Hell Creek State Park Master Site & Management Plan

Prepared by: Peaks to Plains Design PC

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Executive Summary

Hell Creek State Park is a 337-acre intensive use recreation area located approximately 26 miles north of the City of Jordan in Garfield County, Montana. Within its boundaries are sagebrush grasslands with evergreen forests dominated by Ponderosa Pine and Rocky Mountain Juniper. Situated along the southern banks of Fort Peck Lake, Hell Creek State Park attracts over 30,000 annual visitors.

Recognizing the importance of Hell Creek State Park to the State of Montana and visitors, this *Hell Creek State Park Master Site and Management Plan* was initiated. The process used to develop this Plan included extensive public input, detailed inventory and assessment by Peaks to Plains Design (supplemented with a *Facility Conditions Inventory* report by Great West Engineering), and the development of recommendations for future expansion and campground management practices.

When planning for the future of Hell Creek State Park, it is important to develop an understanding of the region as a whole. Information on visitor demographics and park use was gathered through the Army Corps of Engineers (ACOE), Montana State Parks and from personal communications to provide a context which this Master Site and Management Plan was generated. A familiarity with this information ensures the development of a plan that is realistic, sensitive to current issues and tailored to this unique park site.

Input received through the public participation process was an important asset, as viable recommendations for the future of Hell Creek State Park were developed. The public process included personal interviews with State Park staff, ACOE staff, park concessionaire; two in-person public meetings; comment cards; and an email-based "suggestion box."

The recommendations are all connected. A change to one aspect within the park affects another, and a careful balance needs to be achieved. The top recommendations are listed in this summary and primarily address code compliance and public health issues. Once addressed, then Montana State Parks can address the desires of visitors in the terms of campground expansion or visitor services.

1.1 Priority Management Strategies

1. Determine the Status of Montana State Parks at Hell Creek Recreation Area

Expiring agreements within the next six years provides Montana State Parks an opportunity to assess their role and function at Hell Creek Recreation Area. Using this Master Site and Management Plan and the *State Parks' Strategic Plan* (December 2014) for guidance, careful consideration towards the purpose, services offered and available resources will provide insight into this valuable examination.

- Option #1: Address the existing site infrastructure needs, make priority improvements and *continue to manage the site and concession* beyond the current ACOE Agreement end date of April 2021 with a new contract or extension.
- Option #2: Address the existing site infrastructure needs and make priority improvements and continue to manage a *modified site boundary* beyond the current ACOE Agreement end date of April 2021. In this scenario, Montana State Parks relinquishes the management of the concession operations to the ACOE.
- Option #3: Montana State Parks would *return the site to the ACOE* in April 2021 or sooner, according to the terms of the ACOE-State of Montana Agreement. Montana State Parks would make only *minimal infrastructure improvements* until the end of the agreement period.

2. Outfitters and Guides

Outfitting is a recognized private commercial service that occurs at Hell Creek State Park. Some outfitters and guides are "basing" out of the campground at Hell Creek State Park which is against State and Federal regulations. To be in compliance with the ACOE regulations, outfitters and guides will no longer be allowed in the campground. Commercial clients, however, are allowed to stay at the campground.

- Determine the number of outfitter and guide "spaces" that are appropriate for a "based" service.
- Determine the location for those spaces within the State Park based upon available infrastructure.

3. Transition to a Campsite reservation-only campground

The stresses on the infrastructure are a result of age and overuse. The tradition of allowing everyone who travels to the Park a site to camp, whether or not a site exists, must end. Not only it a violation of State Department of Public Health and Human Services' (DPHHS) health codes, it taxes the infrastructure causing increased maintenance and reduced efficiencies.

- An effective marketing campaign will be needed to educate visitors on the rationale behind the change.
- Additional enforcement presence will be required to execute this goal.
- Place a digital sign at the start of Hell Creek Road in Jordan that displays the campground status, so visitors are informed prior to the start of their 26 mile trip into Hell Creek.
- Work with the campsite reservation system vendor to implement the changes.
- The transition may need to be phased over two seasons for visitor convenience and education.

1.2 Priority Infrastructure Strategies

1. Flow Monitoring of Water and Sewer Consumption

Install flow monitoring devices on the systems to gain an understanding of consumptive use for both water and sewer. This will provide for more accurate design calculations and properly sized infrastructure.

- Install flow monitoring devices on the existing lines and record data as recommended in the plan.

2. Fish Cleaning Station Waste Disposal

Much of the sanitary sewer break down is due to the fish cleaning station and the waste it generates. Removing the fish cleaning station from the sanitary sewer distribution system will not only reduce the amount of effluent traveling to the drain field, but it will also provide for a cleaner sanitary system.

- Implement a more regular pumping schedule of the existing tanks.
- Bio-augment with bacteria cultures.
- Increase the septic tank capacity.
- Implement a solids collection system.

3. Water System Improvements

Address the water quality and storage capacity. The primary reason for the premature replacement of plumbing fittings and fixtures is the chemical composition of the potable water source, the ACOE well. Once addressed, all potable water distributed within the State Park boundaries should be required utilize this one source.

- Install water treatment system.
- Replace and upsize water storage tank.
- Provide yard hydrants in the vicinity of all campsites.

4. Sanitary Sewer System Improvements

The existing sanitary sewer system was designed for the RV dump station, comfort station (showers and flush toilets) and fish cleaning station. Standard engineering practices design for an average gallons per day flow rate and does not take into account peak periods. Removing the fish cleaning station and transitioning to a reservation-only campground may render the existing system capacity sufficient. However, the overuse and lack of proper maintenance may require replacement sooner than usual.

- Conduct regular maintenance activities. Replace any worn or damaged parts.
- Conduct an engineering study of the actual use utilizing the flow monitoring and evaluating the design for peak periods of use, including day users.
- Consider combining all three sanitary systems present within the State Park boundary, into one sanitary sewer system, operated by one certified manager.

5. Campground Improvements

The existing comfort station (service building) consists of flush toilets and showers and was designed for 43 campsites. The campground currently has 71 formal campsites, with many more overflow occupants and unaccounted for day users. Demand for multiple types of campsites outweighs the supply.

- Transition to a reservation-only campground.
- Provide additional overflow parking areas for day use and multi-vehicle visitors.
- Increase the number of tent-only and group campsites.
- Remodel or provide an additional comfort station to accommodate the number of campsites and day users.

- ONLY expand the number of campsites if the electrical, water and sewer infrastructure can accommodate the additional activity.

6. Internal Access Roads and Boat Ramps

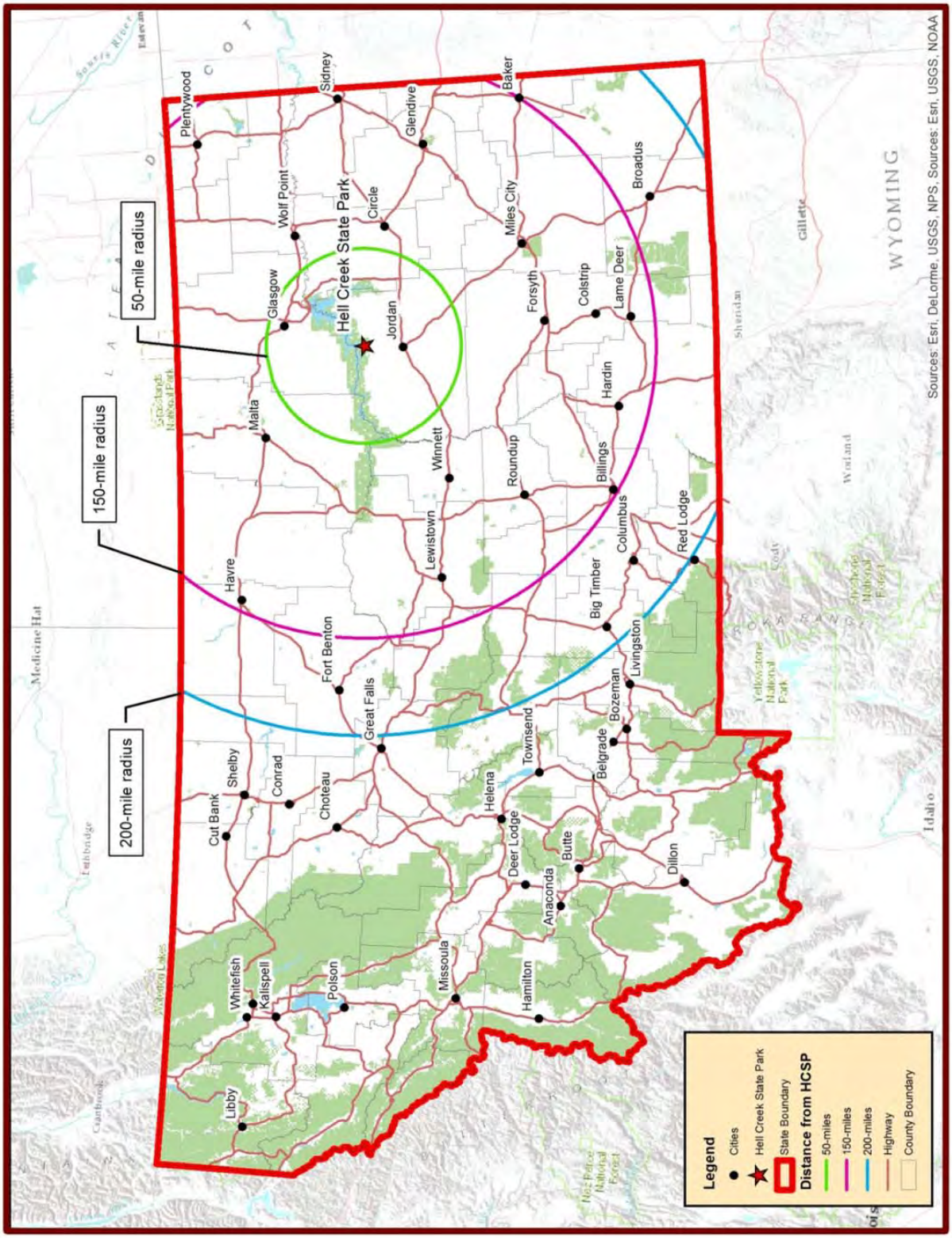
Hell Creek Road is not included in this category. Stabilization of soils is a critical component to the success of this item.

- Stabilize the boat ramp areas and parking lots with a geoweb fabric.
- Expand parking areas to accommodate day and overnight parking opportunities.

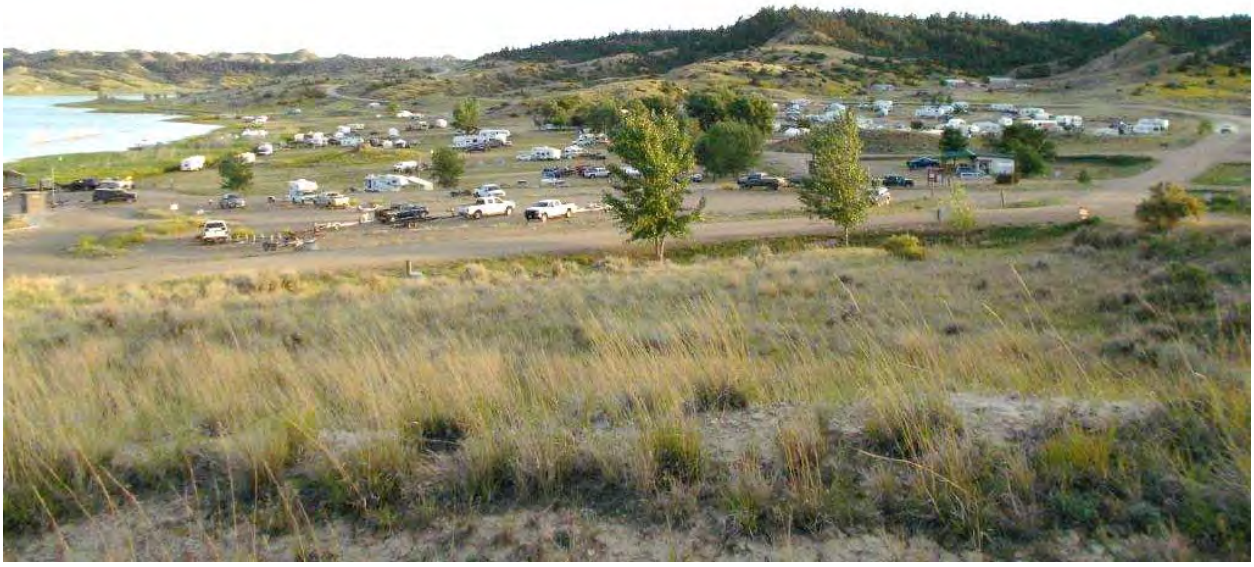
7. Electrical and Telecommunication Improvements

Electrified campsites are not required by any regulatory rule, it is provided as a visitor benefit. The existing electrical service line is at capacity. Adding capacity is a significant investment with little financial return to Montana State Parks. Therefore, focus on safety improvements first.

- Add an additional service line. *Without additional capacity, anyone's (including State Parks') desire to add additional electrified camp sites, additional concessions facilities or an additional comfort station would be difficult to achieve on the current service line.*
- Add a second low voltage regulator.
- Move the transformer out of the high flood pool.
- Investigate the feasibility of placing a cellular tower within Hell Creek State Park for public safety and visitor convenience.


50-mile radius
150-mile radius
200-mile radius
Hell Creek State Park
Plentywood
Sidney
Baker
Glendive
Wolf Point
Circle
Miles City
Broadus
Glasgow
Jordan
Forsyth
Colstrip
Lame Deer
Malta
Hardin
Winnett
Roundup
Billings
Lewistown
Columbus
Red Lodge
Havre
Big Timber
Fort Benton
Livingston
Great Falls
Bozeman
Townsend
Belgrade
Shelby
Conrad
Cut Bank
Choteau
Helena
Deer Lodge
Butte
Anaconda
Dillon
Whitefish
Kalispell
Polson
Missoula
Hamilton
Libby
Medicine Hat
Lethbridge
Cranbrook
Sheridan
Gillette
WYOMING
Cody
Wolland
Idaho
Legend
Cities
Hell Creek State Park
State Boundary
Distance from HCSP
50-miles
150-miles
200-miles
Highway
County Boundary
Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Hell Creek State Park Inventory Map
Legend
Hell Creek State Park Boundary*
Concessionaire Lease Area
1. Private cabins
2. Low-water boat ramp & parking
3. Concession store, motel & cabins
4. Water storage tank
5. Concession docks/boat slips
6. ACOE groundwater well
7. Concession dry dock storage
8. Concession residence area
9. Fish cleaning station & RV dump
10. Group use shelter & playground
11. Primary boat ramp
12. Main campground (44 electrified sites)
13. Lakeside camping (12 non-electrified sites)
14. Comfort station
15. Park office
16. Drainfield
17. Trailhead
18. Park maintenance shop
19. Park staff housing
20. Milroy's Cove (7 non-electrified sites)
21. Boy Scout Point (8 non-electrified sites)
22. Day-use beach
23. Boy Scout Point boat ramp
24. Informational kiosk
25. Cattle guard
26. Entrance kiosk
* The park boundary represents an "as is" boundary that is provided without warranty by Montana State Parks. Data was retrieved from the Montana Geographic Information Clearinghouse. However, it is generally understood that the State Park's use follows the fluctuating pool line of the Lake.
FORT PECK LAKE
MT 543
HELL CREEK ROAD
0 400 800 1,600 Feet
N



1 Statement of Purpose

Hell Creek State Park encompasses 337 acres of land that is under a U.S. Army Corp of Engineers (ACOE) no-cost lease arrangement with Montana State Parks. Located on the southeastern shore of the Fort Peck Reservoir in Garfield County, this area attracts heavy use during all seasons primarily for purposes of hunting, fishing and recreation on Fort Peck Reservoir. Montana State Parks administers a private concessionaire contract that provides lodging, fuel, repair services, durable goods and other services. The destination's popularity has grown significantly, placing strain on the natural resources, infrastructure and agency management.

