

Lake Nighthorse

Conceptual Recreation Plan

October 2014

Introduction

The City of Durango Parks and Recreation Department in collaboration with the Bureau of Reclamation prepared this draft conceptual plan for recreation facilities and management at Lake Nighthorse. As follows are several documents which provided the foundation for the development of the Lake Nighthorse Conceptual Recreation Plan:

- Draft Lake Nighthorse Recreation Master Plan prepared by the Animas-La Plata Water Conservancy District (May 2011);
- Preliminary Draft Environmental Assessment for Lake Nighthorse Recreation Master Plan prepared by the Bureau of Reclamation (October 2012);
- Animas-La Plata (ALP) Project Final Supplemental Environmental Impact Statement (FSEIS) prepared by the Bureau of Reclamation (2000);
- Recreation Market Assessment, Lake Nighthorse, Durango, Colorado Prepared by RPI Consulting for the Animas-La Plata Water Conservancy District (June 2010);
- Draft Lease Agreement between United States of America and City of Durango, Colorado, for Administration of Recreation at Lake Nighthorse (In progress, available upon completion 2014);
- Draft Lake Nighthorse Annexation Agreement (In progress, available upon completion 2014); and
- Draft Memorandum of Agreement (MOA) among Animas La-Plata Operation, Maintenance, and Replacement Association and City of Durango and Ute Mountain Ute Tribe and Southern Ute Indian Tribe and Bureau of Reclamation for Recreation Planning and Development at Lake Nighthorse for Animas-La Plata Project, Colorado and New Mexico (In progress, available upon completion 2014).

Background

Ridges Basin Dam and Lake Nighthorse were constructed by the Bureau of Reclamation (Reclamation) as a component of the Animas-La Plata (ALP) Project. The ALP Project was built to fulfill the water rights settlement of the Ute Mountain Ute and the Southern Ute Indian Tribes of southwestern Colorado (Colorado Ute Tribes) and to provide a municipal and industrial water supply to various entities in the region. Reclamation prepared a Final Supplemental Environmental Impact Statement in 2000, and subsequently signed a Record of Decision which envisioned development and management of recreation by a nonfederal entity. The reservoir area encompasses approximately 5,500 acres, and the water surface area is 1,500 acres at normal high water elevation and 750 acres at minimum pool.

In 2004, Ridges Basin Reservoir was renamed Lake Nighthorse, in honor of Ben Nighthorse Campbell, the former U.S. senator from Colorado who served as the primary author for the Settlement Act and its amendments. Construction of the dam and reservoir started in May 2003 and the initial reservoir filling was completed in June 2011.

In 2008, Colorado State Parks declined to accept the development and management of recreation at Lake Nighthorse and agreed to allow Reclamation to seek other nonfederal partners. The State gave Reclamation a \$3 million Motorboat Access grant for construction of a boat ramp, a parking area, a vault restroom, and an access road. Construction of the boat ramp project was completed in June 2013.

Recognizing the potential of the reservoir to serve as an important recreational amenity, the Animas-La Plata Water Conservancy District initiated public meetings in 2009 and contracted for the preparation of a recreation master plan in 2010 for development and management of recreation at Lake Nighthorse. The final Draft Lake Nighthorse Recreation Master Plan was completed in May 2011. Since then, considerable discussion has been ongoing with individual members of the Animas La-Plata Operation, Maintenance, and Replacement Association and Reclamation regarding recreation at Lake Nighthorse in an effort to determine what level of recreation might be appropriate and compatible with the project's primary purpose.

The City of Durango recognized that a nonfederal recreation manager for Lake Nighthorse has not been found by the Bureau of Reclamation. Several nonfederal agencies were approached by Reclamation and all entities declined to accept the management and development of recreation at Lake Nighthorse. In 2012, the City of Durango Parks and Recreation Department received the National Gold Medal Award for Excellence in the Field of Park and Recreation Management, granted by the American Academy for Park and Recreation Administration in partnership with the National Recreation and Park Association. This most prestigious award is given to only one Parks and Recreation agency in the entire nation each year by population. Durango Parks and Recreation received the award for cities less than 25,000. The Durango Parks and Recreation Department has the expertise to manage Lake Nighthorse and there is significant community interest in opening the facility to the public for recreation.

