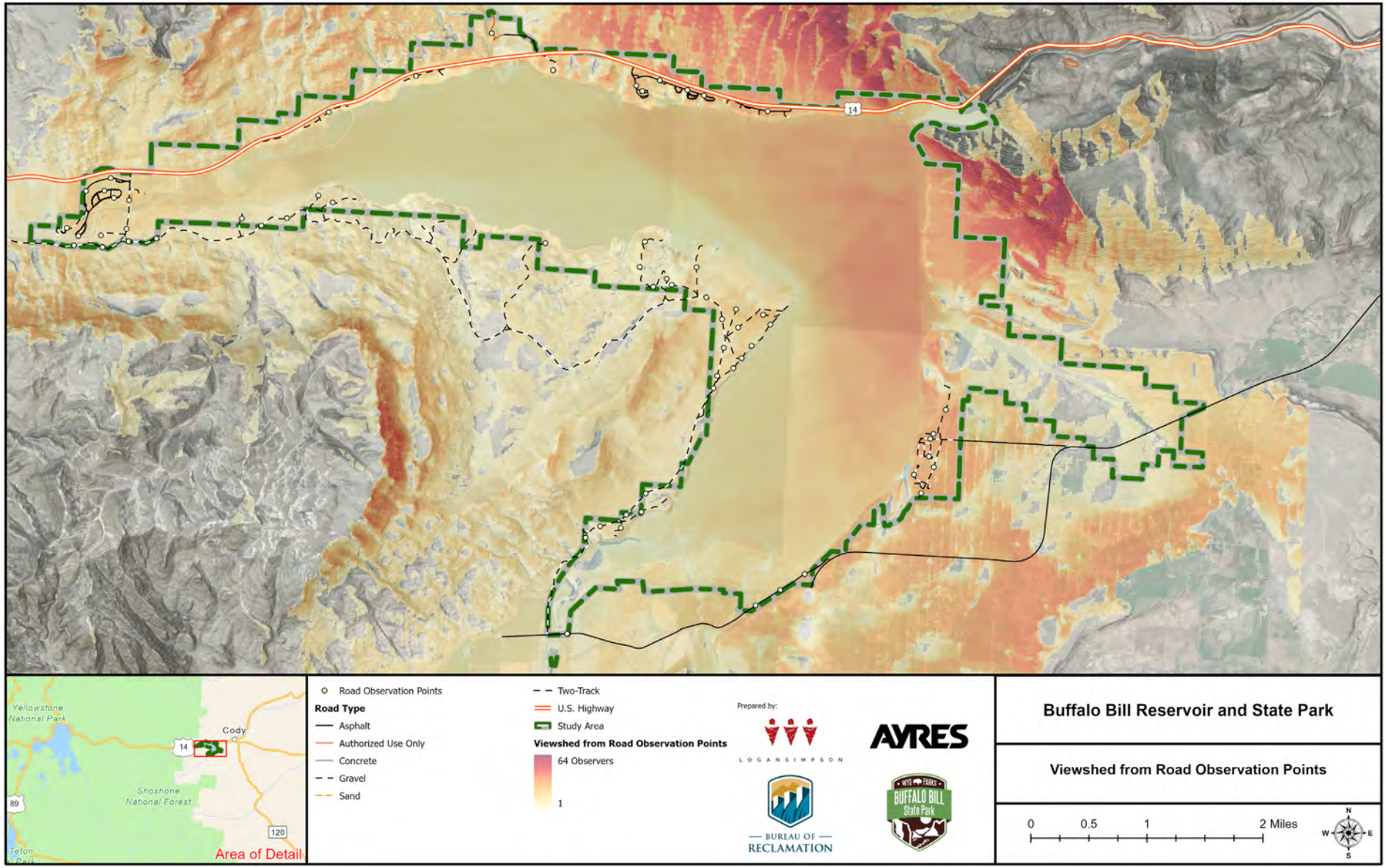


Figure 7. Bedrock geology in and surrounding the Study Area

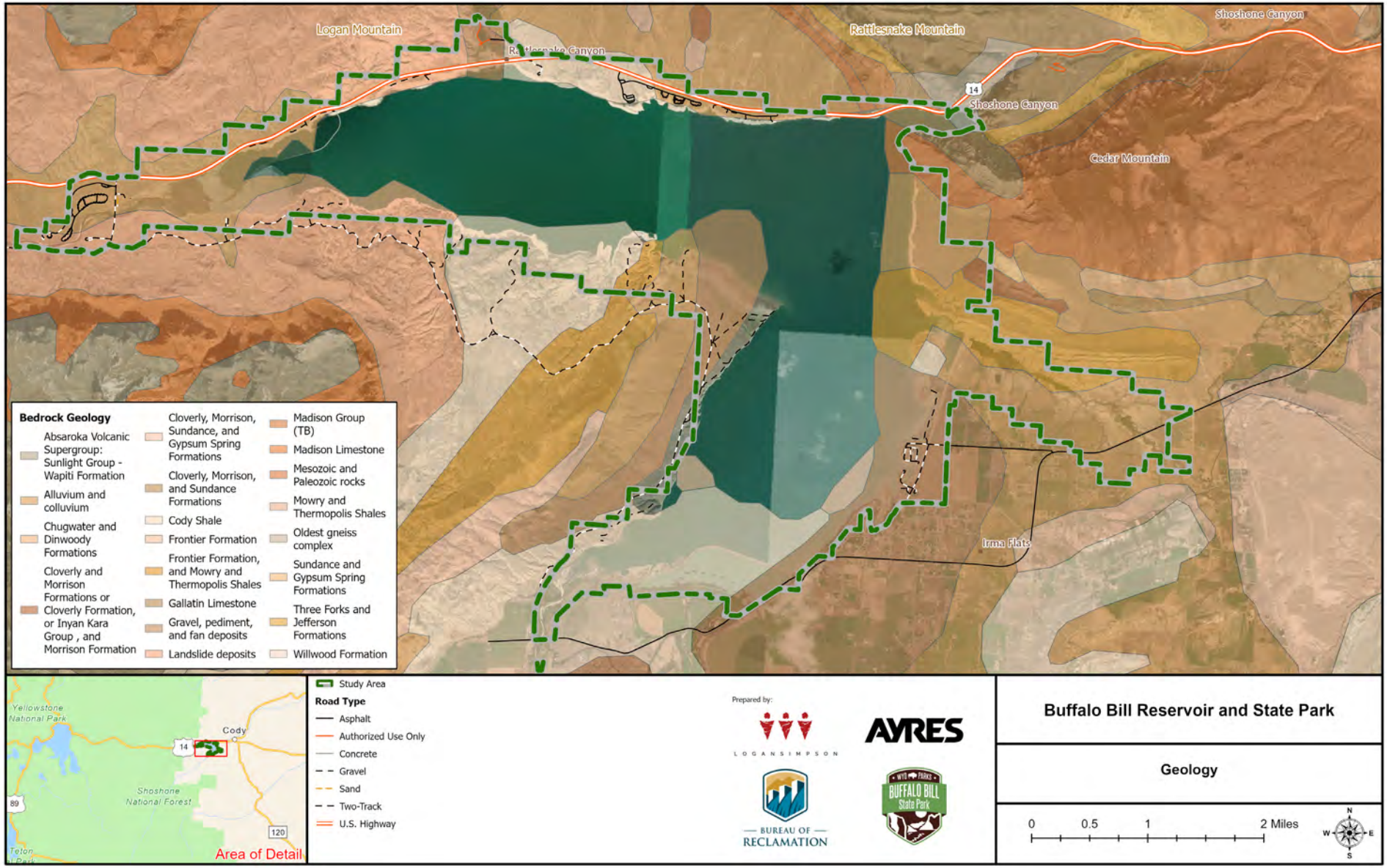