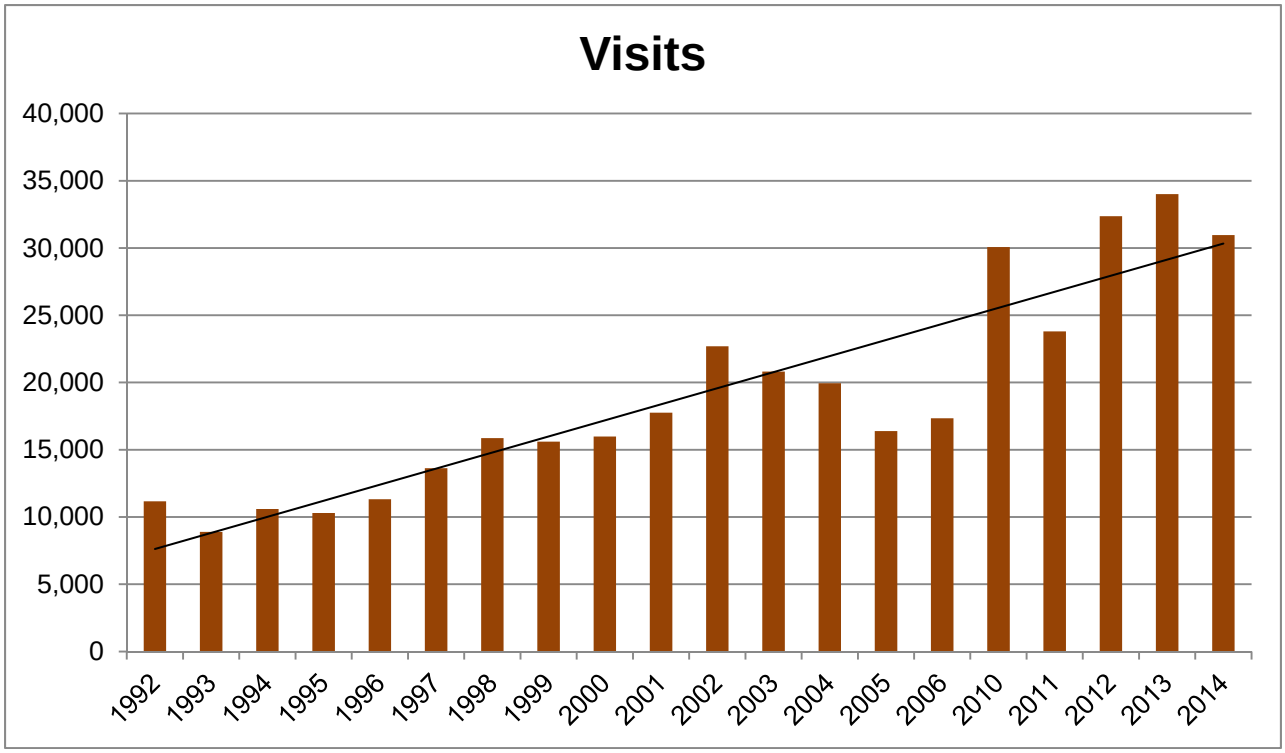
The purpose of the plan is to evaluate the carrying capacity of the land, provide an analysis of the existing infrastructure and the ability to expand such infrastructure and solicit ideas from the public as to their vision for future development. The results include recommendations relating to policy, management and infrastructure that supports the needs of visitors without compromising the natural resources and carries out the mission of Montana State Parks' Strategic Plan.

2 AREAS OF OPPORTUNITY

The Army Corps of Engineers (ACOE) operates under an August 2008 *Fort Peck Dam/Fort Peck Lake Master Plan with Integrated Programmic Environmental Assessment* that classifies this area as "Hell Creek Recreation Area" as designated for intensive recreational use. Management of Hell Creek State Park requires a complex structure of management of multiple resources. The recreational opportunities at Hell Creek State Park are significant.

2.1 VISITATION

The number of visitors to Hell Creek Recreation Area has increased significantly since the ACOE last completed its 2008 plan. Montana State Parks does not have an adopted plan for Hell Creek State Park. As a result, the current management directives are reactionary and outdated. The infrastructure is undersized for the visitor demand. While visitation numbers appear to fluctuate according to the Fort Peck Reservoir levels, in general, the visits are on a positive trend line. Participants in the planning process noted that with improvements to the facilities (most notably Hell Creek Road), visitation will continue to increase. It should be noted that there is a gap in the visitation data starting in 2007 when drought brought the Fort Peck Reservoir down to record levels and water access was not available. According to park staff, up to 800 people are at the park on busy weekend days, which includes marina guests and private cabin users.



Visitation Numbers
Hell Creek State Park
Source: ACOE 1992-2006
MT State Parks 2010-2014

2010: 30,068
2011: 23,796
2012: 32,370
2013: 34,009
2014: 30,962

Due to the remoteness of the park, park staff have adopted a "we will accommodate you if you come" approach that allows for camping in undesignated campsites. The overflow campsites typically occur seasonally as the water's shoreline fluctuates. The quantity of visitors, vehicles, boats and camping units overwhelms the ecology, infrastructure and law enforcement capabilities at the park. As a result, the Park is subject to health and safety violations and also results in higher maintenance costs that are not accounted for in the annual budgeting efforts. The infrastructure cannot keep up with peak demand as no limit is placed on the use for the park.

According to people who participated in the public engagement meetings, the typical visitor is not solitary, but accompanied by multiple people, groups and vehicle units. While day use occurs at the Park, many utilize overnight accommodations, some planning more than a year in advance. The nearby cabin owners utilize many of the facilities located within the park as well. This was not limited to the water access, but also included features such as the comfort station, group use building and fish cleaning station.

Respondents indicated mixed reviews with the campsite reservation system, initiated in 2011, from the difficulty of the user interface to frustration with no-shows or the ability to have first come, first serve campsites. While there was mixed interest in going to a reservation only system, we can only speculate that this is because the current online system only takes reservations up to two days in advance, thus eliminating the ability to go camping at Hell Creek State Park as a last minute decision.

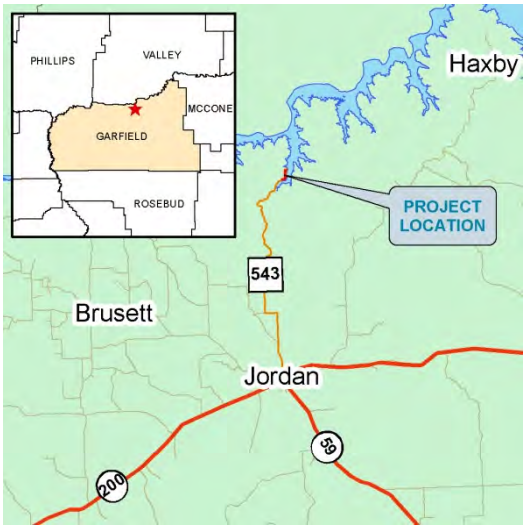
While fishing, hunting and boating are cited as primary reasons for visiting the State Park, visitor sentiment was strong regarding visiting Hell Creek State Park for group interaction and as a family destination.

3 DEMOGRAPHICS & NATURAL RESOURCES

3.1 GARFIELD COUNTY AND JORDAN, MONTANA

Garfield County is located in eastern Montana, and it is approximately 160 miles northeast of Billings, 120 miles east of Lewistown and 94 miles northwest of Miles City. The county covers a land mass of approximately 4,850 square miles, making it the seventh largest county in the State.

As of the last population census, Garfield County has a population of 1,206 and a population density of 0.3 people per square mile. The population has steadily declined since 1930 when the county had a population of 4,252; although, recent estimates suggest that the population has increased since the previous census. Approximately 47 percent of the population in Garfield County works in the industry classification of agriculture, forestry, fishing and hunting, and mining, which is the most dominant industry in the county, with the next closest industry being retail trade at 14 percent (Census, 2010). The county seat, the Town of Jordan, is also the most populous within the county.



The region is also known for its outdoor recreation opportunities. Both the Charles M. Russell Wildlife Refuge and Hell Creek Recreation Area provide access to Fort Peck Lake and excellent water-based recreational and sporting activities. These amenities draw over 30,000 annual visitors. The terrain within the region is also famous amongst paleontologists for its fossil beds. Dinosaurs and other prehistoric creatures once roamed in this region.

3.2 GENERAL DESCRIPTION OF LANDSCAPE/TOPOGRAPHY

Located in a region known as the "Missouri Breaks," Hell Creek State Park shares many of the landscape and topographical features as its surrounding area. The region is characterized by rolling uplands with many steeply eroded ravines, and ranges between 2,200 and 3,000 feet in elevation. Fort Peck Reservoir has fluctuated greatly due to drought and flood events; however, the surface elevation is relatively controlled by Fort Peck Dam, a US Army Corps of Engineers operated facilities (located downstream). While the Missouri River is the main source of water for Fort Peck Reservoir, smaller tributaries, such as Hell Creek and the Mussellshell River, feed the reservoir as well.

3.3 Soils

The NRCS Soil Survey indicates that the predominant soils are silty-clay (nearest to the reservoir) and sandy loams – all of which are relatively well draining soil classes. The topography typically consists of moderate to steep slopes which contributes to the soils being classified as having a "severe" erosion potential.

The erosion potential affects infrastructure including roads, water and sewer lines and building foundations. Improvements invested on or sub surface have a tendency to move with the soil, causing increased maintenance costs to keep the improvements in working condition.

3.4 Wildlife

Many species of animals and fish are found in Hell Creek State Park and the surrounding area. According to the wildlife distribution maps obtained from Montana Fish, Wildlife and Parks, the region serves as general habitat to mountain lions, mule deer, elk, Sharp-tail grouse, and Sage grouse (one-mile south). It also serves as wintering habitat for White-tailed deer (within park boundaries) and antelope (7-miles southeast). Other furbearers and small mammals include: muskrat, beavers, mink, fox, bobcat, coyote, weasels, skunk, and badger.

FWP also lists 48 species of fish found in Fort Peck Reservoir and Hell Creek, notably: northern pike, walleye, trout, bass, and Chinook salmon. The Charles M. Russell National Wildlife Refuge indicates that over 250 species of migratory, resident and breeding birds are located within this region.

3.5 Plant Cover

This particular region area is predominately covered by sagebrush grasslands/scrub-shrub, evergreen forests dominated by Ponderosa Pine and Rocky Mountain Juniper, emergent herbaceous wetlands, woody river-bottom riparian and wetland areas dominated by sandbar willow and cottonwood. The State Park is predominantly a Silver Sage and grasslands complex that transitions to a mixed-shrub riparian zone at the lake edge (east) and an evergreen forest in higher elevations (west).

3.6 Expansion Suitability Based on Slope

Expanding the campground area is one method to accommodate the large number of visitors to the park. Therefore, to assist in identifying future development sites, a suitability analysis based on slopes was conducted and included in the appendix. The slopes were categorized into four groups: "Suitable" (0-5% slopes), "Moderately Suitable" (5-12% slopes), "Less Suitable" (12-20% slopes) and "Least Suitable" (slopes greater than 20%). As

the slopes become steeper, site modifications (e.g. site grading) will become more significant.

The results of the analysis indicate that 15 percent of the park is "suitable" (0-5% slopes) for campground expansion while 31 percent is moderately suitable (requiring a little site preparation). The suitable sites are fairly well distributed throughout the park; however, the southern area of the park is likely the most suitable since the areas in the north have already been developed as campgrounds. The rest of the park ground is not considered to be suitable for campground expansion without significant site modification.

The results further reveal that while nearly half of the park is suitable for campground expansion, there is very little that has not already been utilized. For the areas that are suitable and not already utilized, proximity, access and infrastructure need to be considered prior to any additional development.

3.7 Cultural Resources

The Army Corps of Engineers has a Cultural Resource Management Plan that guides the multiple significant resources surrounding the Fort Peck Reservoir. A plaque stands at the State Park's entrance, designating Hell Creek Fossil Area, due to its paleontological resources, as a National Natural Landmark in 1966. According to the ACOE Fort Peck Lake Management Plan, the types of activities that are not likely to significantly affect cultural resources are:

- Mowing and Controlled Burning
- Pedestrian Trails
- Use of Existing Excavated Areas

Activities that may adversely affect cultural resources and would require cultural resource management procedures are:

- Facility Construction
- Right-of-Way Easements
- Reforestation
- Equestrian Trails
- Off-Road Vehicular Use
- Road and Parking Area Construction
- Shoreline Modification
- Other Earthmoving Activities

4 Management Considerations

4.1 Staffing

Hell Creek State Park is staffed with 3.4 full-time equivalent (FTE) State Park employees. The park manager (1.0 FTE), who resides on site, spends approximately one-third of his time on administration, one-third on maintenance and one-third of this time on visitor contact. The employee ranger position is allocated 0.75 FTE for visitor contact, and the employee lead maintenance position is allocated 0.75 FTE. There is an additional 0.9 FTE allocated to seasonal groundskeeper positions.

Employees are housed on site with two employee residences that were built five years ago. Some seasonal employees live off site and commute to the park. One full time employee and three seasonal employees can live in the on-site housing for a modest fee. If park operations require additional FTE's, there may not be space available to house those people on site.

4.2 Law Enforcement

Law enforcement is provided by a Montana Fish, Wildlife and Parks Game Warden stationed in Jordan. The Game Warden is allocated 60 hours per fiscal year for park-specific enforcement. There are also allocated hours for wildlife and hunting enforcement that can be used in conjunction with the park enforcement hours.

The Garfield County Sheriff's Department responds to emergency calls at the State Park. However, the Sherriff's Department has limited resources, so park regulation infractions are usually addressed by park staff.