The City of Durango is a member on the Animas-La Plata Operation, Maintenance and Replacement Association (Association) and has an interest in the future of recreation at Lake Nighthorse. Other representatives on the Association include the Ute Mountain Ute Tribe, Southern Ute Indian Tribe, La Plata Conservancy District, Navajo Nation, Animas-La Plata Water Conservancy District, San Juan Water Commission, and the Colorado Water Conservation Board. The members of the Association represent the project beneficiaries for whom the project was constructed.

In 1874, Congress approved an agreement between the United States and certain Ute Indians in Colorado, known as the Brunot Agreement, pursuant to which the Utes ceded certain land to the United States and reserved a right to hunt on the land. The Brunot Agreement enables members of the Ute Indians to hunt, fish and gather, by which the Utes supported themselves in the region for centuries. Almost all of the federal property encompassing Lake Nighthorse is located within the Brunot area and subject to the Brunot Agreement rights. Reclamation, the Tribes, and the City area are having ongoing discussions regarding implementation of these rights.

Recreation Management and Development

Discussions regarding the City of Durango exploring the feasibility of accepting the responsibility for management and development of recreation at Lake Nighthorse were initiated with Reclamation in 2011. The management and development of recreation at Lake Nighthorse is a complex negotiation process involving multiple stakeholders. Consensus has been reached to establish the framework for proceeding with recreation at Lake Nighthorse in a cautious and respectful manner. The management and development of recreation at Lake Nighthorse is intended to occur in manner consistent with the primary purpose of the project, and will be managed in accordance with the following guiding principles:

Guiding Principles

- Protection of cultural resources.
- Ensure compliance with all applicable local, state, and federal development standards and environmental regulations and requirements.
- Monitor and protect water quality.
- Honor Brunot Agreement/Treaty rights.
- Promote ecological sustainability and preserve wildlife habitat.
- Provide ongoing care, stewardship, law enforcement, and patrol the property consistent with City parks and open space areas.
- Provide improvements within the development area to enable public access to recreational amenities.
- Ensure that recreation management and development does not adversely impact the primary purpose of the ALP Project for municipal and industrial water supply.

Pursuant to the draft MOA and ongoing discussions, the Recreation Planning and Development Committee (Committee) will include representation from the Animas-La Plata Operation, Maintenance and Replacement Association, City of Durango, Ute Mountain Ute Tribe, Southern Ute Indian Tribe, and Reclamation. The purpose of the Committee is to review and discuss recreation planning and development at Lake Nighthorse to ensure compatibility with the primary purpose of the ALP Project for municipal and industrial water supply, including initial development and any future development of recreation facilities. Lake Nighthorse is currently outside the jurisdictional boundaries of the City of Durango. In order for the City to undertake the administration of recreation at Lake Nighthorse in accordance with the terms of the Lease Agreement between Reclamation and the City of Durango, annexation of the property into the City is necessary to facilitate the provision of municipal services and, in particular, law enforcement. The annexation of federal land encompassing Lake Nighthorse is limited to the recreation area and facilities to be managed by the City of Durango.

Initial Recreation Development

The development of recreational improvements at Lake Nighthorse will be phased to ensure compatibility with the primary purpose of the ALP Project, subject to the availability of funding, and consistent with the decisions of the Committee. Initially, Lake Nighthorse will be open for day use only, including minimum facilities necessary for public health and safety, law enforcement, and protection of the environment. The map below illustrates the current and future recreation area, highlighted in green.