Figure 8. Soil types within the Study Area

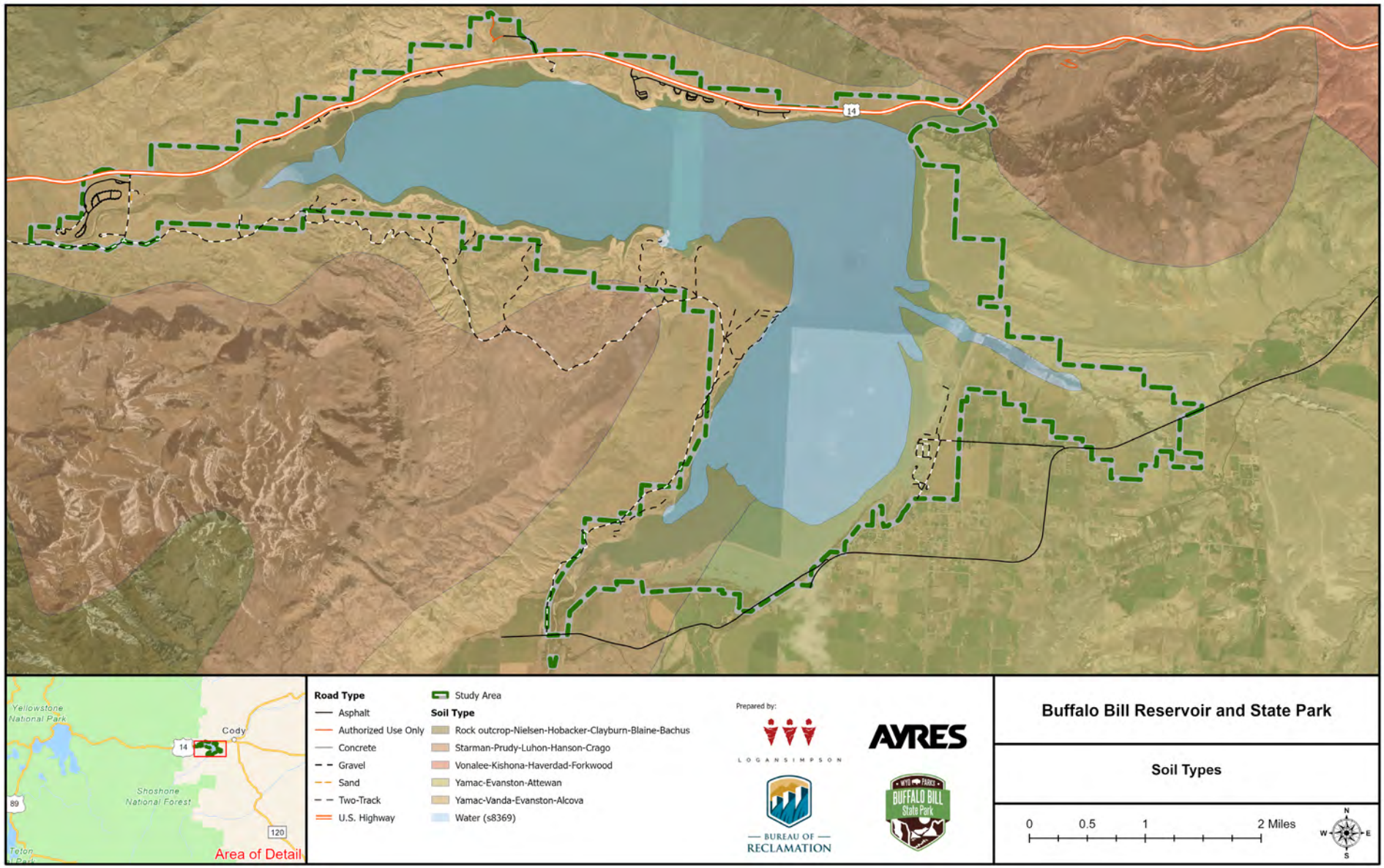


Figure 9. Watershed boundaries within and