With a limited enforcement presence during peak periods places, park staff utilize an education versus enforcement approach, hoping that open communication resolves most issues. While this does work, there are times when staff must decide where their roles end and a request for law enforcement action begins. When no formal enforcement authority exists, the lack of enforcement hurts customer service and the overall credibility of management.

4.3 Contractual Agreements

The State Park operates under a no-cost lease agreement from the U.S. Army Corps of Engineers. Montana State Parks and the ACOE conduct an annual coordination meeting. The lease agreement between the State of Montana and ACOE expires in 2021. The results from this planning process will likely support renewal discussions.

Concession Royalties
Hell Creek State Park

2013:	$6,837
2012:	$3,915
2011:	$4,553
2010:	$3,887

Montana State Parks has a contractual arrangement with a private concessionaire, dated 1988 and expires in 2018. The concessionaire must not only comply with the contract parameters, but is also subject to ACOE inspections, regulations and standards. According to the contract, the concessionaire pays a royalty to the State of Montana for the sales of gasoline (1 percent), merchandise (2 percent) and dry dock storage (5 percent).

4.4 Outfitters and Guides

Outfitting and guides are a recognized private service at Hell Creek State Park. ACOE allows Montana State Parks to issue a State Park's "Restricted Use Permit" to operate out of Hell Creek State Park. This license could be sole sourced to the concessionaire. Regardless, any commercial service needs a federal permit, in addition to other state or local permits, to provide the service. The annual fee permit can encompass all federal lands (land and water) and the fees and process for obtaining a federal permit is regulated through the ACOE. The State of Montana also requires a Board of Outfitters license.

Outfitter and guide infrastructure requirements if "based" out of Hell Creek State Park

- Housing (RV or built)
- Potable water
- Sanitary sewer
- Solid waste disposal
- Electricity
- Telecommunications
- Bait tank

Some outfitters are currently utilizing the Hell Creek State Park's campground as a "base" camp for guide services. The regulations state that an outfitter or guide cannot be "based" out of Hell Creek State Park or its campground. No paid services are to be provided in the campground including, but not limited to meals, making of reservations, paying of camping fees or solicitation. The outfitter or guide can "meet" the client at the park to begin the service, however. If Montana State Parks wants to allow "based" outfitting and guide services at the park, the agency must dedicate a location for seasonal "based" camping.

As a part of the covenants associated with the land sale of the private cabin sites located north of the State Park, a deed restriction was placed on the land that the cabins are not to be utilized for commercial operations. However, if an outfitter lived at a cabin and meets the client at the park, and utilized the cabin as their private single-family residence, this is allowed.

4.5 Private Cabin Owners North of State Park

Hell Creek State Park's staff strives to communicate regularly with the private cabin owners. The cabin sites to the north of the park (outside of the park boundary) were sold by the ACOE to the individual owners as part of congressional action, and the final sales were completed in 2014.

Covenants and restrictions were part of the process, including the removal of the private cabins from the potable water system that the State Park utilizes. Issues that remain include the cabin owner's use of the comfort station (for showers) due to lack of water and sewer infrastructure at the cabin sites.

While all Montana residents can utilize the State Parks without paying a day-use fee, it may be assumed the shower facilities were intended for paying campground customers only. However, during the public meetings, some cabin owners felt that their contribution to the State Park $6 opt out fee entitled them to the use the facilities. In addition, staff has observed that some of the private cabin owners utilizing the Park's solid waste containers instead of providing their own service, resulting in additional solid waste costs for Montana State Parks.

4.6 Management Considerations

- Phase out the "we will accommodate you if you come" approach to campground occupancy.
- Consider additional employee housing on-site for both the State Park and the concessionaire's seasonal employees and site-based outfitters and guides.
- During renegotiation of the State-ACOE lease, consider new boundaries that remove the concessionaire from under State Parks management.
- In recognition of the need for site-based outfitters and guides, designate a location within Hell Creek State Park.
- Continue attendance at the annual cabin owners' association meeting.
- Conduct an annual public outreach meeting to facilitate an exchange of ideas and feedback regarding Hell Creek State Park.
- Add a Credentialed Law Enforcement position (i.e. game warden) at the park to improve law enforcement presence.
- Increase the current Montana FWP's Game Wardens' allocation allocation of park hours for Park enforcement efforts at the site.
- Contract formally with Garfield County for additional law enforcement.

5 Visitor Services

5.1 Visitor Contact

During peak periods, the amount of human resources required to manage a park with up to 800 visitors per day is immense. The visitor contact services include education, fee collections, campsite check in/out, answering questions and maintenance. The park ranger position is the primary staff person providing visitor service interaction at the park. Additionally the park manager takes on visitor services as required. Typically the ranger conducts camper check-ins and outs, collects fees and answers questions.

The current ranger station consists of a small building that is located in an awkward location for incoming visitors. While its centrality is useful for the main campground, it lacks visibility from the entry road and other facilities. As a result, people who visit the park may not be aware that the facility exists. A small welcome sign at the top of the hill discusses the regulations. However, even this sign is located almost ¾ of a mile inside the park boundary.

5.2 Hiking

A trailhead is located near the employee housing and maintenance shop area. The trail is about 1.5 miles and extends outside the park boundary. Due to its awkward location, not many visitors realize that it exists. While it is assumed that most visitors are there for the primary purpose of fishing and boating, there is an interest for day hiking and other activities. The trailhead for the existing trail is not conducive to attracting use. Relocate the trailhead and add day-use parking for more visibility.

5.3 Playground

A playground is located near the main campground and provides opportunities for young children to play. Aside from the water activities, this limited experience for a visitor to the park may be an opportunity for expansion. The playground area appears to be in compliance with the latest safety and accessibility requirements. However, discussions have been initiated to resurface the playground with engineered wood fiber or ground rubber and a ramp and add equipment that is designed for older children.

5.4 Swimming Area

While visitors are aware that a swimming area exists, it is not formally dedicated and monitored. Several people cited that boats often enter the swimming area, causing conflicts and potential safety issues.

5.5 Educational Outreach and Evening Programs

There is a lack of interpretive programs due to the staffing it takes to manage and implement them. The addition of evening programs may provide entertainment for families and encourage more responsible behavior from others. Considering the wealth of cultural, ecological and wildlife bounty in the area, there is a limited interpretive experience currently at the park.

5.6 Private Concessionaire Services

The private concessionaire provides essential services on a year-round basis. Those services include sales of fuel, motel rooms, food and supplies. Additional services include engine and boat repair and search and rescue. The concessionaire's agreement allows for further development of revenue-generating sources. Refer to the concessionaire chapter in this document.

5.7 Visitor Service Opportunities

- Relocate the ranger station to the entry of the park.
- Relocate the trailhead to a more visible day-use area with parking.
- Provide more signage throughout the park area for wayfinding, regulatory and interpretative displays.
- Formalize a swimming area, complete with signage, accessible access and buoys.
- Work with regional partners to develop evening programs.
- Add an alternative activity such as Frisbee golf or a basketball court to diversify visitor's activities.
- Expand the playground or provide other opportunities for visitors under the age of twelve.

6 Campgrounds

6.1 Campground Development Considerations

The development of public and private campgrounds is regulated under the Administrative Rules of Montana (ARM), Title 37, Chapter 111, subchapter 2, (Trailer Courts and Tourist Campgrounds) which are administered by the Montana Department of Public Health and Human Services (DPHHS). Additionally, potable water supply is required under ARM 37.111.206, sanitary sewage disposal is regulated under ARM 37.111.207, and solid waste disposal is regulated under ARM 37.111.217. These three rules are under the jurisdiction of the Montana Department of Environmental Quality (DEQ).

Additionally, any campground with two or more campsites falls under the Montana (and Garfield County) subdivision regulations, with five or more campsites requiring a public water supply as defined in ARM 37.111.206.

ARM 37.111.2 outlines three different types of campgrounds:

- General Services Campground. A campground used for public camping that provides on-site water supply, sewage disposal, solid waste disposal and other services such as laundry or groceries.
- Limited Services Campground. A campground used for public camping that is accessible by a motorized vehicle and provides the following services only: potable water supply, sewage disposal and solid waste disposal.
- Primitive Campground. A campground that is used for backcountry camping and does not have any services.

The official designation is decided through a campground license. Montana State Parks is exempt from the license (50-52-103 MCA). If the concessionaire operated any campground (no matter if it was federal, state or privately constructed), the concessionaire would be required to have a campground license.

Currently State Parks is operating the campsites at Hell Creek State Park, which is considered as a general services campground with 71 dedicated campsites. Therefore, Montana State Parks must meet the requirements of ARM 37.111.2 because they are the designated operator of the campground.

The Boy Scout loop has 8 campsites available on a first come, first served basis. Milroy's Cove loop has 7 campsites available on a first come, first served basis. The Lakeside area has 12 campsites available on a first come, first served basis. The Lakeside area also has a large open space utilized for overflow camping. The upper and lower loops have 44 electrical campsites with 33 reservable and all other sites available on a first come, first served basis.

The designation status is important because it dictates the extent of additional infrastructure that is required as a part of the campground development. According to DPHHS, there is no set proximity principle for designating separate campgrounds. The current rules identify "separate" campgrounds by what the operator designates as separate. Since Milroy and Boy Scout camp sites were informally developed, they may be considered secondary sites, subject to formal review and related infrastructure development.

ARM 37.111.211.7(a) indicates that a manager of a campground may not accept camping units that would exceed the number and types of sites approved under a campground license. State Parks should establish the official number of campsites (44 to 71) and types. The importance of this is ARM 37.111.211.7(b) where a campground may accommodate an overflow of camping units for a period that may not exceed 14 days in a calendar year if the local health authority issues written approval for the overflow prior to the occurrence.

6.2 Campsite Industry Standards & Best Practices

As RVs continuously become larger and visitors often bring several recreation vehicles, campsites must also evolve. Below is a list of industry standards and best practices from Kampgrounds of America that should be considered when modernizing camping facilities.

RV Site Parking Pads Industry Best Practices

- Clearly number/identify each camp pad (night visibility should also be considered – e.g. glow-in-the-dark numbers)
- Name RV loops rather than calling them "A or B." (loops are currently not named)
- Locate sites within 400-feet of restrooms and 100-feet of drinking water
- Provide 50-amp electrical service and pedestals at least 25% of RV sites that are in a safe operating condition
- All RV site parking pads should be well defined and made of the following materials:
    - concrete, paved or chip-sealed
    - gravel base, free of weeds and grass
    - grass or dirt so long as they are clearly defined and maintained
- Provide RV site parking pads that are 30-feet wide and a minimum of 60-feet long
- Locate RV site parking pads so that they are no less than 30-feet apart
- Angle back-in RV sites at 60-degrees
- Level RV sites at 1-inch for every 6-feet
- Do not permit campers to have a cluttered campsite (e.g. appliances, inoperable vehicles, tarped vehicles, or broken equipment)

Tent Site Industry Best Practices

- Tent sites have a well-defined edge
- Sites are a minimum of 520-square feet (including the parking pad)
- All tent sites have a picnic table or commercial quality patio furniture.
- Tent sites should have a grill and/or fire-ring (unless restricted by law). All equipment must be cleaned after guest use and well maintained.
- All tent site areas should drain well and be level.

6.3 Known Campground Issues

Out of the total of seventy-one designated campsites that are available, thirty-three are reservable. Travel to the State Park is a difficult 26-mile drive, so once people start out on the road to the park, they are generally committed to staying. Low water on the reservoir exposes large areas of land that have been utilized for overflow camping. An approach of "we will accommodate you if you come," results in uncontrolled numbers of campers in areas not formalized for camping.

People who generally travel to the Park come with many components. It is not unusual to observe a pick-up truck, camper, boat and ATV all part of "one" unit. In addition, families may arrive in multiple vehicles throughout the duration of the stay. The result is a lack of parking for all components associated with the group.

Forty-four campsites have 50 amp electrical service. The electrical services are well-used not only for RV camper purposes, but it has been observed by park staff that people also use the sites to draw power for everything from charging boat batteries to chest freezers. There may be potential for overloading the power supply with unaccounted for demand.

Visitors utilizing tents often occupy formal pads and have indicated a desire for campsites with shelters and more solitude. Public correspondence indicated a desire for additional tent sites that are generator-free. However, many tent occupants still indicate a need for electricity to charge boat batteries.

The singular comfort station is often a place of respite for those seeking a shower after a hot day on the lake. It is common for a line for the showers to run late into the night hours. The ability to shower is often compromised with a lack of water capacity to serve the park. Montana State Parks collects shower fees through quarter machines that generate minimal revenues for the park. The number of lavatories and showers required per number of campsites is outlined in ARM (37.111.230). ARM also requires that a comfort station or service building should be within 300 feet of all campsites.

Dogs are common companions when visitors recreate. The Administrative Rules of Montana (37.111.226) specifically regulate animals running at large. Any pet animal must be limited to the area of the lot, unless the animal is leashed. The campground manager is responsible for the containment of any animal and any nuisance caused by an animal. Many people are not comfortable taking their dog on a boat and leave the dogs unattended throughout the day at a campsite. As a result, barking dogs affect the quality of experience for those who remain at the campground.

6.4 Potential Campground Mitigation Measures

- Increase the number of reservation-only sites.
- Place a Hell Creek State Park digital sign in Jordan at Hell Creek Road. The sign should have the ability to be updated via web-based technology. The sign should indicate "campground open or campground full" and "concession accommodations open or concession accommodations full."
- Increase the number of tent-only campsites as per visitor demand from public feedback through this process.
- Add an additional comfort building or service station.
- Renovate existing sites to proper depth and dimensions that accommodate modern-sized recreational vehicles.
- Add group use campsites as per visitor demand.
- Provide additional overflow parking areas for day use and multi-vehicle visitors.
- Provide freezer accommodations offered through the concession.
- Consider building a fenced dog park to encourage responsible pet activities or consider kennel facilities that could be offered through the concession.

Public feedback through this process indicated a need for dedicated tent sites. Kampgrounds of America has constructed several wheel-spoke tent sites that allow for one common shelter, but also provide privacy through the use of fencing. In the shelter, electrical services can be provided. This appears to be a viable option for Hell Creek State Park because it minimizes the footprint on the land, it consolidates infrastructure to a center core and the design can limit its incompatibility with RV campers. It should be noted that even tent users at Hell Creek may be towing a boat, so trailer parking would be required to accompany this detail.

7 Public Water Supply System

The source of the potable water supply at Hell Creek State Park is from an ACOE-funded ground water well, developed in 2004. The distribution system provides potable water to the fish cleaning station, RV dump station, comfort station, campground hydrants, and the park employee residences. The private, offsite cabins were once served by the primary well, but have since been removed in 2014 as a condition of their land purchase. The concessionaire has the ability to utilize the potable water system, but the concessionaire currently elects to utilize their own water source, treatment and distribution infrastructure.