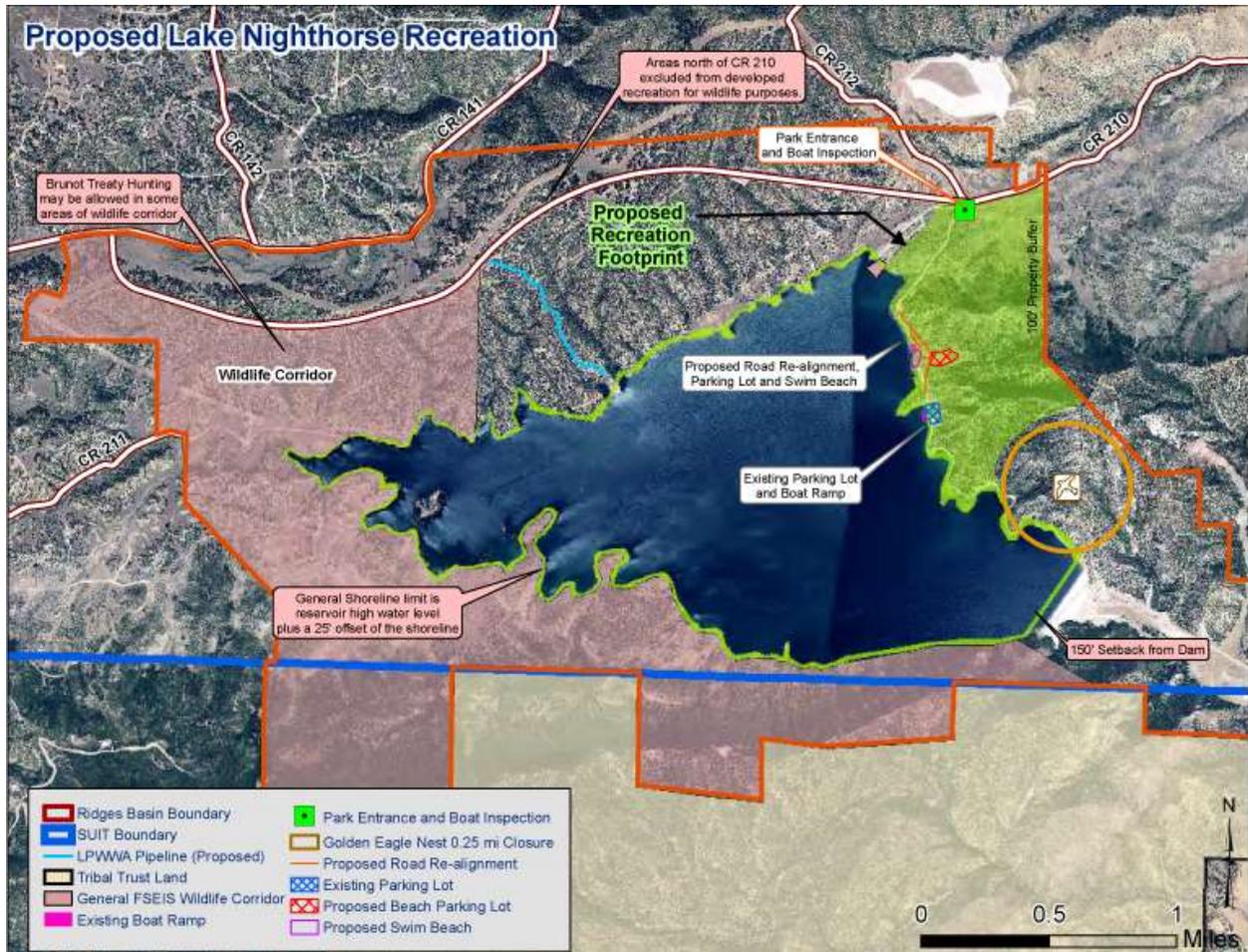


Figure 1: Proposed Recreation Footprint

The initial phase of recreation development to enable Lake Nighthorse to be open to the public has been funded by a variety of sources to Reclamation (\$3,350,000), City of Durango (\$285,000), and La Plata County road improvements involving the CR 210 turn lane into Lake Nighthorse (\$350,000).

Below is an overview of the basic necessary improvements to open Lake Nighthorse to the public:

Aquatic Nuisance Species Inspection Station and Decontamination Area

Reclamation will coordinate with the Committee to plan and develop at the entry to Lake Nighthorse an aquatic nuisance species (ANS) inspection station and decontamination area. Near the existing access to CR 210, the Lake Nighthorse entrance will be located to ensure that all vehicular traffic will pass through the entrance and all motorized boats will be inspected for potential presence of ANS on vessels. The decontamination area will capture and contain all fluids associated with the treatment for ANS.

Water Quality

Reclamation will continue its ongoing water quality activities for monitoring and protection purposes. The following provides a description of Reclamation's water quality activities associated with the Animas-La Plata Project and Lake Nighthorse.

Lake Nighthorse

Since 2009, Reclamation has periodically conducted water quality sampling at Lake Nighthorse which includes a petroleum product monitoring element. The data gathered will provide a baseline to compare future monitoring. A regular water quality sampling program will start when the reservoir opens for public use. The sampling will include monitoring for potential pollutants such as benzene, toluene, ethyl benzene, and xylenes which are some of the volatile organic compounds found in petroleum derivatives such as gasoline.

Reclamation does not believe there will be adverse impacts on water quality due to the use of motor boats on the reservoir. However, if applicable water quality parameters are exceeded, Reclamation will work with the appropriate entity/entities to resolve the issue(s) while involving the recreation manager and project stakeholders.

In order to establish a baseline for E. coli, initial sampling occurred on the reservoir in late September 2014 and will be conducted again in October and November, weather permitting. After the E. coli data is gathered, the next step will be to analyze all the collected data and provide the information to project stakeholders.