around the Study Area

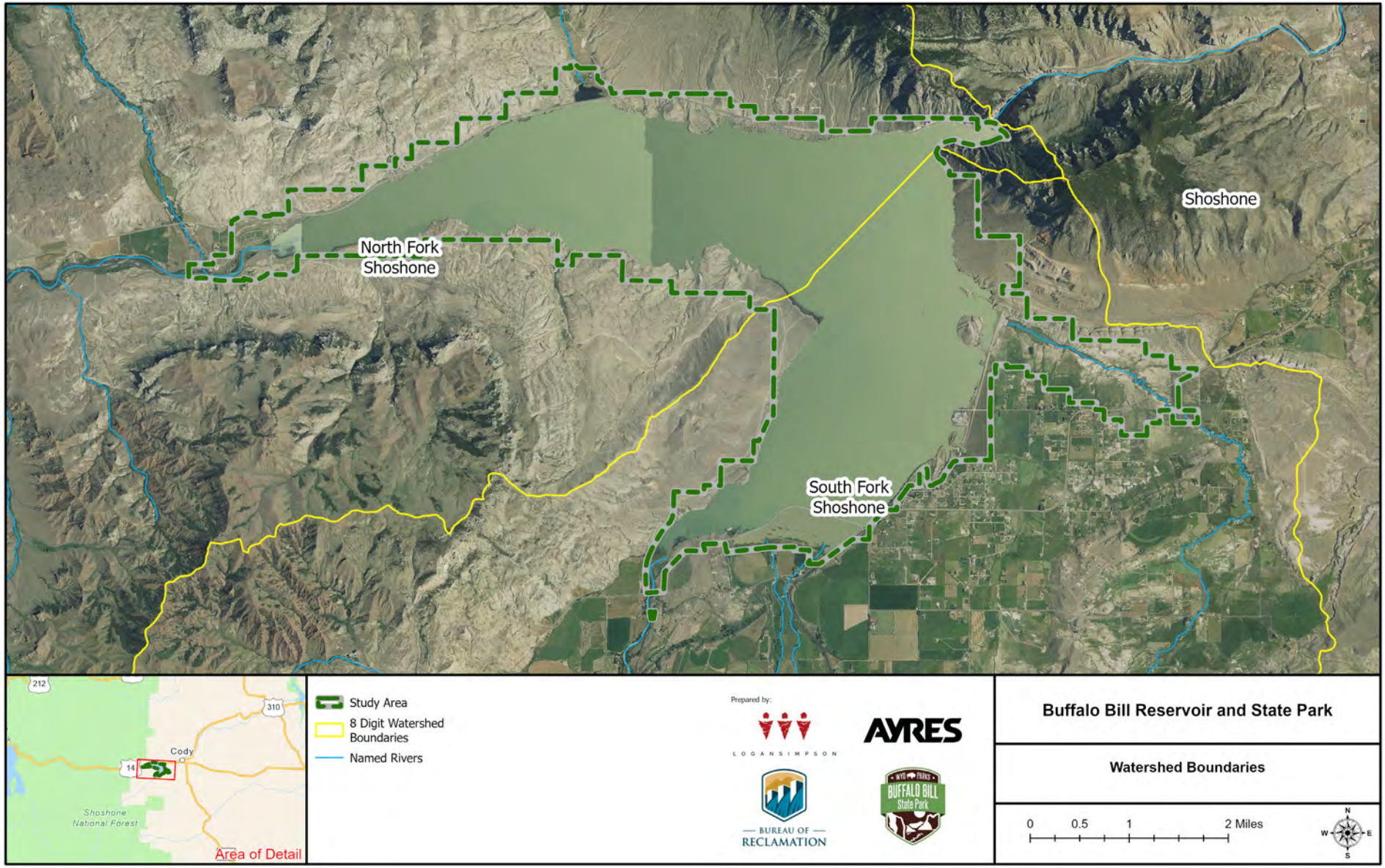


Figure 10. Land cover in and around the Study Area