Water pumped from the primary well is metered through the pump house and treated with sodium hypochlorite prior to distribution. During the peak summer months, treated water is pumped to an 8,000-gallon water storage tank located on the hillside west of the pump house. During the winter months, water is not available to the public, the storage tank is not utilized and potable water is pumped directly from the pump house to the park staff residences. The campground comfort station has flush toilets and showers. Hot water is supplied to the comfort station from an industrial grade propane hot water heater.

7.1 Known Water System Issues

The existing ACOE well produces highly corrosive water requiring replacement of standard plumbing fixtures every three to five years. The secondary water system servicing the concessionaire's area is non-potable.

Park staff reports the 8,000 gallon water storage tank is unable to keep up with the comfort station demand on peak weekends. The capacity of the existing comfort station (with showers and flush toilets) is inadequate to meet the current demand on peak days. The comfort station, designed for the original number of campsites (43), is showing signs of end of life due to increased use beyond its design parameters.

Evidence of settlement and ground movement surrounding the existing buried water supply tank is apparent. The expansive and movement-prone soil has shifted to the point that portions of the exiting water tank are now exposed. From the sanitary survey completed for the system in 2010 by Montana DEQ, several maintenance deficiencies were noted, and the report recommended that it was time to start considering replacing the water storage tank.

The existing soils located throughout the State Park are composed of highly expansive clays that frequently shift, potentially compromising the integrity of the PVC water mains.

7.2 Potential Water System Mitigation Measures

- Replace and increase the size of the summer water storage tank or add an additional tank to accommodate the maximum current daily usage and any future campground expansion.
- Provide low-flow shower fixtures and toilets in the comfort station to limit water usage.
- Utilize corrosion resistant fixtures and fittings.
- Utilize resilient flexible piping for new waterline improvements to minimize the effects from shifting soils.

- Provide pressure tanks and infrastructure capable of supporting a year around fish cleaning station.
- Provide potable water to Milroy and Boy Scout campground areas as per requirements.

7.3 Solutions Considered for Potable Water

Option 1: Flow monitoring

Reviews of the ACOE well water meter logs from 2009 to 2013 provide recorded flow rates that are both confusing and inconsistent. The well logs provide meter readings for the campground, marina and private cabins on a monthly basis between the months of May through October. Inconsistencies in the meter readings were noted, and at times monthly meter readings were not obtained.

In order to gain a firm understanding of the existing water usage, install in-line water meters to document water flow for the water storage tank, RV dump station, fish cleaning station, comfort station, employee residences and concessionaire. Record weekly meter readings throughout the busy season, and daily meter readings during peak weekend events. These important meter readings will be utilized to correctly size future water and sewer system improvements for the State Park.

Estimated material and labor costs: $10,200 annually

Option 2: Install a water treatment system

The water source from the ACOE well has chemical properties that make it very corrosive. While detailed well water chemistry was not available, it is understood that the corrosive components of the water include high concentrations of sulfate, chloride ions and saline compounds. A detailed analysis of the well water should be obtained to analyze the cation and anion levels as well chemical makeup of the water to select the best treatment device. Once the water chemistry is known, the appropriate water treatment system can be selected and appropriately sized.

Two such options to consider include an ion exchange system which passes the water over a proprietary resin that removes the undesirable salts from the water, or installation of a degasifier or air stripper to remove dissolved carbon dioxide, and change the pH of water to make it less corrosive. Removal of the corrosive elements of the well water would serve to benefit all aspects of the existing water system and reduce required maintenance and repairs associated with corrosion. It is anticipated that inclusion of a water treatment system and pressure tanks will necessitate construction of a larger water treatment building.

Estimated Cost to Implement: $269,000

Option 3: Replace and upsize existing water storage tank

The existing 8,000-gallon water storage tank was installed in 1993 to service the campground and concession area. Per the design report, the original system was designed to provide water to the concessionaire area, three campsites, comfort station, RV dump station, yard hydrants, rental cabins, and the water treatment facility with an average daily use of 1,400-gallons.

Maximum daily use was determined to be 4,200 gallons. The additional storage volume was to provide additional water storage in the event of a power outage. Since installation, water demand has increased, primarily as a result of the inclusion of an enhanced RV dump station, fish cleaning station and an increase in campground usage. In addition to the existing water tank being undersized to meet the current demand, the tank also suffers from lack of proper maintenance, deterioration due to corrosive water and movement from unstable soils as noted in Hell Creek State Park's "2010 Sanitary Survey", and a State Park infrastructure report completed in 2015 by Great West Engineering. Flow monitoring should be conducted on a daily or weekly basis and during peak periods to aid in adequately sizing the proposed water storage tank. It is recommended that the existing water storage tank be removed and replaced with a new 16,000-20,000 gallon water tank constructed on piers or piles to minimized effects from soil movement.

Estimated Cost to Implement: $271,000

Option 4: Provide yard hydrants in the vicinity of all campsites

Per Administrative Rules for Montana, Section 37.111.206(c), in general services and limited services campground spaces for tents or dependent trailers must either be directly served by a water supply or within 300 feet of a common water station. This option would extend water service lines and yard hydrants to the existing and proposed campground spaces in conformance with the Administrative Rule. It should be noted, that a provision exists in the Administrative Rules that a deviation to this rule may be obtainable upon consultation with the local health authority, and that the deviation does not have the potential to cause adverse public health effects. Installation of a booster pump station may be required to provide sufficient pressure and flow to remote campsite locations.

Estimated Cost to Implement: $492,000

8 Sanitary Sewer Systems

Hell Creek State Park's sanitary sewer system is composed of three existing systems. The primary public sewage system handles effluent generated from the comfort station, fish cleaning station and RV dump station. A second, small individual septic system services the State Parks employee residences. A third, privately-constructed, separate sanitary sewer system is utilized by the private concessionaire servicing the marina, marina cabins and concessionaire's residence. Three small drain fields are also located within the immediate vicinity of the campground but are believed to be currently abandoned or not in use.

8.1 Main Public Sanitary Sewer System

The primary sanitary sewer system for the State Park was constructed in 2001 to handle effluent generated by the comfort station, RV dump station and fish cleaning station. Collected effluent is primarily treated in septic tanks located adjacent to each facility before being transported through gravity sewer mains to a central lift station dosing vault. The dosing vault transfers the effluent through a 2-inch PVC force main to a recirculating dose tank. Effluent from the recirculating dose tank is pumped through a recirculating sand filter located west of the campground for additional treatment prior to being pumped to a drain field for final treatment and disposal.

In review of an engineering report prepared in 2000 by Stahly Engineering, the primary sanitary sewer system was designed to accommodate 43 campsites with an average daily flow rate of 4,500 gallons per day (gpd) based on expected use and an allowable 10-year increase. The original current sanitary sewer systems design basis of 43 campers per night was arrived at based on 2,459 camping visits recorded in 1999.

The engineering report arrived at the 4,500 gpd average daily flow rate based on the following facility design flow rates: staff housing at 414 gpd, fish cleaning station at 2,484 gpd, comfort station at 1,187 gpd, and the RV dump station at 428 gpd. Based upon a review of meter readings for the ACOE well water use, between 2009 and 2013, the main septic system average daily flows during the peak summer season is estimated to be between 2,100 and 2,600 gpd

8.2 Employee Housing Sanitary Sewer System

In 2008 a separate sanitary sewer system was constructed to service the two State Park's staff residences and seasonal work bunkhouse. Effluent is collected in a 1,000-gallon septic tank and transferred to a dosing tank, which distributed the effluent to a drain field located north of the main campground drain field.

8.3 RV Dump Station

The RV dump station has no known reported issues. Since the campground currently provides less than 100 trailer spaces, the RV dump station meets the requirements for Administrative Rules of Montana for Trailer Courts and Tourist Campgrounds. If additional RV campsites are completed in the future, and the expansion results in an excess of 100 total spaces, a second RV dump station will be required.

8.4 Fish Cleaning Station

Extensive research and discussions with agency officials, engineers and operators has confirmed that the operation and maintenance of fish cleaning stations are problematic on small sanitary sewer systems and in remote locations. The solids (primarily fish components) are considered by the Montana Department of Environmental Quality as "industrial waste" and therefore any disposal of such waste must be sent to a Class 2 landfill. The closest Class 2 landfills are at Miles City and Lewistown.

The fish cleaning station at Hell Creek State Park is especially problematic, given its extremely high rate of use, most evident given that the 4,000-gallons of existing septic tank storage required pumping after only approximately two weeks of service between the initial seasonal start up on May 15, 2015 and Memorial Day, 2015.

The existing septic tanks for the fish cleaning station are inadequate to handle the current use and loading, resulting in the need for frequent pumping during the busy season, as often as once per week. Design for the original system anticipated only one to two scheduled pumping's per year to remove the accumulated sludge and solids.

Based on discussions with industry professionals, the fish cleaning station is plagued with several problems. The first main problem is the amount of solids introduced to the septic tanks. As designed, the fish cleaning station utilizes industrial grinder pumps to grind the remnants of the fish waste, and discharges the effluent to the two parallel 1000-gallon single compartment septic tanks. The two single compartment tanks discharge to one 2,000 gallon tank. The sheer volume of solids generated from the fish waste currently overwhelms the capacity of all three septic tanks, resulting in plugging of the effluent filter and necessitating frequent pumping. If not frequently monitored, the overabundance of effluent has in the past lifted the lids off of the septic tanks, and overflowed onto the adjacent ground surface which poses considerable health concerns to the parks staff and public.

A second problem that exists for the fish cleaning stations septic tanks is the biological nature of the effluent. In general, septic tanks rely on the bacteria and enzymes developed in blackwater to aid in the digestion of solids and sludge that accumulate in the septic tanks. With no introduction of blackwater into the septic tank environment, the biological conditions do not allow for efficient breakdown of the solids and sludge in the effluent.

A third problem associated with the failing system is cleaning and maintaining the effluent filter and septic tanks. It was noted in the *Facility Conditions Inventory* by Great West Engineering (2015) that the effluent filter appeared to be plugged, and the septic tanks were coated with biofilm at the time of their inspection. The inspection occurred prior to the onset of the system activation for the summer season. Detailed seasonal shutdown and startup procedures are provided for in the systems operational and maintenance manual, and it appears that these procedures are not utilized.

8.5 Recirculating Sand filter and Drain field

The existing recirculating sand filter and drain field was designed to accept and treat effluent generated by an average of 43 campsites per day. The overuse of the existing fish cleaning station and unregulated amount of campground users per day is currently overwhelming the existing system. Multiple occurrences of clogged lateral orifices on the recirculation sand filter have been reported by park staff. The existing overused fish cleaning station is believed to be the primary source of particulates plugging the lateral orifices.

Often times, the first signs of drain field failure include the presence of standing water or puddles located overtop of the drain field, and the presence of odors associated with the effluent. From discussions with parks staff, they have observed both the presence of standing water or puddles overtop of the drain field, and septic odors emanating from the drain field.

The presence of the standing water and puddles can endanger public health and pollute nearby water resources. The highly expansive clays frequently shift, potentially compromising the integrity of the PVC sewer mains.

Given that the existing drain field is located upland from the existing campground and lake, a strong possibility exists for runoff to occur from the drain field resulting in potential contact contamination with the campground sites and reservoir. With the minimal regulation on overflow camping, high public accessibility around the state park, and presence of children, the health concerns associated with an overburdened septic system are of paramount concern.

Water well pumping records between 2009 and 2013 indicate an average monthly potable water usage for the campground facility at up to 3,700 gpd which is below the 4,500 gpd the system was designed to accommodate. This recorded flow rate is an average over a 30-day period, and peak weekend rates are anticipated to be significantly higher potentially resulting in the system's overburden. Park staff report that the 8,000 gallon water storage tank is unable to keep up with the comfort station demand on peak weekends, therefore drawing the conclusion that the effluent flows are much higher than the average rate.

8.6 Inclusion of Day Users and Nearby Residents

Located beyond the campground are 45 private cabins that were recently purchased from the ACOE by private individuals. As a condition of the sale, the private cabin owner's covenants require them to provide their own water and septic sewer systems. However, through the public engagement process, it was revealed that some private cabin owners previously serviced by the ACOE well have not developed their own water or sanitary sewer systems and rely on the facilities located at the campground.

Participants in the public engagement process also indicated that even if they are only visiting the site for the day, they often utilize the comfort station showers prior to the drive home. The inclusion of the private cabin owners, guests and day user's results in an unforeseen increased use of the campground's showers and toilet facilities not accounted for in the original design.

8.7 Certified Water and Sewer System Operator

In conformance with Chapter 38, Section 17.38.249, of the Department of Environmental Quality's Public Water and Sewer Systems Requirements, a certified operator is required to be in responsible charge of the public water supply and waste water treatment systems. A certified operator must be provided to perform monitoring and reporting for the public water supply or waste water treatment systems. Certified operator licensing is provided

by the Department of Environmental Quality and must be renewed on an annual basis per Montana Code Annotated 2014 (MCA) 37-42-301 through 37-42-322.

A public water system means a system for the provision to the public of water for human consumption, through pipes or other constructed conveyances, if that system has at least 15 service connections or regularly serves at least 25 individuals. The term includes any collection, treatment, storage, and distribution facilities under control of an operator of a system that are used primarily in connection with a system and any collection or pretreatment storage facilities not under control of an operator and that are used primarily in connection with a system, per MCA 75-6-202. A public sewage system means a system of collection, transportation, treatment, or disposal of sewage that serves 15 or more families or 25 or more persons daily for any 60 or more days in a calendar year per MCA 75-6-102.

The Park Manager is currently the Certified Water and Sewer System Operator for the two systems. The concessionaire should be certified for concessionaire's water and sewer systems based upon the requirements as per codes.

8.8 Sanitary Sewer Mitigation Measures

- Remove the fish cleaning station from existing septic system and construct a new septic disposal system to handle the effluent generated by the fish cleaning station.
- Increase the size of the existing septic tanks, sand filter and drain field on the primary sanitary sewer system to accommodate the peak daily use and any proposed campground expansion.
- Install a package treatment plant or alternative sewer treatment system to handle the known combined sewage flows from both the concessionaire's system and the campground system.
- Utilize resilient flexible piping for new sewer main improvements to minimize effects from shifting soils and make other improvements to the existing system.

8.9 Solutions Considered for the Sanitary Sewer System

Option 1: Develop a more regular pumping schedule for the fish cleaning station

The overuse of the fish cleaning station combined with extremely high levels of solids and minimal presence of good bacteria leads to frequent pumping requirements for the existing septic tanks. Often, the pumping of the existing system only occurs after failure of the system is observed, such as the tank

lids being lifted off the top of the septic tanks. In conformance with the Operations and Maintenance Manual developed for the sanitary sewer system, in no case should sludge be allowed to occupy more than 40 percent of the vertical dimensions of the septic tank.