After the reservoir opens for public use, appropriate sampling will be conducted for E. coli and additional sampling will include monitoring for invasive species such as quagga and zebra mussels. Water sampling for larval mussel detection will include lab analyses to ascertain the potential for mussel survival in the reservoir with emphasis on key parameters including calcium, pH, temperature, dissolved oxygen, and nutrients. The data gathered from the sampling will be analyzed and provided to project stakeholders.

Animas River

Reclamation developed and implemented a program to monitor water quality in the Animas River from the Durango Pumping Plant (DPP) to the confluence with the San Juan River for five years after the DPP began operation in 2011. This sampling includes monitoring general water quality (major constituents, heavy metals, nutrients, and total organic carbon) and radiochemistry (radioactive materials). Weather permitting; sampling is done year round on a monthly basis. Two sites are located upstream from the Durango Pumping Plant (DPP); one is located behind the Doubletree Hotel and the other is near the DPP. The third site is located about ½ a mile downstream from the DPP.

Reclamation also samples the Animas River at two other locations on a quarterly basis; one site is located upstream from the DPP at East 32nd Street and the other site is located near Farmington, New Mexico, upstream from confluence of the Animas and San Juan Rivers.

After Lake Nighthorse opens for public use, sampling on the Animas River will also include larval mussel detection and lab analyses to ascertain the potential for mussel survival in the river with emphasis on key

parameters including calcium, pH, temperature, dissolved oxygen, and nutrients. The data gathered from the river sampling will be analyzed and provided to project stakeholders. In the event larval mussels are found in the river, Reclamation will work with the appropriate entity/entities to address potential introduction in the reservoir.

Cultural Resources

The City of Durango will work with Reclamation and the Tribes to ensure protection of cultural resources pursuant to the Ridges Basin Cultural Resource Management Plan. Below is a schematic overview of the Section 106 Process that is required by the Bureau of Reclamation.