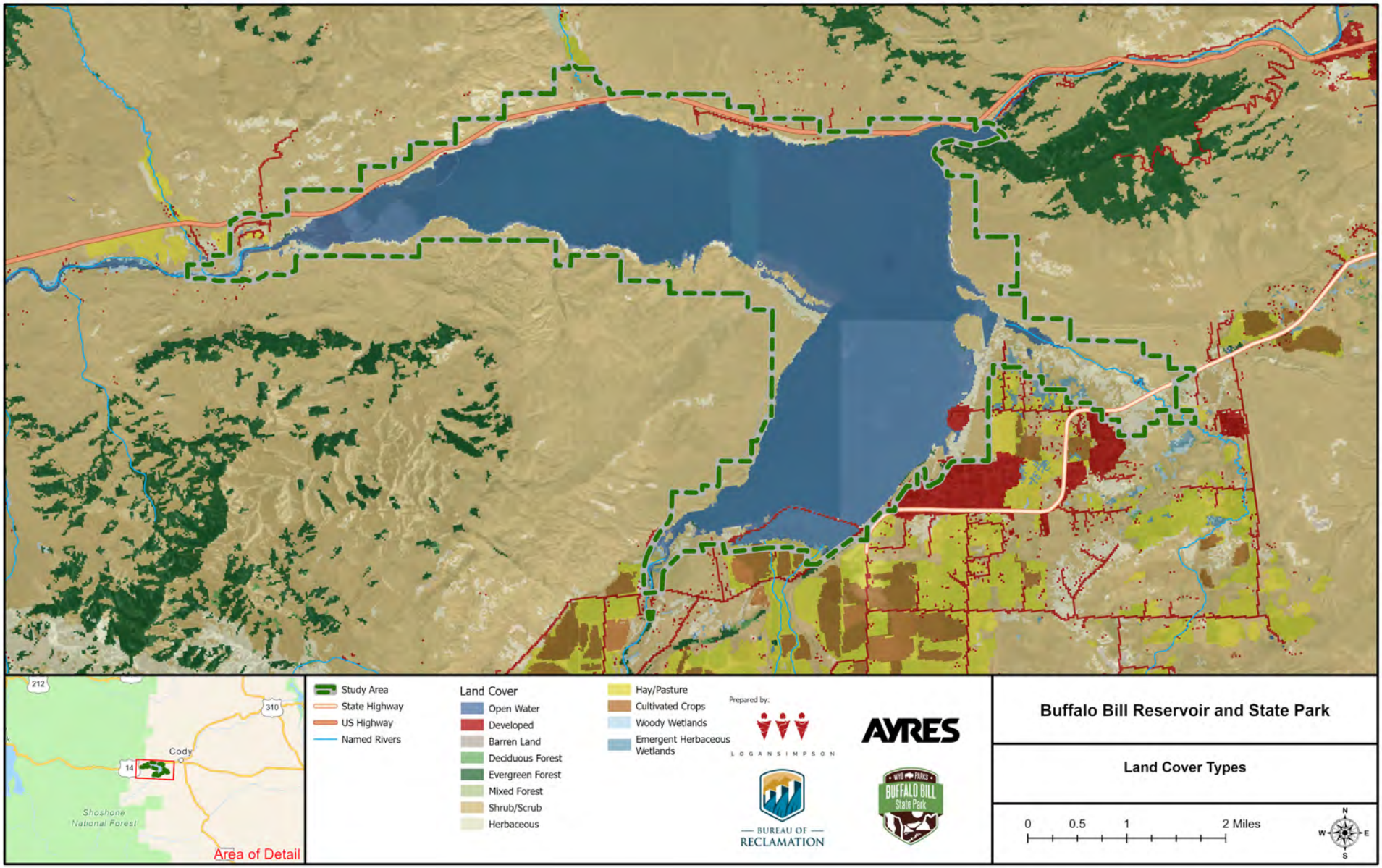


Figure 11. Pronghorn antelope, Rocky Mountain goat, and bighorn sheep seasonal range in and around the Study Area