Frequent inspections by parks staff, combined with scheduled pump truck visits should minimize the risks of system failure due to overfull septic tanks. It is recommended that daily or weekly inspections be conducted initially until a foreseeable pattern of use and sludge accumulation is observed. Inspections may decrease to weekly or bi-weekly thenceforth, once the operators become more comfortable with the system. In addition, pump the septic tank prior to known peak weekends to allow for maximum capacity.

Anticipated cost to implement: $3,200

Option 2: Bio augment the fish cleaning station with bacteria cultures

Since the only effluent present in the fish cleaning station is generated from the ground fish waste, the biological nature of the effluent is not sufficient to generate the necessary bacteria to aid in the digestion of the solids and sludge. Inclusion of bacteria cultures to the existing septic tanks should aid in the digestion capacity of the system. A bacteria culture treatment, such as RoeTech 106PS, be applied at the beginning of the season and after every pumping at a minimum. Additional treatments may be required based on observed system requirements and attained results.

Anticipated cost to implement: $450 per year

Option 3: Increase fish cleaning station septic tank capacity

Increase the size of the existing septic tanks from 1,000-gallon each, to 3,000-gallon each to allow for additional solids storage, and provide additional time for bacterial action. The additional septic tanks capacity would be 3,000 gallons each, and would be fitted with large access doors for maintenance access and cleaning, as well as efficient effluent filters for removal of solids. The additional capacity will require less frequent pumping of the system and aid in available sludge digestion time. To properly size the fish cleaning stations septic tanks, it is recommended that flow monitoring be conducted on a daily basis during the summer season until usage patterns are realized.

Anticipated Cost to Implement: $26,300

Option 4: Solids collection system for fish cleaning station

Utilize a mechanical screening and screw removal system to remove the solids from the fish cleaning station septic tanks. The system would operate in the existing septic tanks, and allow fine effluent particles to flow through the screening system, while capturing the larger particles. The larger particles would be removed from the septic tanks through a screw pump and discharged into a surface collection container, which would be collected and transferred to a Class II landfill. Inclusion of this system would minimize pumping frequency, but require disposal of the collected solid waste removed from the septic tanks. Given the climate of the area, and nature of the waste, this may pose a problem associated with odors and additional waste accumulation in the solid waste dumpsters.

Anticipated Cost to Implement: $36,000 plus $4,000 annual disposal fees.

Option 5: Construct all-weather fish cleaning station

Through public engagement process, it was found that the public desired having a year-around, all-weather fish cleaning station for the park, with additional capacity. Development of a year-around fish cleaning station, would include construction of a 20-foot by 40-foot enclosed building with concrete pad, insulation, propane heating, and an additional fish cleaning station. Modifications to the existing water distribution system such as additional pressure tanks may be required to meet necessary fish cleaning station pressure and flow requirements. Additionally, it is recommended that at the time of construction that the existing septic tanks be removed and replaced with large septic tanks to handle the increased effluent generated by the second fish cleaning station.

Estimated Cost to Implement: $329,000

Option 6: Connect campground, concessionaire and employee housing to a single septic system

Abandon the three existing sanitary sewer systems and combine them into one centrally located system. The combined system would be adequately sized and designed to accommodate the existing waste water loading and flow loading rates as well as any future campground, comfort station, fish cleaning station, restaurant or motel unit expansions. The system will be designed to operate year around and can be scaled back for usage during the winter months.

Existing system flow rates should be measured on a weekly basis over the course of the busy season to aid in correctly sizing a future system. Additionally, effluent samples should be obtained and analyzed for BOD and TSS content to ensure the proposed treatment system is able to meet the Montana DEQ water quality standards.

Estimated implementation cost's would require additional engineering studies to adequately size and design the system based on actual system flow and effluent BOD and TSS content.

Anticipated cost to implement: Determined from further engineering study

Option 7: Remove fish cleaning station from septic system and provide surface water discharge

Remove the fish cleaning station from the existing septic system and discharge the fish effluent back into Fort Peck Reservoir. This option may prove difficult as DEQ considers the effluent generated by a fish cleaning station to be industrial waste, and requires it to be treated to applicable state water quality standards prior to discharge. This option would require a Montana Pollutant Discharge Elimination Systems (MPDES) individual permit to discharge the effluent to surface water.

Through discussions with Montana DEQ, they are unaware of any fish cleaning stations that have been permitted as such to date. It is understood that Walleyes Unlimited sought to obtain a permit for a similar application of a fish cleaning station on Canyon Ferry last year, but has since withdrawn due to the difficulty in obtaining a permit and meeting the necessary water quality standards associated with the effluent discharge. Based upon discussions with DEQ this would be an arduous process.

Anticipated cost to implement: Unknown

9 ELECTRICAL AND TELECOMMUNICATIONS

Hell Creek State Park obtains its electrical power from McCone Electric through a combination of overhead and underground power cables. The State Park and private cabin owners are the end users on this stretch of electrical power lines, with the power line terminating at the private cabins north of the State Park. Since Hell Creek State Park and the cabin owners are the end users, the availability of power is relatively limited.

McCone Electric and their consultant's reported that the service line is currently at or very near its maximum electrical capacity. Any major expansions, such as added electrified campsites or new buildings, at Hell Creek State Park will more than likely require upgrading the existing power lines from a single phase to three-phase. The transition from single phase to three phase power requires the installation of new power poles and cabling from the nearest substation, which is located approximately 24-miles away.

Electrical providers will sometimes provide cost assistance for upgrades their system but in this case, McCone Electric has indicated that the costs associated with the electrical phase upgrade will be entirely the responsibility of Hell Creek State Park and the cabin owners. The reasoning for this comes back to the fact that both are end users on the line and there would be little to no financial benefit to McCone power to upgrade this stretch of their power grid.

9.1 Known Electrical and Telecommunications Service System Issues

The existing system is underground and is subject to repairs associated with expansive and shifting soils. The State Park, concession area and private cabins are located at the end of the service line lending to potential capacity issues. McCone Electric and their consultant have verified that the existing electrical system is at capacity, and any expanded loading would require significant electrical service upgrades in excess of $1 million. An existing transformer servicing the campground is next to the main boat ramp, and the transformer is located within the high water pool elevation. Portions of the existing electrical service are buried in excess of twelve feet deep making it difficult to access for service and repair.

Campground users frequently connect high power consumptive devices to the 50-amp services. Many visitors utilize the electrical service to recharge boat batteries. Visitors without electrical service often rely on generations, which often run past the park's quiet hours. Campground expansion or increased usage will require upgrades to the existing electrical service.

Wireless communications and cellular telephone reception is almost non-existent. Both the state parks staff and concessionaire have access to internet services as provided by Mid Rivers Communications. The concessionaire offers wireless internet in the cabins.

Landline telephone service for the State Park and concessionaire is provided by Mid Rivers Communications. The visitor services building, staff residences, marina and concessionaire's residence all have telephone service. Public pay telephones are located outside of the marina store and at the campground comfort station. Land-based telephone system upgrades are not deemed necessary at this time.

9.2 Solutions Considered for Electrical and Telecommunications

Option 1: Upgrade electrical service line with additional phase power

Upgrading the electrical service with an additional phase would entail new power lines and poles extending from the substation, located north of Jordan, to Hell Creek State Park, a distance of approximately 24 miles. The cost of the additional service will be entirely borne by the users (State Parks and cabin owners, concessionaire, etc.), with no financial assistance from McCone Electric.

The additional capacity benefits of adding a low voltage regulator are limited, it would be necessary to add an additional phase to the electrical service to gain capacity beyond 150 kva. *Without additional capacity, anyone's (including State Parks') desire to add additional electrified camp sites, additional concessions facilities or an additional comfort station would be difficult to achieve on the current service line.*

Estimated Cost to Implement: $1,200,000

Option 2: Add a second low voltage regulator

The addition of a second low voltage regulator to the single phase service would aid in increasing the overall capacity of the service. The additional regulator should provide an additional capacity of 150 kva (approximately enough capacity for twenty five, 50-amp, camp sites) to accommodate future service expansions.

Estimated Cost to Implement: $30,000-$40,000

Option 3: Relocate the existing transformer out of the high water pool

The existing transformer servicing the campground is currently located within the high pool elevation of Fort Peck Reservoir. The transformer should be removed and relocated to an area outside of the high pool elevation.

Estimated Cost to Implement: $6,500

Option 4: Enhance cellular telephone service

Cellular service is the primary method to contact help in the event of an emergency. It is recommended that the addition of a cellular telephone tower be pursued to not only improve the level of service at the state park but also as a measure of safety for park visitors. Through research with cellular telephone tower providers, it is understood that installation of a cellular tower within the park may not be feasible based on spectrum restrictions and resource limitations.

Estimated Cost to Implement: Unknown

Option 5: Add charging stations to the parking areas

With the minimal availability of electrified campsites, the opportunity for individuals to recharge their boat batteries is limited without running generators during designated quiet hours. This option would provide for ten, 20-amp electrical pedestals for charging station(s) located within the existing truck/boat parking area. The charging station would allow visitors, who are not staying at the electrified sites, an opportunity to charge up their boats batteries without a generator.

Estimated Cost to Implement: $17,500

Option 6: Provide wireless internet services in campgrounds

From information obtained from park visitor comment cards and through public facilitation meetings, several parks visitors have expressed a desire for access to wireless internet service. In addition, as cellular telephone service coverage for the park in almost non-existent, the inclusion of wireless internet would enhance the visitor experience by allowing them to connect the digital world. This may provide an additional source of revenue for the State Park though charging park users access to the wireless internet.

Estimated Cost to Implement: $3,950, plus an annual service contract of $516

10 SOLID WASTE

Hell Creek State Park utilizes a large dumpster for trash collection and is contracted with Miles City Sanitation for collection and disposal. The large dumpster is emptied on an as-needed basis, averaging 5-7 times per year. While the dumpster is signed for official State Park use only, unauthorized dumping has been occurring. It is debatable whether day users constitute authorized dumping; however, dumping of construction materials not related to park construction has been observed at the site. A locked gate or cover may mitigate unauthorized dumping.

The collected solid waste should be stored in flytight, watertight, rodent-proof containers or in other suitable containers with secured lids with minimal weekly collection, in conformance with Administrative Rules for Montana for Trailer Courts and Tourist Campgrounds, section 37.111.217.

11 Boat Ramps and Internal Access Roads

Three boat ramps are located within the State Park. According to the Army Corps of Engineers document, *Fort Peck Dam/Fort Peck Lake Master Plan with Integrated Programmic Environmental Assessment*, boat ramps are categorized by the original funding source for construction and current management. The categories are:

- Category I – ACOE built ramps, managed and maintained by the ACOE.
- Category II – ACOE built ramps, managed and maintained by another agency.
- Category III – ACOE cost shared expenses with another agency, managed and maintained by another agency.
- Category C – Other agency built ramp, managed and maintained by other agency.

Category I and II boat ramps are the only boat ramps that cannot be cost shared because these facilities are constructed at full Federal expense.

Low Water Boat Ramp

East of the concessionaire area, a low-water boat ramp was constructed by the ACOE. According to the ACOE, this ramp is listed as a "Category I" ramp; however, State Parks has provided assistance for dock maintenance and gravel in the past.

Primary Boat Ramp and Boy Scout Point Boat Ramp

The primary boat ramp and the Boy Scout Point ramps are considered "Category C" ramps. Both of these ramps are the responsibility of Montana State Parks.

11.1 Known Internal Access Road and Boat Ramp Issues

Expansive clay soils are present beneath the roads, boat ramps and parking areas, resulting in moderate to severe rutting during periods of high moisture. Frequent loads of gravel are purchased and utilized to shore up the soft soils and fix roadway rutting, however; the gravel continues to migrate into the soft subgrade.

Due to highly variable water levels, portions of the access road, boat ramp and parking area are susceptible to submersion further exacerbating the rutting conditions and leading to siltation of once stabilized areas. During periods of low water levels, the Primary and Boy Scout Point boat ramps are unusable requiring all boat traffic to utilize the low-water boat ramp, located east of the concessionaire's operations. Similarly, during high water levels, the low-water boat ramp is completely submerged and unusable. The Boy Scout and low-water ramps can only accommodate one boat launch or removal at a time leading to excessive traffic congestion when the primary boat ramp is unusable. The *Facility Conditions Inventory Report* (2015) documented extensive cracking at the primary boat ramp and recommends removal and reconstruction.

The increased visitation requires the addition of parking facilities. Even boaters, who are in a designated campsite, often park their vehicle and boat trailer in the boat ramp parking lot during the day versus parking back at their campsite. Additional parking is needed for the Boy Scout Point and low water boat ramp areas.

Campers in the main campground often complain about dust from Hell Creek Road. An informal access road connecting the main campground to Milroy and Boy Scout camping areas is located very near the high water pool elevation of 2250. When lake levels are high, this road is inundated and unusable. The ACOE has indicated that any new improvements should not be located within the full pool elevation of 2250 in elevation.

Because campground traffic often contributes to the congestion on Hell Creek Road, staff has indicated a desire to have a separate, internal campground road system from Hell Creek Road to alleviate that congestion and to control access. After investigating the possible road alignment scenarios, it has been determined that it would be difficult and cost prohibitive to construct an internal access road connecting the campsites currently in-place.

11.2 Potential Internal Access Road and Boat Ramp Mitigation Measures

- Widen internal roads within the State Park to better accommodate large recreation vehicle towing configurations.
- Stabilize internal roads, parking and boat ramp access areas with a geoweb or geotextile combination.
- Pave with asphalt all park roads to reduce dust and mud conditions.
- Consider valet parking as a concessionaire provided service.
- Expand Boy Scout boat ramp parking area.
- Expand, armor and pave the low water boat ramp and parking area.

- Construct a breakwater and raise the ground level at the low water boat ramp, parking and shoreline.
- Add additional dry dock storage facilities as a concessionaire provided service.

11.3 Solutions Considered for Internal Access Roads, Parking Lots and Boat Ramps

Option 1: Stabilize the Primary Boat Ramp and Parking Area

Stabilizing the existing primary boat ramp and truck/boat parking areas with a geoweb stabilized gravel surface. Geoweb is a 3D cellular geogrid, developed for soil stabilization in part by the ACOE. The cellular grid serves to confine the applied gravel surface within the individual but interconnected geogrid cells, and increase available soil loading capacity. Utilization of the geoweb should provide for an all-weather surface that will resist erosion and prevent the applied gravel from migrating down into the soft subgrade. It is recommended that a small test location be completed for this product to monitor its effectiveness over the course of a typical operational season.