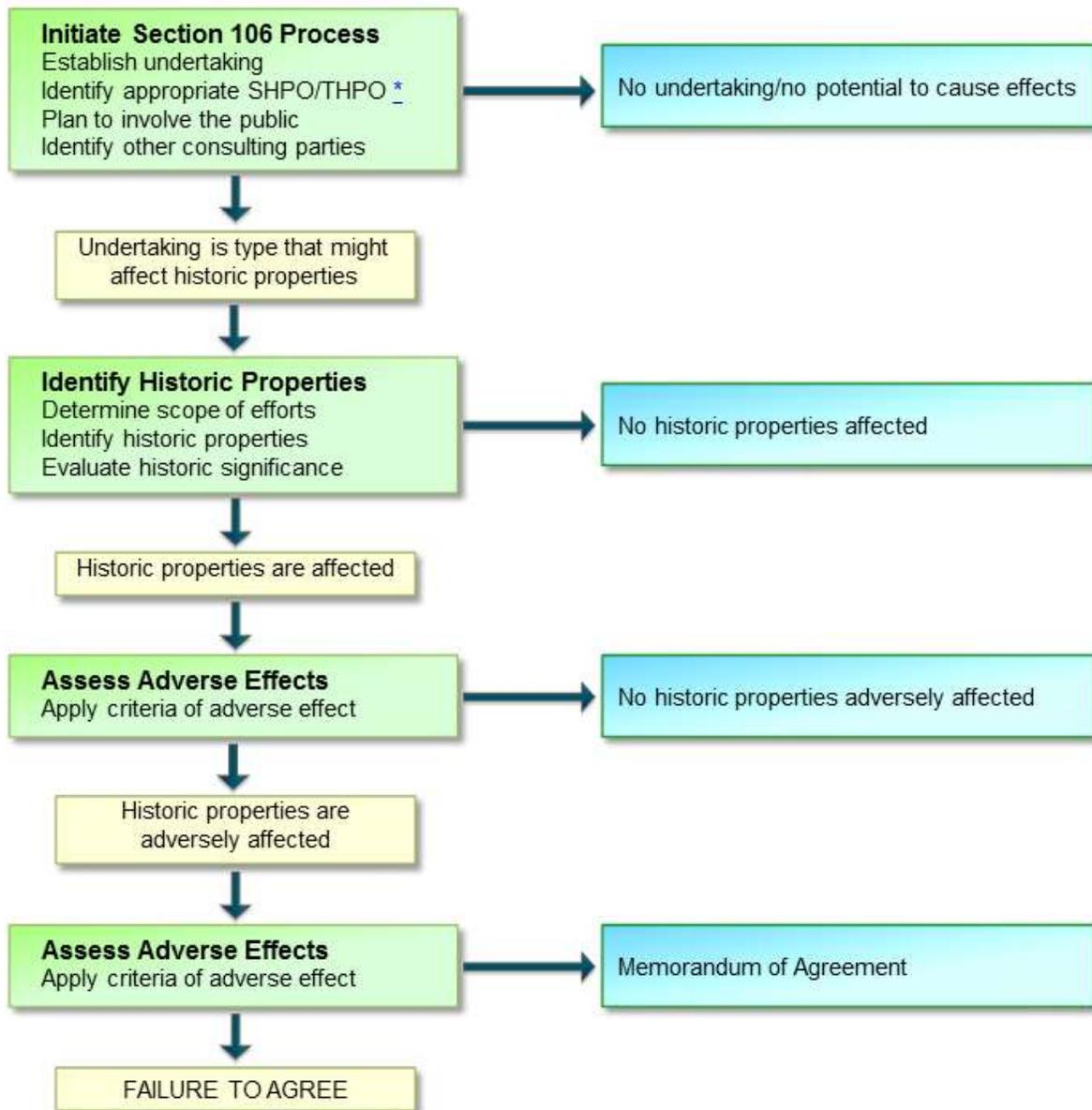
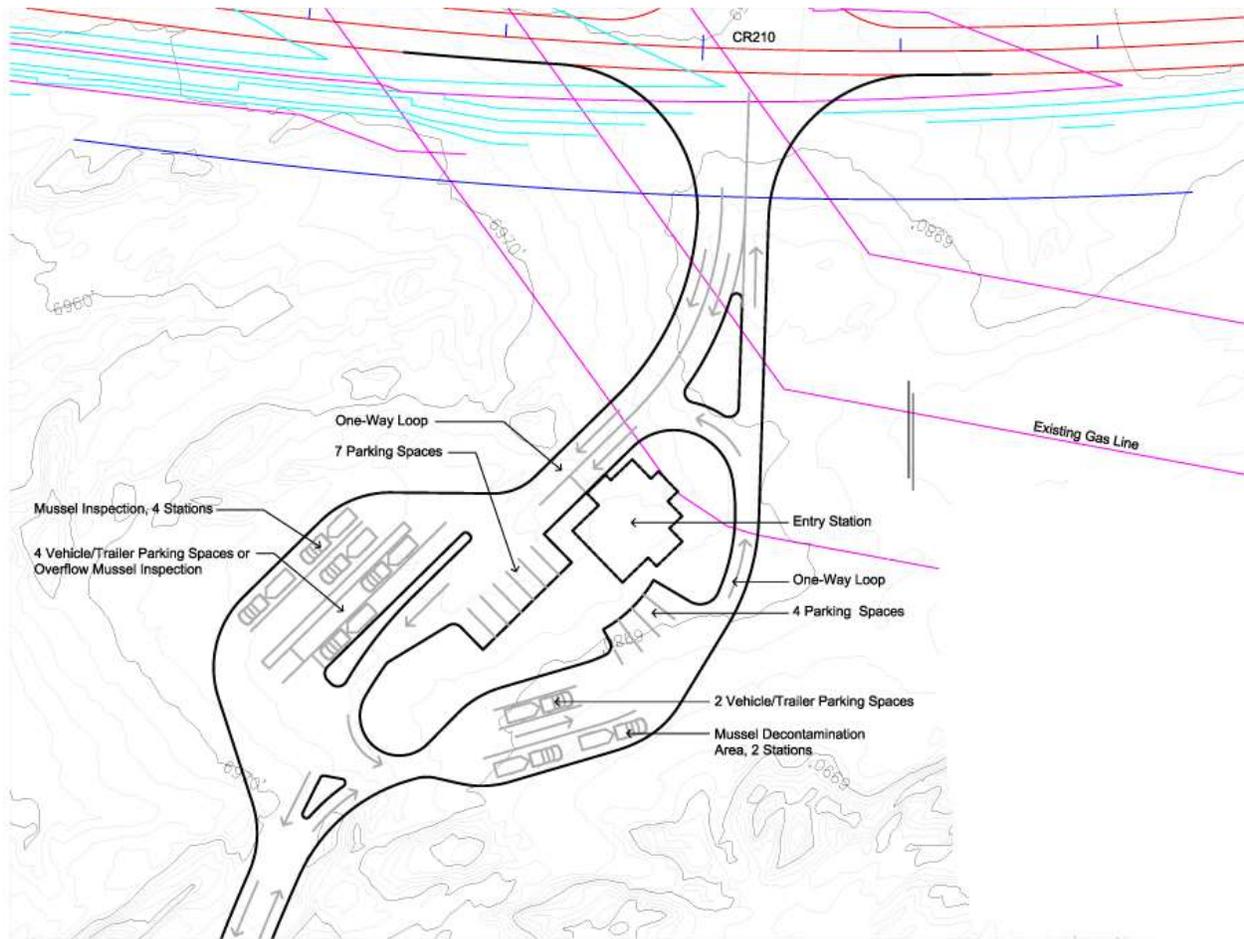