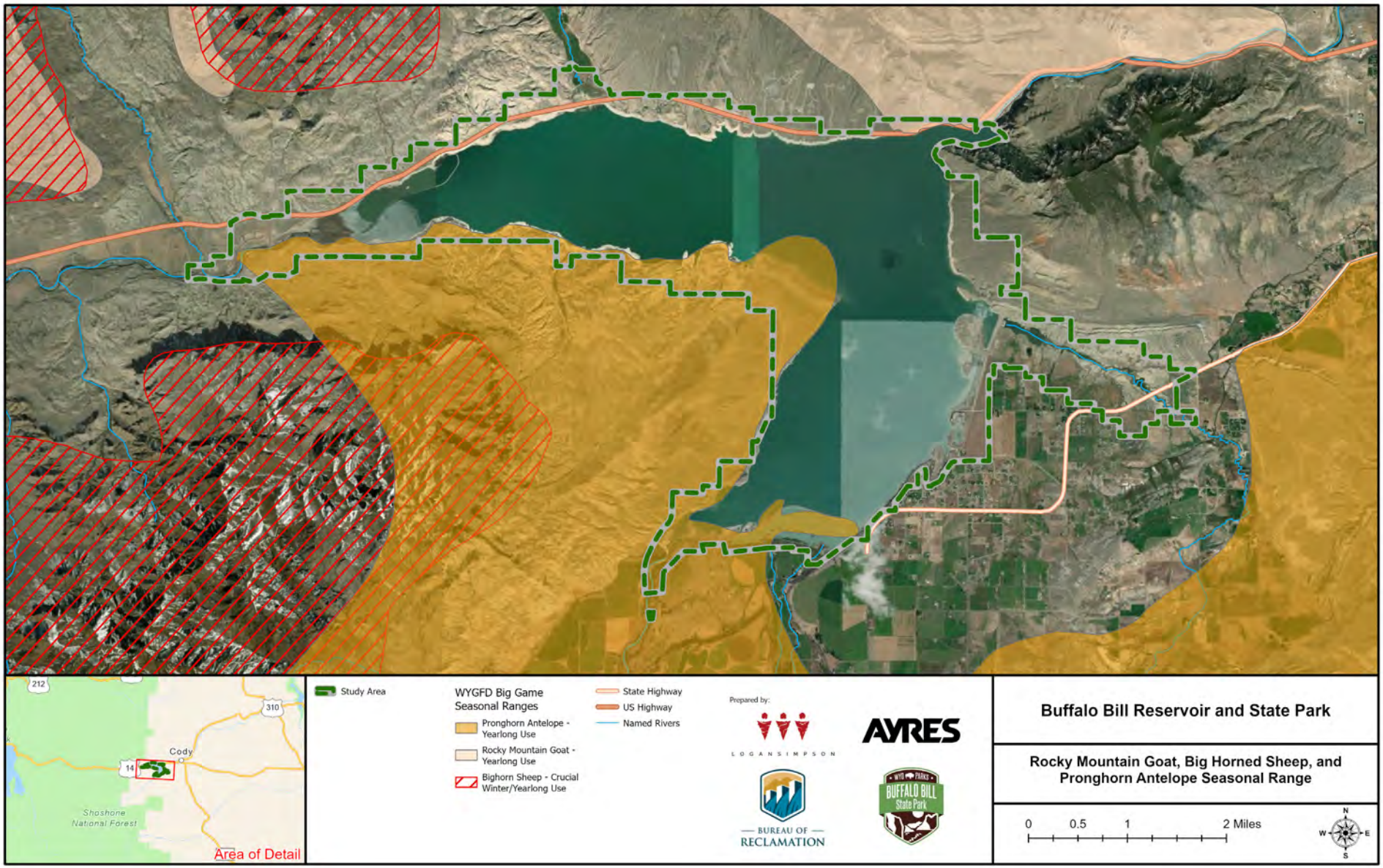


Figure 12. White-tailed deer and mule deer seasonal range in and around the Study Area