Anticipated Cost to Implement - $328,000

Option 2: Stabilize the Internal State Park Access Roads

A chief complaint among all visitors is the stability and condition of Hell Creek Road and the internal access roads. The soils prove problematic when the subsoils become saturated; leading to instability of the roadway resulting in mild to severe rutting, and at times inaccessibility. The internal access roads should be expanded to 24-foot width and stabilized through the application of a geotextile or geogrid and new gravel road surface. The use of the geotextile will serve to provide additional bridging support for the roadway surface, and prevent the migration of the roadway gravel into the soft saturated subsurface. It is recommended that a small test section be constructed to evaluate the effectiveness of the proposed stabilization method.

Estimated Cost to Implement: $470,850

Option 3: Remove and Replace the Primary Boat Ramp

The Facilities Condition Inventory (2015) noted signs of significant cracking and failure in the primary boat ramp. It was recommended that the existing boat ramp be removed and reconstructed with a combination of poured in place concrete and precast concrete panels.

Estimated Cost to Implement: $370,000

Option 4: Stabilize the Low-Water Boat Ramp and Parking Area

Stabilize the low-water boat access and truck/boat parking areas with a geoweb stabilized gravel surface in a similar method applied to the main boat ramp and truck/boat parking area. Management and maintenance to the low-water boat ramp, with its Category I designation falls to the responsibility of the ACOE.

Anticipated Cost to Implement: $240,500

Option 5: Expand the Low-Water Boat Ramp for Additional Capacity

During periods of low water, the main boat ramp adjacent to the campground is unusable requiring all boat access to occur at the low-water boat ramp, which is a single ramp. Removing/replacing or adding onto the existing boat ramp would allow for double boat launching capacity. This increase will help alleviate congestion currently associated with the single boat ramp. It should be noted that this ramp is classified as a Category I boat ramp, and as such management and maintenance of the ramp is the responsibility of the ACOE.

Estimated Cost to Implement: $150,000

12 HELL CREEK ROAD (MT SECONDARY HIGHWAY 543)

Access to Hell Creek State Park is provided via Montana Secondary Highway 543 also known as Hell Creek Road. The roadway is approximately 26-miles in length between Jordan and Hell Creek State Park. The gravel access road is approximately 20-25 feet wide and was observed to be in fair condition with soft shoulders at the time of a site visit conducted in February 2015.

Hell Creek Road is maintained in its entirety by Garfield County, even though it is a Montana Secondary Highway. According to the Montana Department of Transportation (MDT), if the roadway were paved, then the maintenance responsibilities would fall to the MDT. Maintenance efforts for the 26-mile access road encompasses more time that the rest of the roads in the County combined, as reported by the County Road Supervisor.

Since Hell Creek Road is classified as a Montana Secondary Highway, it is eligible for federal funding, such as Federal Land Access Program (FLAP) grants, to aid maintenance and improvements. Garfield County was recently awarded a FLAP grant for Hell Creek Road which they are planning to utilize for drainage improvements and reconstruction of the last 4-miles of the road before the State Park's boundary.

Based on a discussion with MDT, counties are eligible to designate a priority roadway for inclusion in the State's Capital Improvement Plan (CIP); however, Hell Creek Road was not listed as the County's one designated priority road.

The expansive clay soils are present beneath the roadway resulting in rutting during periods of high moisture. The narrow width of Hell Creek Road is of concern with observed traffic patterns. Park staff report their observations that approximately 75 percent of visitors access the park with a truck, camper and boat configuration. Public engagement and feedback indicate that visitors time their arrivals and departures based upon weather conditions. One visitor cited that as improvements are completed to Hell Creek Road, instead of 2,500 visitors, you may see 5,000 visitors in a weekend, as the road is really the biggest detriment to visiting the State Park.

12.1 Potential Hell Creek Road Mitigation Measures

- Collaborate with the FHWA engineers to consider turnout access at various locations along Hell Creek Road to provide passing areas for large recreation vehicle towing configurations.
- Collaborate with MDT and Garfield County to ensure that Hell Creek Road maintenance and reconstruction needs are prioritized to meet demand.

12.2 Solutions Considered for Hell Creek Road

Option 1: Stabilize Hell Creek Road within State Park Boundaries

Similarly to the internal access roads, chief complaint among park users, the concessionaire, and park staff is the stability and condition of Hell Creek Road within the park. Hell Creek Road within the State Park boundaries should be expanded to 24-width and stabilized through the application of a geotextile or geogrid and new gravel road surface. It is recommended that a small test section be constructed to evaluate the effectiveness of the proposed stabilization method.

Estimated Cost to Implement: $660,000

Option 2: Magnesium chloride application

The application of magnesium chloride from outside of the park boundaries on Hell Creek Road extending from Jordan to Hell Creek State Park. The application of the magnesium chloride would not only provide dust suppression for the roadway, but also serve to enhance the stability of the roadway surface by maintaining the fines within the road surface, which help keep the gravels embedded in the roadway. It is recommended that

magnesium chloride be applied annually in the spring, after grading prior to the busy season. A small test section should be completed initially to evaluate the effectiveness of the magnesium chloride application. The estimated cost to implement is based on applying magnesium chloride to the full length of the 26-mile road, however smaller, more problematic locations of the roadway, such as intersections and hill sections could be isolated for application as a cost savings measure.

Estimated Cost to Implement: $ 169,000 (annually)

13 Public Engagement and Feedback

Several opportunities were made available to the public to provide opinions regarding the needs at Hell Creek State Park. Two public meetings were held in Billings and Jordan in April 2015. Over 100 people attended those meetings. In addition, the public could provide written and oral comments to Park staff and provide comments through the Montana State Parks website. The consultant also received written comments directly via email and through phone conversations. The meeting notes are included in the appendix; however, the following paragraphs outline the key themes that emerged from the meetings.

13.1 Existing Park Amenities Desired to Remain

Participants indicated their appreciation for the comfort station. This facility is important for both campers and day users. One participant indicated his desire to shower after spending all day on the lake, prior to driving back home.

The availability of electricity is important to visitors. The electrified campsites create an enhanced camping experience; many indicated their use of electricity to charge boat trolling motors. Those who primitive camp (tent) like to reserve the electrified campsites for the same reason. Those without electricity access rely on generators to charge motors, which usually takes several hours and conflicts with quiet hours in the campgrounds.

The services that the concessionaire provides are desirable as well. Visitors rely on the ability to get bait, gas, food and services, search and rescue, dry dock storage and repair at the State Park. Many indicated that they would not feel comfortable visiting the park if those services did not exist. The reassurance of having someone "save your vacation," at the State Park was highly important to the respondents.

For fishing enthusiasts, the fish cleaning station is appreciated and used. Many people also commented that the availability of water is something they rely upon. Shelters were highly desirable as they provide wind, shade and hail protection to campers. The playground is utilized and desired as well.

13.2 Additional Amenities or Services Desired

Participants recognized that the comfort station is in high demand, and asked for expanded facilities and for year-round use. Similarly the fish cleaning station was requested for expansion and year-round use.

A restaurant is desired, noting that a rebuild of the grocery and marina store is needed. Expanded campsites were desired, but indicated a desire to have them in the concessionaire, not State Park's control. Several present indicated a desire for a longer concessionaire lease in order to make this happen. Note that private campground development with more than five sites (including tent sites) would require public water and sewer development if a part of the concessionaire's services.

At the boat ramps, many asked for increased parking and expanded ramp capacity. There was also a desire for more ADA accessible access to the water. Participants also asked for a designated swimming area, protected from water traffic.

Alternative activities besides hunting, fishing and boating include dances or entertainment, a basketball court, Frisbee golf, dog care and a golf course. Shelters and shade were desired, citing both built and landscape opportunities.

Auxiliary services are those that people use, but do not readily seek: services such as water, sewer, garbage or telecommunications. A few participants recognized the pressure on those systems and indicated their support to plan for peak demand versus average demand.

13.3 Priorities

The public meetings generated a significant list of improvements or new amenities. When asked to categorize the improvements into four quadrants of important of urgent categories, most placed them all in important and urgent. The key themes for important and urgent ranged from additional campsites, year-round facilities and fixing the access road. Those in attendance cited support for the concessionaire and their services.

13.4 Additional Suggestions

People indicated their appreciation for the cleanliness with the facilities. The visitor interaction with the Park's staff and concessionaire adds value to the visitor's experience. Participants expressed a desire to have full transparency when making decisions about the aspects of the park. Many offered words of support and an indication to "be creative" in the solutions for the Park.

Any changes that can be made with Hell Creek Road would only enhance the visitor experience to get to the park, and expanding the boat ramp(s) would be helpful. They also encouraged officials to consider adding another recreation area on Fort Peck Reservoir to relieve some of the pressure from Hell Creek.

14 Concessionaire Considerations

There are currently three State Parks which provide for visitor services through concession contracts: Tongue River Reservoir State Park, Lewis and Clark Caverns State Park and Hell Creek State Park. In December 2012, Bud Surles Consulting Group prepared the *Montana State Parks Concessions Opportunity Review* that discusses system-wide recommendations to concessionaire operations.

14.1 Current Contract

Commercial services at Hell Creek State Park are provided through a third-party concessionaire. The contractual agreement is for a twenty year term commencing on January 1, 1999 and ending December 31, 2018. The original agreement is between the State of Montana and Hell Creek Recreation Incorporated, based out of Jordan, Montana. On March 6, 2003, the Agreement was transferred from the original contract holder (John FitzGerald, then James and Marilyn Pankey) to Clint and Deb Thomas, who are the current concessioners at the park.

Montana State law (Section 18-4-313, MCA) allows the State to enter into contracts for concession or visitor services for a period of not more than 20 years. According to the law, amended by the legislature in 2015 (SB 191), the contract must require the perspective concessionaire to provide a business plan offering a reasonable estimation that the cost of any capital improvements by the concessionaire will be repaid within the life of the contract, or that where a proprietary interest is held, the concessionaire's interest in any capital improvement may be sold at appraised value to a subsequent concessionaire when the contract concludes.

As a part of the agreement, the State grants the concessionaire permission to use and occupy approximately 55 acres of land. The State of Montana receives a concession fee equal to one percent of gross receipts of all gasoline sales, two percent of gross receipts from the sale of merchandise and services and five percent of gross receipts from dry dock storage.

Allowable activities include the sale of ice, rental of rooms and recreational vehicle parking/campsites, rental of docks, sale of fishing and sporting equipment and supplies, sale of clothing, souvenirs and gifts, rental of boats, excluding personal water craft, rental of sporting equipment or any other paraphernalia, provide outfitting/guide services for hunting and fishing and the sale of supplies, including the right to sell beverages, including beer, wine and liquor as prescribed by law.

Required activities must be provided as a minimum service:

- Operate and maintain a concession store on site providing:
    - Sale of gasoline, oil and boating supplies;
    - Food and beverage sales;
    - Grocery sales;
    - Fishing supplies and equipment sales; and
    - Firewood sales.

14.2 Infrastructure Investments

The current concessionaire has invested personal finances into the facilities placed within the lease area. Unlike other concessionaire arrangements in the State Parks system, the facilities utilized in the operations of the Hell Creek concessionaire's operations were financed and built without public funds. The lease agreement allows for this activity to occur and outlines the procedures in the event that the concessionaire no longer occupies the site.

If State Parks continues to allow a concessionaire to build infrastructure with private funds, commercial lending practices may prove difficult to achieve financing. While building non-public facilities on public lease land is not unusual, additional equity is required. The concessionaire's credit rating and financial position is an important loan aspect. According to a local lender, in general:

- Any loans for construction are tied to the lease maturity. A 20-year loan is typical.
- Loan opportunity is based on risk: equity in other buildings, equipment or cash-in hand.
- Owner-occupied loans typically require a 20 percent minimum down payment, while a 25 percent down payment is standard policy and usually 30 percent is a maximum required down payment.

- The down payment does not necessarily need to be cash. It can be in the form of a lien on equipment or buildings.
- A high risk situation can be mitigated by Government-backed loans (USDA rural development, for example).

14.3 Concessionaire Desired Investments

The current concessionaire provided to the consultant a list of desired services or infrastructure needs.

- New marina (including a restaurant)
- Parking lot expansion and associated earth work
- Boat repair shop
- Additional housing for staff or additional owners
- Dry dock expansion
- Cabins
- Additional motel units
- RV hook-ups (long and short term, possibly house outfitters/guides)
- Cost sharing on road maintenance
- Twenty-year contract term

The consultant reviewed the potential for increased revenue generators for any concessionaire. It appears that the greatest source of additional revenue, with the minimum amount of relative capital investment, could be realized by expanding the dry dock storage capacity. This opportunity also demanded the least amount of labor and had relatively few permitting and code requirements.

14.4 Concessionaire Sanitary Sewer System

The private, concessionaire sewer system is located within the State Park and within the concession area was constructed approximately in 2005 to treat and dispose of effluent generated by the concession and the concessionaire's residence. Effluent collected from the concession area is transported through gravity sewer mains to holding tanks before being transferred by a lift station to a primary septic tank located west of the existing long term boat storage area. Effluent collected from the concessionaire's residence also gravity flows to this septic tank system before being transferred for final disposal to a drain field. It is unknown if the concessionaire is a certified water and sewer operator.

The drain fields are located upland from the existing campground sites and reservoir, in the event of a system overload, potential exists for downhill pollution. No available records have been located for the concessionaire's

septic sewer system or drain field. The concessionaire reports no known problems with the current septic system.

14.5 Concessionaire Water Distribution System

The secondary water system was installed by the concessionaire to service the concession area due to the corrosive nature of the water associated with the primary well water. Surface water from Fort Peck Reservoir is utilized as the water source. A moveable surface water intake is located approximately 50 yards offshore, pumping the collected reservoir water through a filtering system prior to distribution to the concession buildings and cabins. The water filtration is not sufficient to treat the water to potable water standards, resulting in no available potable water for the concession area.

Option 1: Eliminate the surface water intake and connect the concession facilities to the ACOE well system

The concessionaire current elects to utilize a surface water intake to obtain water for their operations in lieu of obtaining water from the ACOE well system. This system is used to provide water to the store, rental cabins and private residence. Since the water is not considered potable, the concessionaire utilizes signage placed above the public fixture units indicating the water is not potable. In accordance with Public Accommodation Administrative Rules for Montana Section 37.111.110 (4)(b), a non-potable water source may only be used if "installation and maintenance prevent any connection to a potable water supply system".

The use of the surface water intake is not only a violation of the Administrative Rules for Montana, but also serves as a potential health risk to individuals who consume the surface intake water. It is a reasonable assumption, even though the cabin/motel units have postings that the water is non-potable, that individuals staying in the units may ingest the water from the faucet or in the shower. In addition, it is understood that the concessionaire's private residence serves as temporary housing for seasonal employees, which utilizes the same non-potable water supply and potentially puts them at risk from consuming the non-potable water.