Figure 2: Cultural Resources Section 106 – National Historic Preservation Act

In general, the goal for future development of recreation amenities at Lake Nighthorse would be to avoid disturbance of existing cultural resources to the extent feasible.

Entrance Area

The City of Durango will coordinate with the Committee to plan and develop an entrance station to include a temporary building(s) for staff to greet visitors to Lake Nighthorse, collect fees, conduct ANS boat inspections, equipment storage, etc. The entrance area will also provide a designated space for fueling motorized boats by the public with their personal portable gas containers.



Lake Nighthorse - Entry Station

Figure 3: Entry Station

Overflow Parking

The City of Durango will coordinate with the Committee to plan and develop an overflow parking area to accommodate the parking demands for the site and eliminate the potential of parking congestion on the primary boat ramp access road. There will be a non-motorized trail adjacent to the road linking the overflow parking lot to the existing paved parking lot at the boat ramp.

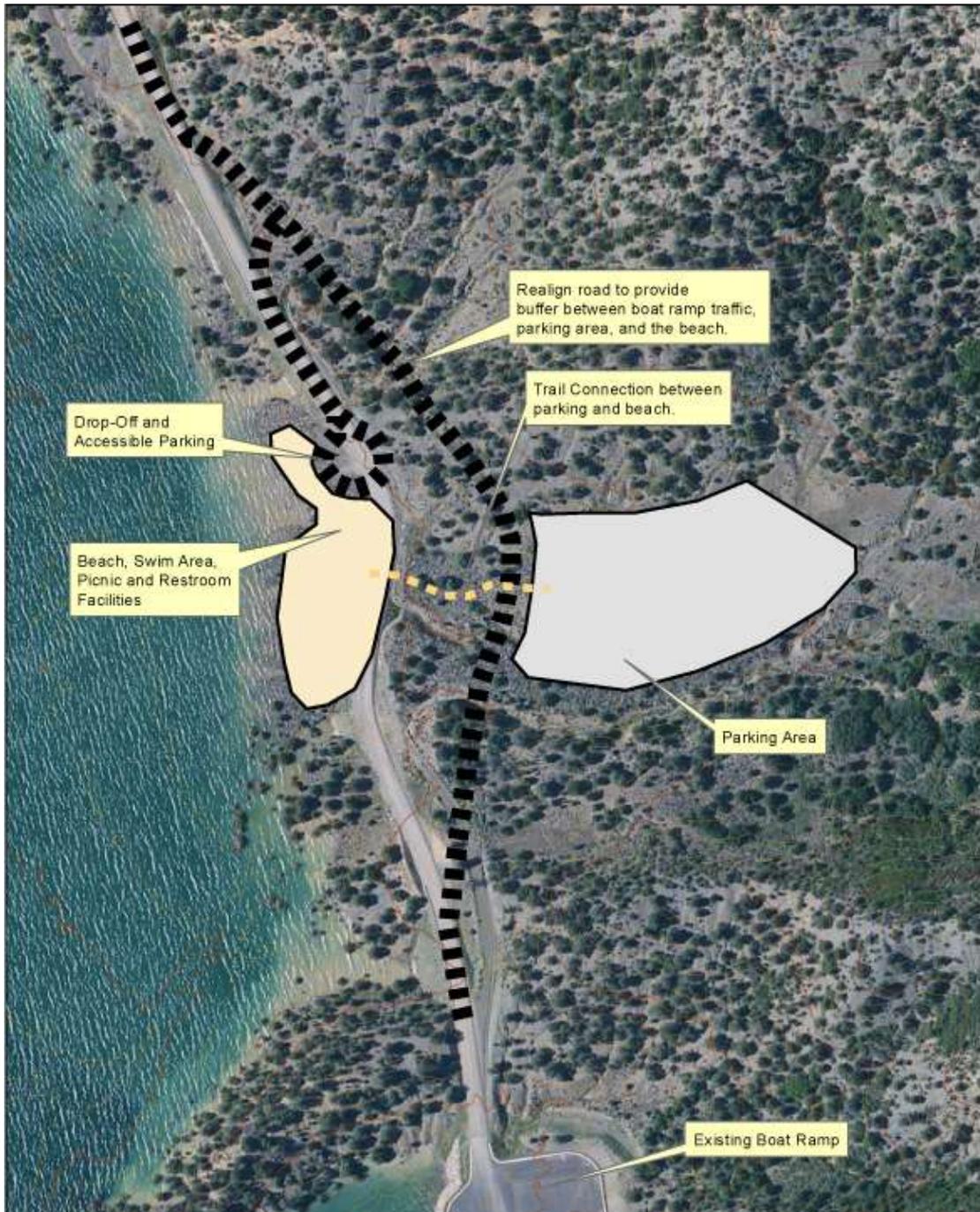


Figure 4: Overflow Parking Area

Road Improvements

The City of Durango will coordinate with the Committee to plan and improve the boat ramp access road from the entrance at CR 210 to the paved parking lot at the boat ramp. The road will be re-graded and finished with a chip seal surface to mitigate dust and alleviate the wash-board condition of the existing gravel road.

Boat Dock and Buoys

The City of Durango will coordinate with the Committee to plan and develop a courtesy dock system at the boat ramp to enable efficient, effective, and safe launching and removal of boats from the water. Safety buoys will be placed in the water to identify the slow wakeless zone near the boat ramp.



Figure 5: Boat Dock

Commitments

The following environmental commitments and recommendations were identified in the FSEIS or developed to address specific concerns expressed by ALP Project stakeholders and the public:

- The lake and recreation area would be initially designated as day use only. The lake would be closed to all boating recreation from mid-November to mid-May.
- The City would provide law enforcement within the annexed area, and all areas outside of the annexation footprint will remain closed to public access unless a land manager can be secured.

- An ANS monitoring, education, and inspection program would be implemented.
- All motor boats would be required to be equipped with mufflers that maintain sound levels below 86 decibels on the A-weighted scale (dBA) at 50 feet from the boat and below 55 dBA in neighboring residential areas.
- The lake would be zoned and marked with buoys to denote no boating near the swim beach, the inlet, and the dam; no wake zones at the west end of the lake and around the lake shoreline; and open use areas where motorized boat travel up to 40 miles per hour (mph) would be allowed. At minimum pool (750 acres), the entire lake would be zoned as a no wake zone.