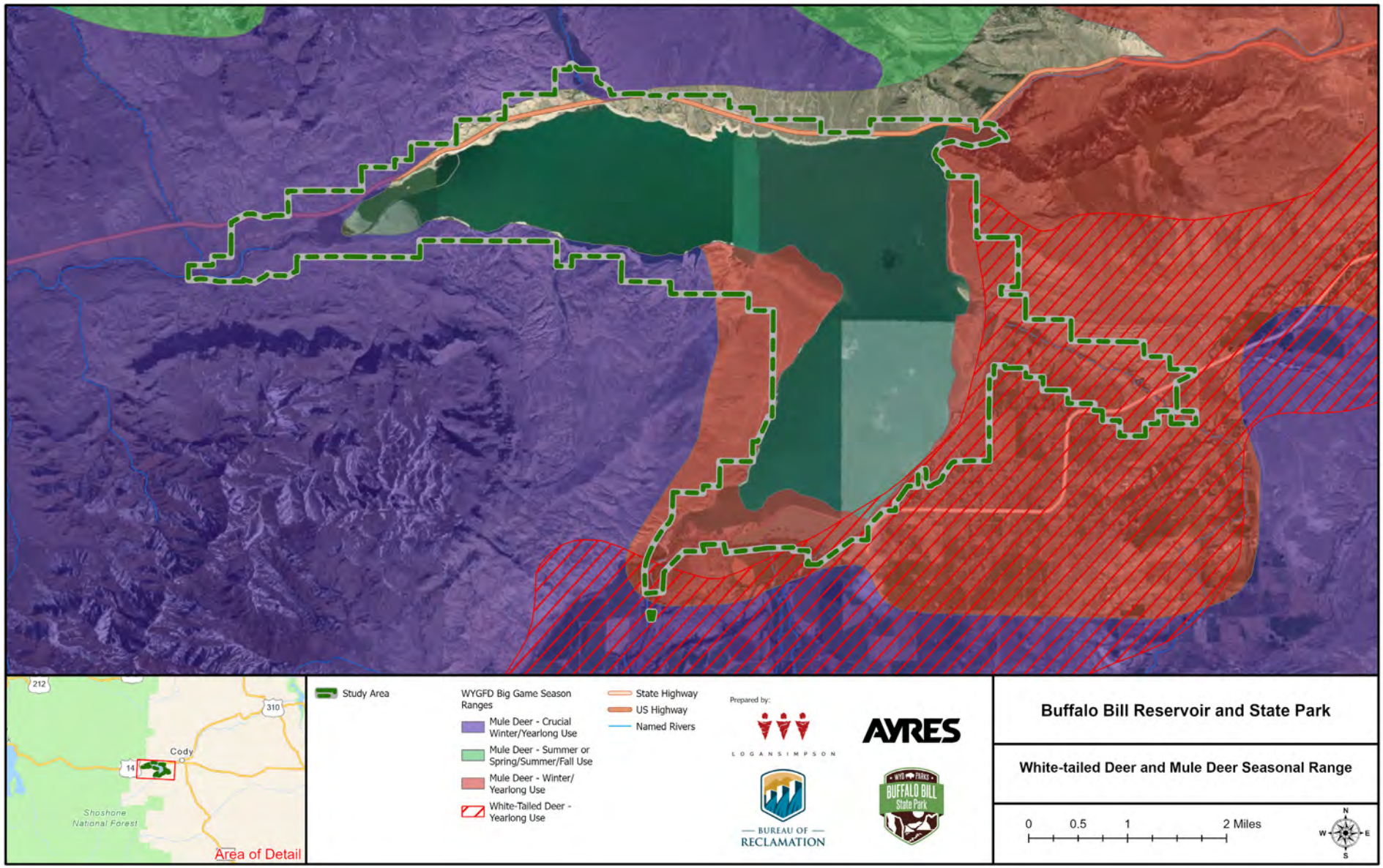


Figure 13. Elk seasonal range in and around the Study Area

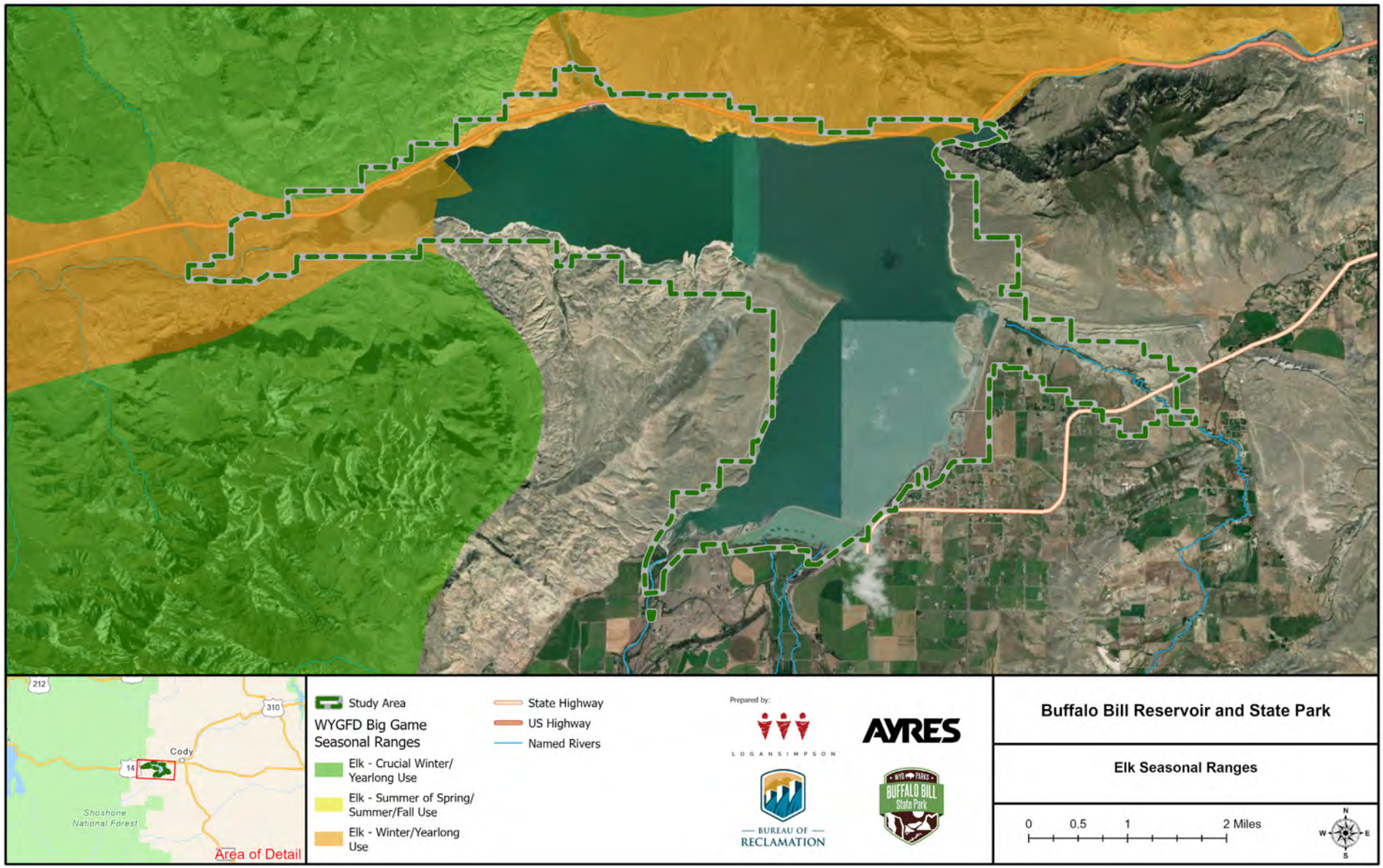