The inclusion of the water treatment system discussed previously should address the corrosive water concerns of the concessionaire and allow the State Park to operate on a single compliant potable water system. Prior to use, chlorinate and disinfect the concessionaire's water system in conformance with state and health code regulations.

Estimated Cost to Implement: $2,500

14.6 Concessionaire Solid Waste System

The concessionaire utilizes a small, towable dumpster that services the marina, cabin/hotel rooms and concessionaire's residence. The dumpster is towed into Jordan on a weekly or as needed basis and processed by a local sanitation service.

15 Additional Considerations

15.1 Align with the State Parks' Strategic Plan

Montana State Parks must evaluate its purpose for being at Hell Creek Recreation Area.

or

- What services should State Parks provide?
- What is the target visitor demographic?
- What are the political implications if State Parks retains or releases its presence from the area?
- Can another agency provide the same better services?
- Are there additional lands in the region that State Parks can acquire to provide opportunities?

These are all questions that should be considered before investing significant funds into Hell Creek State Park.

15.2 No-Cost Lease Agreement with ACOE

The lease agreement with the Army Corps of Engineers will expire in 2021. Montana State Parks needs evaluate Hell Creek State Park as a component of its Strategic Plan. North Central Montana does not have many other State Parks sites, and the importance of having a presence in this region by Montana State Parks is part of that evaluation.

Serious consideration should evaluate the aging and overused infrastructure, the availability of increased staff to accommodate increased development, community relations and purpose for being there. There is precedent with other recreation areas around Fort Peck Lake where the State or local governments have turned the management of those areas back to the

ACOE because many of the same issues Hell Creek State Park is experiencing. The extreme importance of Hell Creek State Park as an intensive recreational use area is cited many times in the ACOE's master plan.

If Montana State Parks continues to manage the recreation area after 2021, consider amending the lease boundary to exclude the concessionaire's facilities. This will allow the ACOE to directly administer the concessionaire's contract, eliminating a layer of management. The revenues from the concessionaire to the State provide such little return on investment, it is logical to conclude that those revenues do not even cover the staff time to manage the contract.

15.3 Concessionaire Contract

The contract agreement with the current concessionaire will expire in 2018. In 2015 State legislation (SB 191) now allows Montana State Parks to negotiate contracts with a term of up to 20 years, with conditions. Concessionaires operating in State Parks will need to provide a business plan if they plan on making capital improvements, as per State law. Many laws, regulations and technologies have changed since the last contract agreement.

15.4 Prioritize Investments

Through the investigative phase of this project, it is apparent that several health codes are not being met. While public sentiment is that park expansion is desired, State Parks must first prioritize development so that all of their facilities (including concessionaire's facilities) are code compliant. A single adverse condition could cause a wave of liability implications for private individuals, state and federal agencies.

Montana State Parks should consistently evaluate improvement needs against visitor counts and objective monitoring criteria to provide reliable information for decision-making. Campground expansion and infrastructure improvements will lead to even more visitation, which has implications for infrastructure, staffing needs and environmental effects.

15.5 Stay Limits

The 14-day stay limit is the current policy for both Montana State Parks and the Army Corps of Engineers. Public feedback has indicated a desire to allow for an extended-stay campground facility.

The Code of Federal Regulations (CFR) Title 36: Rules and Regulations Governing Public Use of Engineers Water Resources Development Projects, 327.7(b) – Camping at one or more campsites at any one water resource project for a period of time longer than 14 days during any 30 consecutive

day period is prohibited without the written permission of the District Commander. FHI, 327.7(c) prohibits placement of camping equipment or other items on a campsite and/or personal appearance at a campsite without daily occupancy for the purpose of reserving that campsite for future occupancy.

In the lease agreement between ACOE and Montana State Parks (condition 31), it does allow camping for up to 30 days in any 60 day consecutive period. However, Montana State Parks' Fee Rule indicates that campers may stay no longer than 14 days (13 nights) in any thirty day period. According to ACOE staff, each lake is allowed to determine whether or not to allow seasonal camping. The ACOE currently does not allow seasonal camping anywhere on Fort Peck.

http://corpslakes.usace.army.mil/employees/visitassist/pdfs/title36-lrl.pdf

15.6 Camping Fees

The amount of fees charged for camping at Hell Creek State Park does not support the level of service provided. State policy indicates that all State Parks' campgrounds are charged the same rate, no matter the location. Therefore, profitable campgrounds subsidize the unprofitable ones. While there is an upcharge for sites with electricity, it is doubtful that the costs for the electricity at Hell Creek State Park are covered by the camping fees.

While the current policy allows for parity across all State Parks, the fees charged are far below private campground market rates. Discussions with campground industry officials noted that a campground generally needs at least 125 campsites to generate enough revenue to create a profit. It should be noted; however, that the rate charged for a campsite with electricity at Hell Creek State Park is the same rate that the ACOE charges for its campground, downstream of Fort Peck Dam.

16 Conclusion

Hell Creek State Park is an intensive recreational area. Visitation trends are on the increase, despite the remote location, difficulty of access and aging infrastructure. Any improvements to the area will continue to attract even more visitors. While it is clear that the amenities that Hell Creek State Park provides a need for north-central Montana residents and beyond. It is a destination park, one where a visitor should be knowledgeable about the area before traveling there. While hunting and fishing are the primary assets, one should not discount the human interaction with friends and family, as a group, as a major attractant to this place.

As explained in the public engagement meetings, the management needs at Hell Creek State Park are like a spider web analogy. You pull on one side of the web and the other side shifts. Likewise, when improvements are made at Hell Creek State Park, all other aspects also change. Therefore, it is vital that decisions are made with the big picture in mind. For example, addressing campground overflow must be a combination of public relations, public health policy, campsite reservation system changes and physical improvements. The changes may take one to two years to modify visitor behaviors.

While this is often challenging in a state agency environment, Hell Creek State Park also operates within the challenges of federal agencies and a private concessionaire. Operations that are commonplace for public entities do not operate the same for the free market. Add the dynamics of Mother Nature and conditions out of everyone's control, the results are a complex web of challenges and opportunities. However, with a clear management vision, the Montana State Parks will achieve their mission preserve and protect our state's cultural, natural and recreational heritage for the benefit of our families, communities and local economics, contributing to the quality of life for present and future generations.

APPENDIX A: EXISTING CONDITIONS SITE PLAN

Site Inventory Map

HELL CREEK STATE PARK

PARK MASTER PLAN PROJECT

Peaks to Plains Design PC
LANDSCAPE ARCHITECTURE / PLANNING / CIVIL ENGINEERING

N

Sheet No. 1 OF 1

Drawn By:	GNL
Checked by:	JJR
Date:	04/21/2015
Project No.:	14075

0 162.5 325 650 Feet

1 inch = 325 feet

HELL CREEK STATE PARK MASTER PLAN

EXISTING SITE INVENTORY

Peaks to Plains Design PC
LANDSCAPE ARCHITECTURE / PLANNING / CIVIL ENGINEERING

N

Sheet No. 2 OF 2

Drawn By:	*GNL*
Checked By:	*JJR*
Date:	*05/31/2015*
Project No.:	*14075*

0 162.5 325 650 Feet

1 inch = 325 feet

HELL CREEK STATE PARK MASTER PLAN

EXISTING SITE INVENTORY

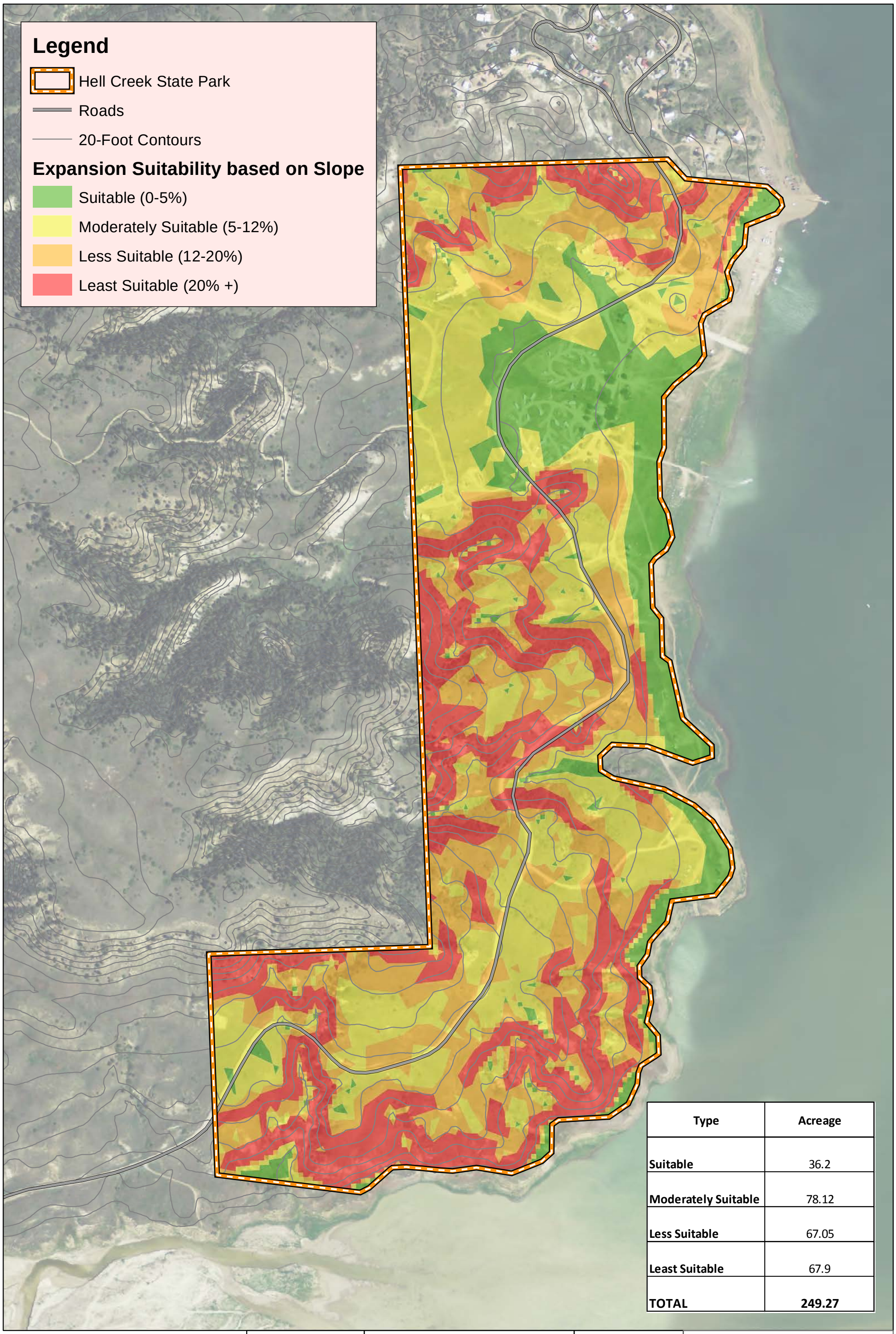
Peaks to Plains Design PC
LANDSCAPE ARCHITECTURE / PLANNING / CIVIL ENGINEERING

N

Sheet No. 2 OF 2

Drawn By:	*GNL*
Checked By:	*JJR*
Date:	*05/31/2015*
Project No.:	*14075*

APPENDIX B: SITE ANALYSIS



Type	Acreage
Suitable	36.2
Moderately Suitable	78.12
Less Suitable	67.05
Least Suitable	67.9
TOTAL	**249.27**

Peaks to Plains Design
LANDSCAPE ARCHITECTURE / PLANNING / CIVIL ENGINEERING

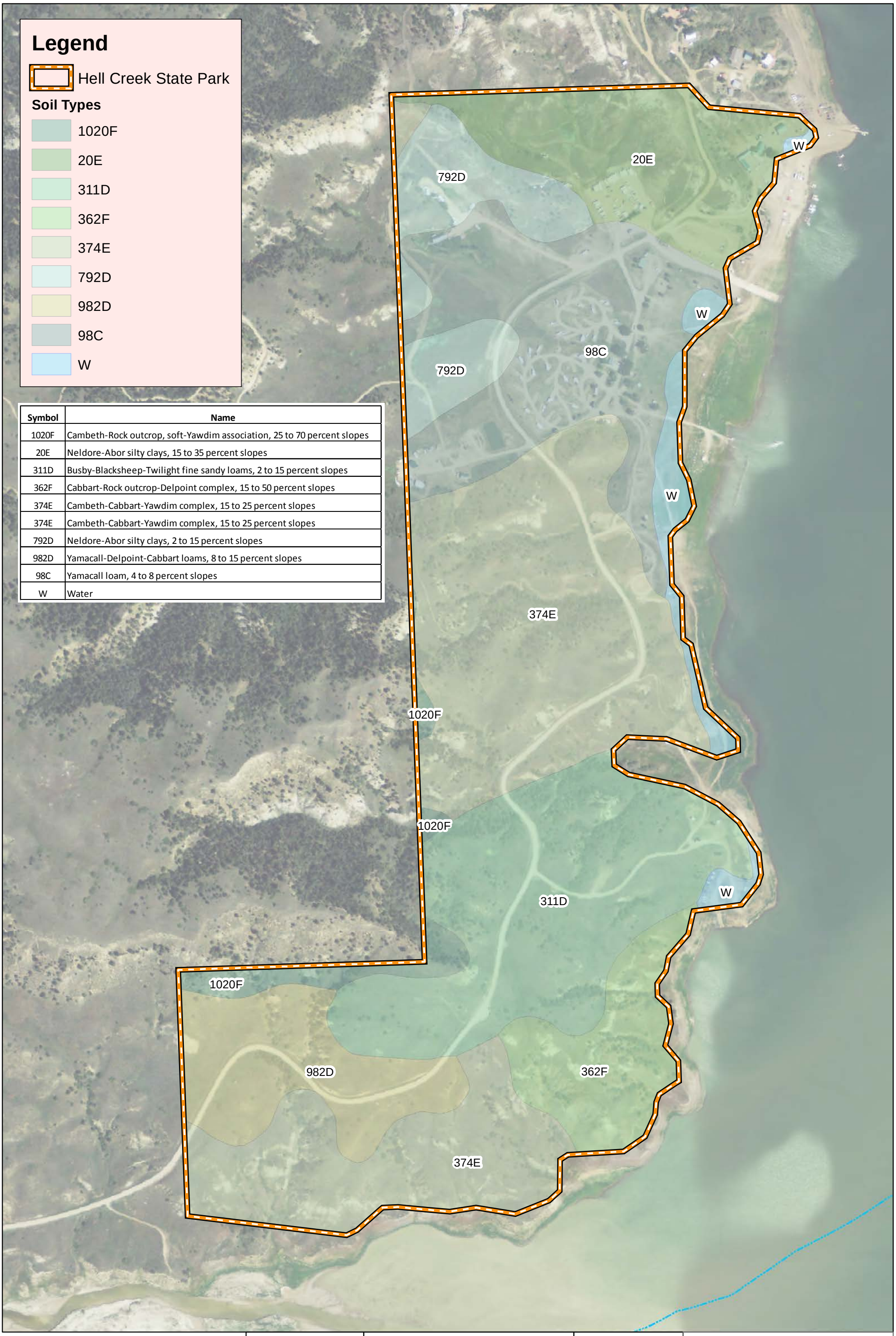
Created By: GNL
Created On: 03/23/15

Hell Creek State Park Master Plan
Site Expansion Suitability
Project No.: 14075

Source: NRCS Geospatial Data Gateway
Layers:
- 2013 NAIP Imagery
- National Elevation Model