- Breakwaters would be constructed at the swim beach and boat ramp areas.
- Swimming, wading, snorkeling, scuba diving, rafting, or tubing would be prohibited within 300 yards of the dam and inlet structure; within 100 yards of buoys or barriers marking public access limits; at the boat dock and boat launch site; and in designated mooring areas.
- Motorized personal watercraft (i.e. jet skis); houseboats that are used as a human dwelling; cabin cruisers with full living quarters on board, including plumbing; and open-air-exhaust boats would not be allowed on the lake.
- All boats would be required to operate at safe speeds, not exceeding 40 mph in open use zones and not exceeding 5 mph in no wake zones.
- No fueling would be allowed on the lake, and all fueling would be required to occur at the entrance station.
- Water quality was monitored for four years after construction (lake filling) was completed. This data will provide a baseline for future monitoring. Potential pollutants from combustible engines (benzene, toluene, ethyl benzene, and xylenes) would be monitored on a regular basis.
- Scuba diving would require the use of a diver's flag to warn other boaters.
- Water-skiing would be allowed only in areas of the lake zoned for open use.
- Flotation devices would be required for all persons being pulled or towed by a boat, and this activity would be prohibited within 500 feet of entrances, swim beach, and mooring areas, and within 100 feet of any person swimming, fishing, or diving; motorized boat travel would be required to proceed in a counterclockwise direction.
- Efforts would be made to avoid construction from May – July in the vicinity of elk calving areas.
- Snowmobiles, off-road vehicles, and aircraft would be prohibited. Facilities would be designed to prevent future erosion and sedimentation. All parking lots and roads would be set back a minimum of 150 feet from the full pool elevation and would provide treatment of runoff. A storm water management plan would be prepared and implemented, and best management practices would be installed prior to all construction activities in accordance with state and federal regulations.
- All lighting would be dark-sky compliant. Lighting would be solar-powered, to the extent feasible.
- All roadways open to public and other use would be graveled initially and paved as need arises and funding allows.
- All structures would complement the existing landscape with the use of natural materials; and utilities would be installed underground.
- All landscaping would consist of native and adapted vegetation.
- Structures would be constructed of fire-resistant materials, and locations of existing utilities would be verified prior to construction.