Figure 14. Black bear seasonal range in and around Study Area

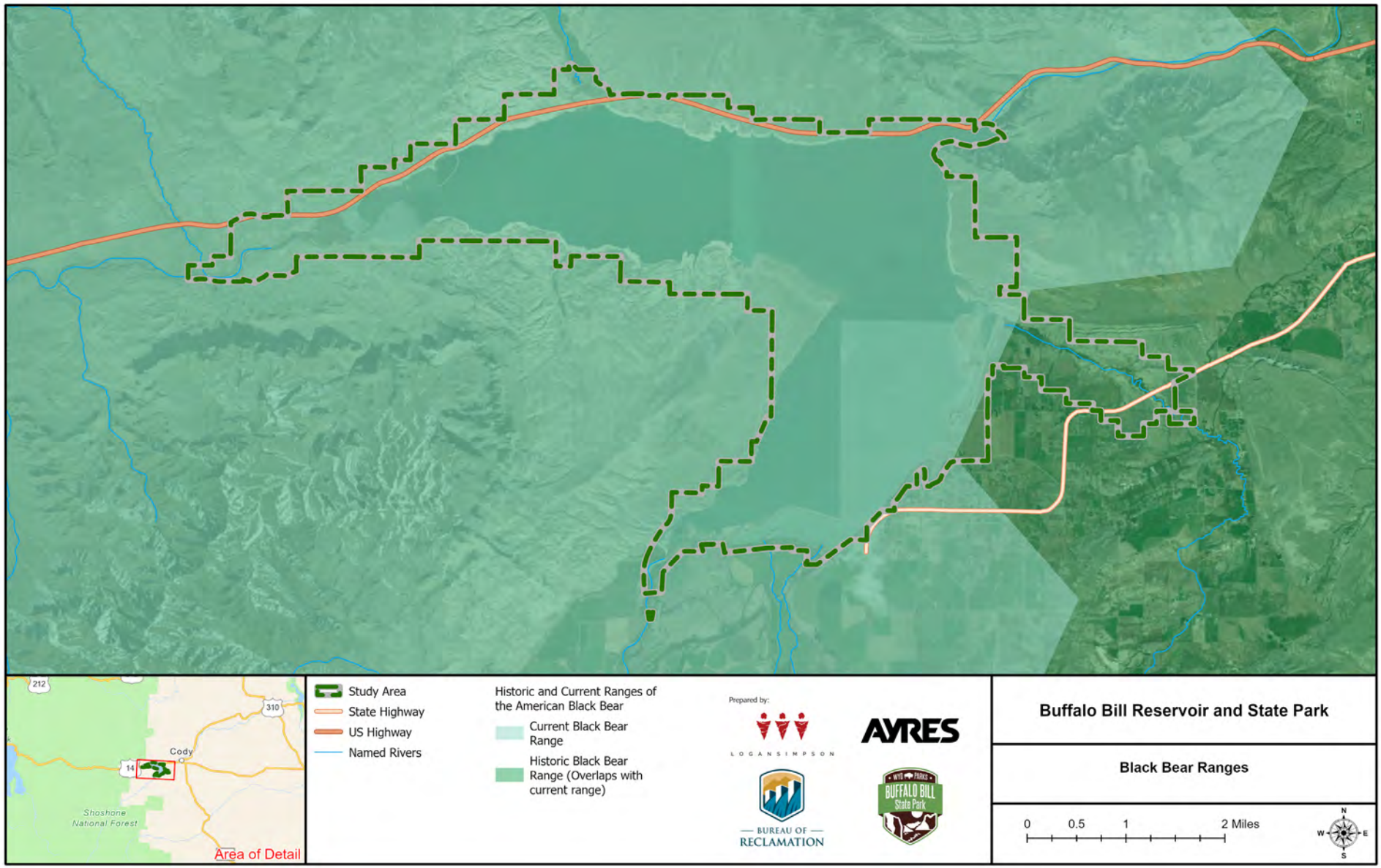


Figure 15. Moose seasonal range in and around the Study Area

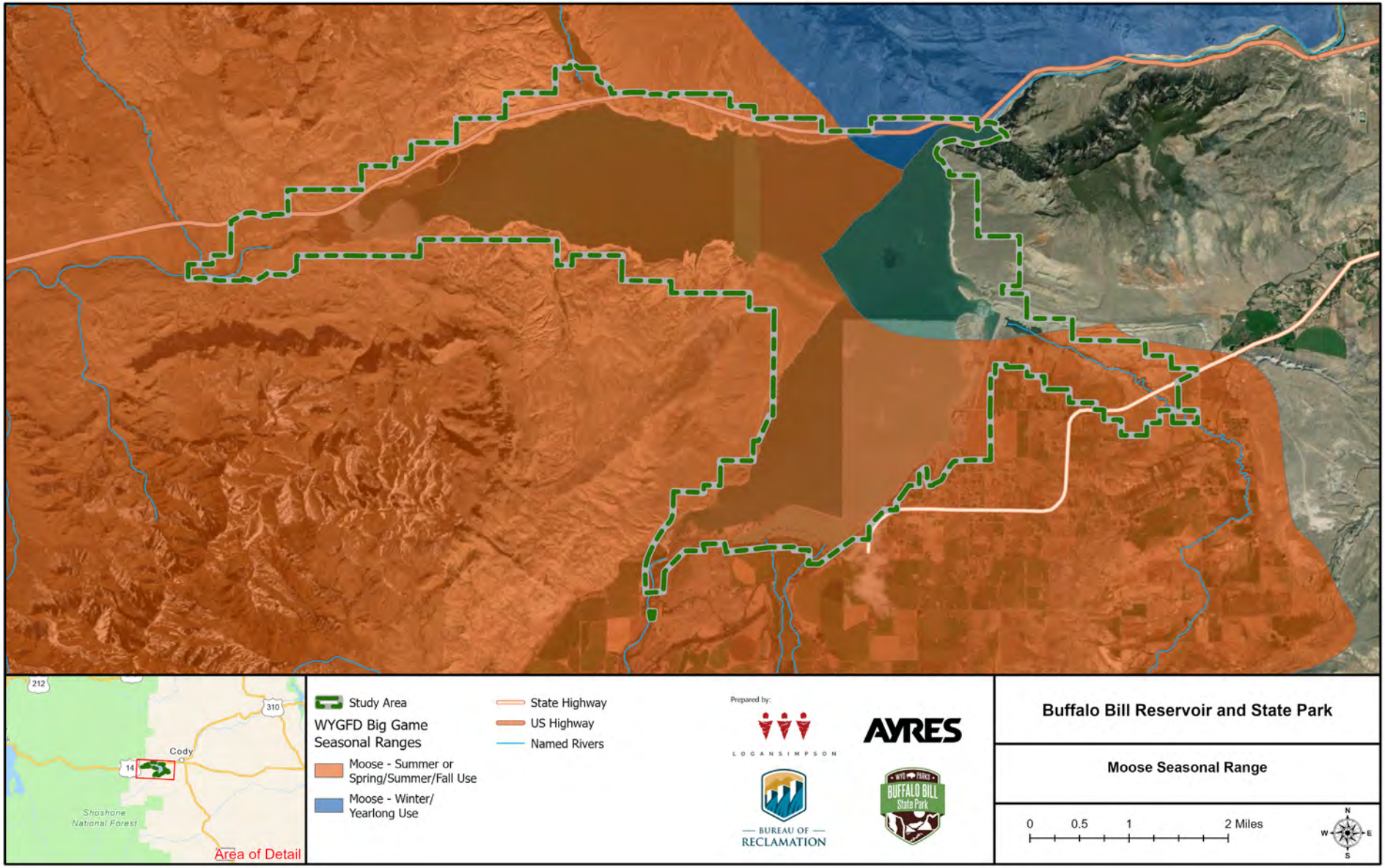


Figure 16. Important Bird Area near the Study Area

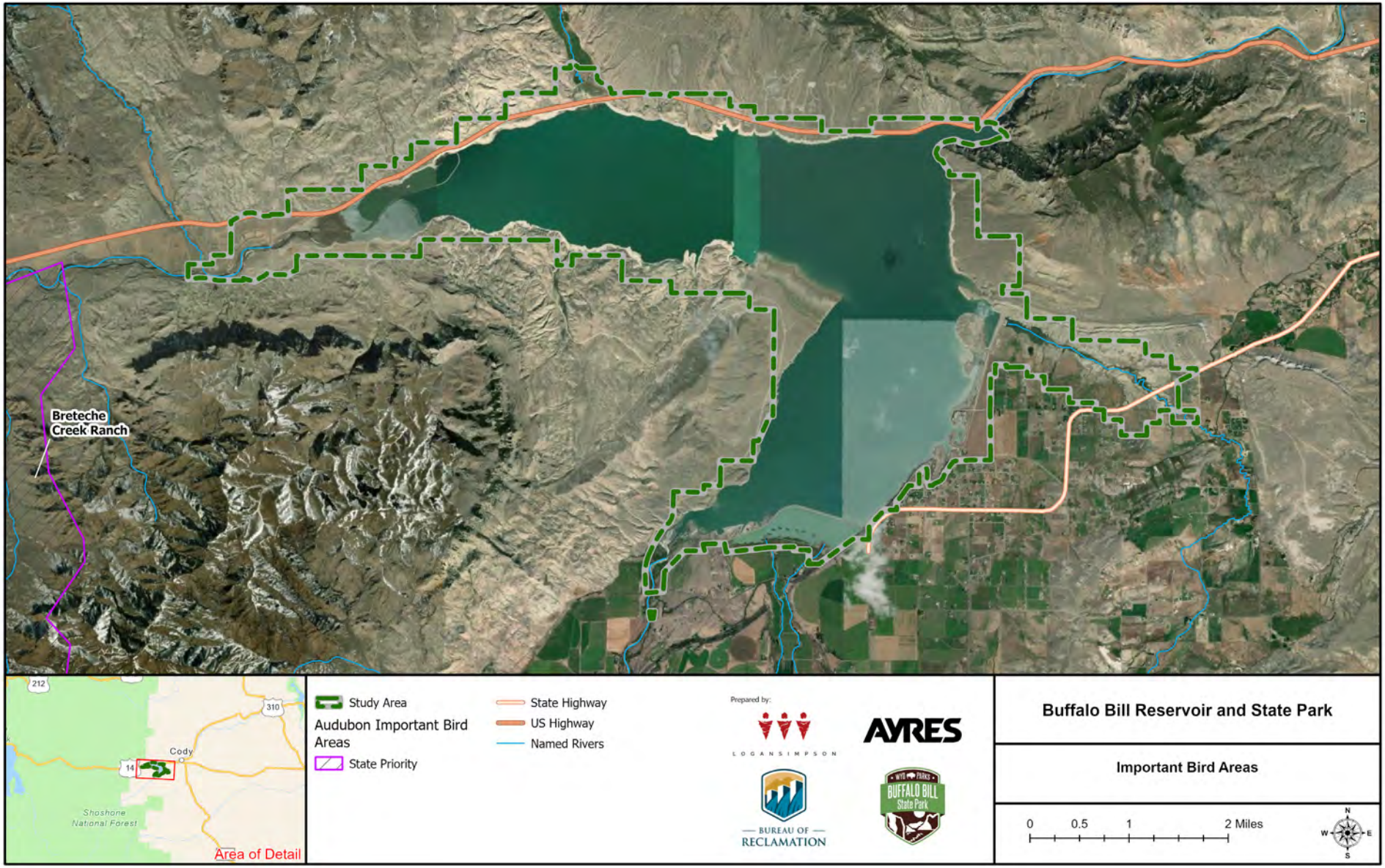


Figure 17. Aquatic Habitat in and around the Study Area