- Disturbance and removal of slow-growing trees, such as pinyon pine, juniper, and ponderosa pine, would be minimized to the extent possible.
- Dogs would be required to be kept on a 6-foot maximum leash.
- Reclamation would commit to providing trout to be stocked in Lake Nighthorse to provide a recreational fishery.
- Effects on cultural resources would be evaluated through the process outlined in the Ridges Basin Cultural Resource Management Plan in compliance with the National Historic Preservation Act Section 106. All areas to be disturbed would be field surveyed prior to construction disturbance, and construction monitoring would be conducted where deemed appropriate.
- Construction contractors would be required to implement measures to control fugitive dust and exhaust emissions during construction, such as water spraying of access roads and materials storage piles. Construction activities would be scheduled to avoid or minimize loud activities in the vicinity of golden eagle nesting areas during the nesting season.

Future Recreation Development

It is anticipated that future phases of recreation development will include the following improvements. Expansion of recreation beyond the initial development described previously (see Figure 1) will only occur with coordination of the Committee and approval by Reclamation.

Interpretive Displays/Education

In consultation with the Tribes, implement and support an education and outreach program to inform the public of the historical significance of Lake Nighthorse including the cultural resource stewardship responsibility, activities, and accomplishments.



Figure 6: Interpretive Signage

Natural Surface Trail

A natural surface trail may be constructed to connect Lake Nighthorse to the Animas River Trail, and a looped natural surface trail system would be constructed on the east side of the Lake linking recreational amenities and enhancing the user experience. Opportunities for linkage with other trail systems outside the project area would be considered.

Swim Beach

A public swim beach may be constructed on the eastern shoreline, including shade structures with picnic areas and a restroom. A trail would link the swim beach to the overflow parking area with an underpass to avoid an at-grade crossing of the main boat ramp access road. Breakwater would be installed to mitigate wave action.



Figure 7: Beach Area Concept

Breakwater

Two locations for breakwater may be installed. The initial installation would be located to alleviate wave action at the boat ramp for launching and the removal of boats from the water. The second location would be at the swim beach.

A public campground with access near the entrance station may be developed to accommodate multiple day visits to Lake Nighthorse. The campground would provide potable water, electricity and toilets and would accommodate both RV sites and tent camping. Campgrounds would have hosts and would be managed and patrolled 24 hours a day and seven days a week when open. Quiet hours would be designated from 10 p.m. to 6 a.m. Fire hazard mitigation plans would be developed and implemented and would specify, at a minimum, no fires outside grills or fire rings, no unattended fires, and no discharge or use of fireworks. The eventual possibility of campground development could be dependent on issues including but not limited to cultural resources, topography, and erosive soils.

Permanent Entrance Building

A permanent park building may be constructed at the entrance station to include administrative office space, public restrooms and an informational display about Lake Nighthorse.

Picnic Areas

Day use picnic areas with picnic shelters and a restroom may be located adjacent to the shoreline along the road to the dam. A gate would be installed on the road to the dam with signage to clarify no public access near the dam.

Conclusion

The development and management of recreation at Lake Nighthorse is within reach and requires the following steps:

- Concurrence among stakeholders on the Lake Nighthorse Conceptual Recreation Plan prepared by the City of Durango.
- Completion of the Environmental Assessment for the Lake Nighthorse Recreation Plan.
- Execution of the Lease Agreement between United States of America and City of Durango, Colorado, for Administration of Recreation at Lake Nighthorse.
- Execution of the Lake Nighthorse Annexation Agreement between the City of Durango and the United States of America.
- Execution of the Memorandum of Agreement Among Animas-La Plata Operation, Maintenance, and Replacement Association and City of Durango and Ute Mountain Ute Tribe and Southern Ute Indian Tribe and Bureau of Reclamation for Recreation Planning and Development at Lake Nighthorse (to create the Committee).
- Finalization of planning and design, including environmental and cultural clearances, of the initial phase of recreation development to enable Lake Nighthorse to open for public use.
- Construction of the initial phase of recreation development projects to open Lake Nighthorse to the public.