N

0 155 310 620 930 Feet



Symbol	Name
1020F	Cambeth-Rock outcrop, soft-Yawdim association, 25 to 70 percent slopes
20E	Neldore-Abor silty clays, 15 to 35 percent slopes
311D	Busby-Blacksheep-Twilight fine sandy loams, 2 to 15 percent slopes
362F	Cabbart-Rock outcrop-Delpoint complex, 15 to 50 percent slopes
374E	Cambeth-Cabbart-Yawdim complex, 15 to 25 percent slopes
374E	Cambeth-Cabbart-Yawdim complex, 15 to 25 percent slopes
792D	Neldore-Abor silty clays, 2 to 15 percent slopes
982D	Yamacall-Delpoint-Cabbart loams, 8 to 15 percent slopes
98C	Yamacall loam, 4 to 8 percent slopes
W	Water

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Created By: GNL
Created On: 04/02/15

Hell Creek State Park Master Plan
Hell Creek State Park
NRCS Soils Survey
Project No.: 14075

Source: NRCS Geospatial Data Gateway
Layers:
- 2013 NAIP Imagery
- National Elevation Model

N
0 225 450 900 Feet

APPENDIX C: PUBLIC MEETING NOTES

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LANDSCAPE ARCHITECTURE / PLANNING / CIVIL ENGINEERING

MEETING NOTES

MEETING DATES: APRIL 21, 2015 & APRIL 22, 2015

PROJECT NAME: HELL CREEK STATE PARK MASTER MANAGEMENT PLAN

PROJECT NUMBER: 14075

MEETING PURPOSE: SOLICITATION OF IDEAS AND FEEDBACK

Question #1: When you visit Hell Creek State Park, describe your typical experience.

Visitor Demographics	Visitor Length of Stay/Planning
• Bring 5th wheel, camper, pickup • 2-6 in party • 10+ in party • Socializing • Relaxing • Family bonding • Bring: campers, pickups, boats, tents • Brings: boats, ATVs, "GENSET", TIP-UPS, wall tents • Has pickup and boat x2 and x3 people • Small groups • Cabin owners (x 3) • Visiting friends (groups of 6-15) • Cabin owners (x8); 1 outfitter • Vehicle, camper, boat, ATV • 3-4 vehicles • Dogs • Day users	• 14-day stay • Go 8-10 weekends per summer • Get away from crowds • Go multiple days all summer long • Pre-planned trips • Place to stay – lodging hotel/cabin – plan far ahead • Use primitive camping • Reservation system problems – no shows/open sites • Long weekend, 2 weeks • Goes regardless of if they can make a reservation • 3-4 week-long tips per summer are common • Difficult to reserve a campsite • Pass through [the park] • Impulse use – no reservations • Some reservations – issues with reservation system • Reevaluation of interactive website – ORMS

Concessionaire as an Added Value	Fish, Wildlife & Natural Resources
• See Clint for boat maintenance, supplies, bait, ice, air compressor, lake happenings [information] • Concessionaire services provided are essential: Long-term lease for concessionaire, Marina is more important than campground, Provides a safe environment • Concession • Concessionaire contract	• Visit for fishing • Fishing • Boating • Hunting • Primarily [go for] boat fishing • Wildlife is important • Fishing/hunting experience • Great experience even if you don't catch a fish • Fish/hunt/shore fishing • [Fishing] tournament • Destination park • Fishing
Fish Cleaning Station	**Access Road**
• Cleaning station • Fish cleaning station • Fish cleaning station	• Pave the road • Washboard road is a deterrent to come • Won't go as often because of the road • Solving road problems will create new problems with too many people • Cancelled campsites due to road • Accessibility is the biggest issue • Endurance to get there • Road (x 1M + 1)
Comfort Station	**Restaurant/Groceries/Bait/Gas/Repair**
• Showers	• At marina, use: gas, ice • Boat repair (not lose the whole vacation) • Groceries • Bait • Repair (x 1M)
Shade/Structures	**Boat Ramps/Parking/Internal Access/Docks**
• Shade • Shelters (x2) – meetings for cabin owners	• Boat ramps • Traffic noise/dust in AM for boat launch • Boat Ramps
Camping/Campsites/Motel/Cabin	**Administration & Visitor Service**
• Camping • Motel • Cabin	• Interact with park staff • Signage • Human relations management

Dry Dock/Storage	Children Services/Playgrounds/Alternative Activities
• No place to store or place boat • Storage facility always full • Can't leave boat until their next visit	• Playground • Playground is limited to young kids • Horse use would be more if advertised • Water sports

Question #2: What do you most appreciate about the park? What would you like to see retained into the future?

Comfort Station	Fish Cleaning Station
• Showers! • Flush toilets • Good shower house – could be bigger • Extended shower facilities • Showers (x 3) • Restrooms • Showers • Flush toilets •	• Fish cleaning station • Fish cleaning station (x 2) • Fish cleaning station
Restaurant/Groceries/Bait/Gas/Repair	Boat Ramps/Parking/Internal Access/Docks
• Bait • Gas • bait, maintenance • Boat/vehicle repairs • Store/marina • Bait • Fuel	• Ramps • Boat ramps • Boat ramps • Parking
Administration & Visitor Service	Camping/Campsites
• Safe, respectful environment • Cleanliness • Availability of park staff • Year-round access • Customer service • Cleanliness	• Electrified Campsites • Electric sites • RV hookups • Ability to charge trolling motors • Electricity • Electric hookups

Access Road	Concessionaire as an Added Value

• Gravel roads
• They used to go to the park more often back in time when the road was maintained better
	• Clint & Deb can fix it
	• Concessionaire marina & services
	• All of concessionaire's services, including: fuel & customer service
	• Safety-rescue
	  • Concessions
	  • Concessionaire (x 10)

Water, Sewer & Garbage	Dry Dock/Storage
• Dump station & potable water • Water • Garbage service • Sharing water	• Dry-docks • Need more storage facilities • Storage • Dry-docks
Children Services/Playgrounds/Alternative Activities	Fish, Wildlife & Natural Resources
• Playground equipment • Playground • Playground	• Local Walleyes Unlimited chapter • Beautiful body of water • Lake/water • Fish
Shade/Structures	
• Shelter building • Shelter building	

Question #3: What additional services or site amenities would be beneficial to enhancing the visitor experience at the park?

Comfort Station	Fish Cleaning Station
• Shower curtains • Larger shower buildings • Additional restrooms • Extended comfort station season	• Additional capacity at fish cleaning station • Extend season and enlarge fish cleaning station
Restaurant/Groceries/Bait/Gas/Repair	Boat Ramps/Parking/Internal Access/Docks
• Completed marina building/grocery/restaurant/store • Restaurant by concessionaire • Restaurant/bar/hotel (x 3)	• Courtesy docks • More boat trailer parking • More parking by main ramp • Double ramp at marina • Increased access/all-weather access to ramp • More slips for boats • Docks available to those staying at Hell Creek • Expanded boat ramp + marina • Expanded parking
Administration & Visitor Services	Camping/Campsites
• Prepare for peak demand • Less red tape to enable development • Longer concessionaire lease • Long term lease for concessionaire • Additional land development • Bid operations & maintenance • Longer concessionaire contract • Fewer FEDS bothering you	• Group camping with electric (x 3) • Better use of space in campgrounds • Wider campsites • Paved campsites • Full hookups at campsites • Campsites & electric sites • RV hookups in concessionaire control • More electric sites • RV-hookups by concessionaire (x 10)
Access Road	Concessionaire as an Added Value
• More gravel [on roads] • Better road • Speed limit signs on primary road • New road or better maintained road • Could improving the road cause additional problems for the park? • [better] road conditions	• Private owned campsites/concession • Allow concession to expand facilities • Concessionaire hookups • Increased concessionaire services, including: long-term camping and dry-dock expansion with electricity

Water, Sewer & Garbage	Dry Dock/Storage
• Larger water system to handle peak demand • Share water with cabin owners • Potable water year round	• More dry dock storage • Additional dry dock storage • Need plug in sites for boats
Children Services/Playgrounds/Alternative Activities	**Telecommunications**
• Kids activities • Dances • Music or other entertainment • Basketball court • Playground for older kids • FOLF (Frisbee/disc golf) course • Dog care • Golf course • Golf cart rentals	• Cell service
Visitor Length of Stay/Planning	**Accessibility/Trails/OHV/Equine**
• Change regulations – more than 1 camper per site, tents on grass • Extended state camping limit (currently 14 days) • Modifying reservation policy • More first-come-first-serve sites • Longer stay periods	• Access to lakeshore during various water levels • ATV trails • Universally accessible • Handicap accessible sites down to water • Motorized/OHV (off-highway vehicle) trails • Bike trails
Shelters/Shade	**Swimming Area**
• More shade shelters • Shade trees • Expand day-use building • Amphitheatre	• Swimming area that is designated with buoys • Dedicated swimming area • Expanded no-wake zone • Better swim/fish dock

Question #4: With limited fiscal, human & infrastructure resources prioritize improvements or management strategies derived from answers given in questions 2 and 3.

	Important	Less Important
Urgent	• More dry dock space • More electric & non-electric campsites • Redo septic system to handle 4th of July • Space utilization • County road • Campsites by concessionaire • Change county rd. to state rd. • Longer concessionaire lease • Streamline red-tape processes • Modify reservation system • Boat ramp parking • Additional campsites by concessionaire • Don't jeopardize concessionaire's lease & ability to provide • More campsites • Extended stay periods • Fuel • Restaurant • Cell tower • Better road • Gravel marina ramp/better low-water access • Improved roads • If road doesn't get approved, the park needs more storage • More electric sites • Additional boat docks • Road • Restaurant • Concessionaire lease • Bid Operations & maintenance • Access mowed lawn/water • Boat ramps/parking • Concessionaire RV hookups • Year-round restrooms • Longer concessionaire contract • Road/dust control • Marina building • Boat ramps • Long-term camping • Reservation confusion [solution] • RV hookups by concessionaire • Dry-docks expansion • Hotel rooms	• More showers • More shade • Continue gas & bait sales • County roads • Gravel of boat ramps & parking areas • Courtesy dock at main ramp • Enlarge fish cleaning station • Extended shower house season • Restaurant • Better kid's fishing & swim dock • Basketball court

	Important	Less Important
Less Urgent	• Coordination/communication with Jordan merchants • Expansion of fish cleaning station • Group campsites • Additional fish cleaning station • FOLF course • Golf course	• Extend main boat ramp • Shower curtains • Children's activities • Day-use building • Trails • State expansion • Dog Kennel • Laundry service

Question #5: What additional information would you like Montana State Parks to consider as they develop this plan?

Concessionaire as an Added Value	Administration & Visitor Services
• Concessionaire's needs • Autonomy for private concessionaire	• Collaboration with locals • Correlation of improvements with visitation • Changes in public relations at park • Education v. enforcement • Warnings v. citations • More user input & utilize user input • Outside bid for operations & maintenance • Replace State Parks • Additional recreation areas on lake (within the Park – not other recreation areas) • Appreciate investment • Maintain what we have • Be creative in execution • Evaluate capability • More transparency • More public participation • Upfront, honest, & transparent communication [with visitors/users] • ACOE fix cabin foundations! • Likes it just as it is • All events & notices put on a calendar on the websites

Access Road	Boat Ramps/Parking/Internal Access/Docks
• **COUNTY ROAD MAINTENANCE** (MgCl!) • State road maintenance • What can be done with road?	• If the park grows in numbers, they may need another boat ramp • They felt limited at the campground boat ramp and boy scout boat ramp because they are the only docks • Boy Scout ramp is the protected from the wind and steeper so you don't have to go out too far with a vehicle • Breakwater
Water, Sewer & Garbage	Comfort Station
• Garbage service for cabin owners	• More showers & flush toilets
Accessibility/Trails/OHV/Equine	
• Walking paths	

Comment Cards and Other Alternative Feedback Venues

1. Activity level experiences wide swings, from low to very high. It is very frustrating for people to be there during periods of high volume use and the facilities can't handle the demands. Better to be prepared for high volume periods than to try and establish an average knowing it will be inadequate during high volume usage.
2. Move the kids dock to a better location. Away from the weeds and to deeper water. Kids do not use it at the current location.
3. Want more privatized (concessionaire) run hotels, marina, RVs, restaurant, everything in general – they have to make money or go broke so there is better service such as saving people in night, mechanic work, bait, store – need longer 40 year contract in this so they can get banker to go with them.
4. I think it is important to keep in mind that return visitors of the park enjoy their experience because of the dedication and services of Clint & Deb. Speaking from experience, I don't choose to travel to Hell Creek because you have nice bathrooms or campgrounds, I chose to travel down a crappy road because I know while I am there, I can depend on the Thomas family to help if I'm in a bind or for their services to add to the enjoyment of the trip. I think it is safe to say that without them and the services they provide, Hell Creek wouldn't be worth going to anymore.
5. Better on shore fishing access, not everybody has a boat to fish in.
6. Take care of what each have <u>now</u>. More camping down by water's edge, fire pits, and tables.
   The Road –

Maybe try and add concessionaire a little competition would maybe help come up with a bigger marina & restaurant.
Hell Creek State is one of the best places in Eastern Montana. Very Proud of it.

7. Consider economic impact of additional services at Hell Creek as the addition may negatively affect merchants in Jordan.
8. At Hell Creek campground it would be a great improvement to expand the parking area and the boat ramp at Boy Scout Point. This ramp offers more protection from the wind and more and more boaters are using this ramp.
9. Also at Hell Creek, dust from the main road inside the park is a major problem.
10. At Fort Peck in general another campground with electric hookups and boat ramp in the dam area would relieve some of the pressure from Hell Creek.

The above listed notes were transcribed by **Peaks to Plains Design, P.C.** of the contents of the meeting. Please advise the preparer, in writing, of any errors or omissions.

APPENDIX D: MASTER PLAN

CAMPGROUND EXPANSION CONCEPT

1. Proposed basketball court
2. New Trail Head & Trail Spur
3. Potential Cell Phone Tower Lease Area (200' x 200')
4. Tent Camping Sites (10)
5. Group Campsites (9)
6. Tent Camping Sites (15)
7. Visitor Service Building

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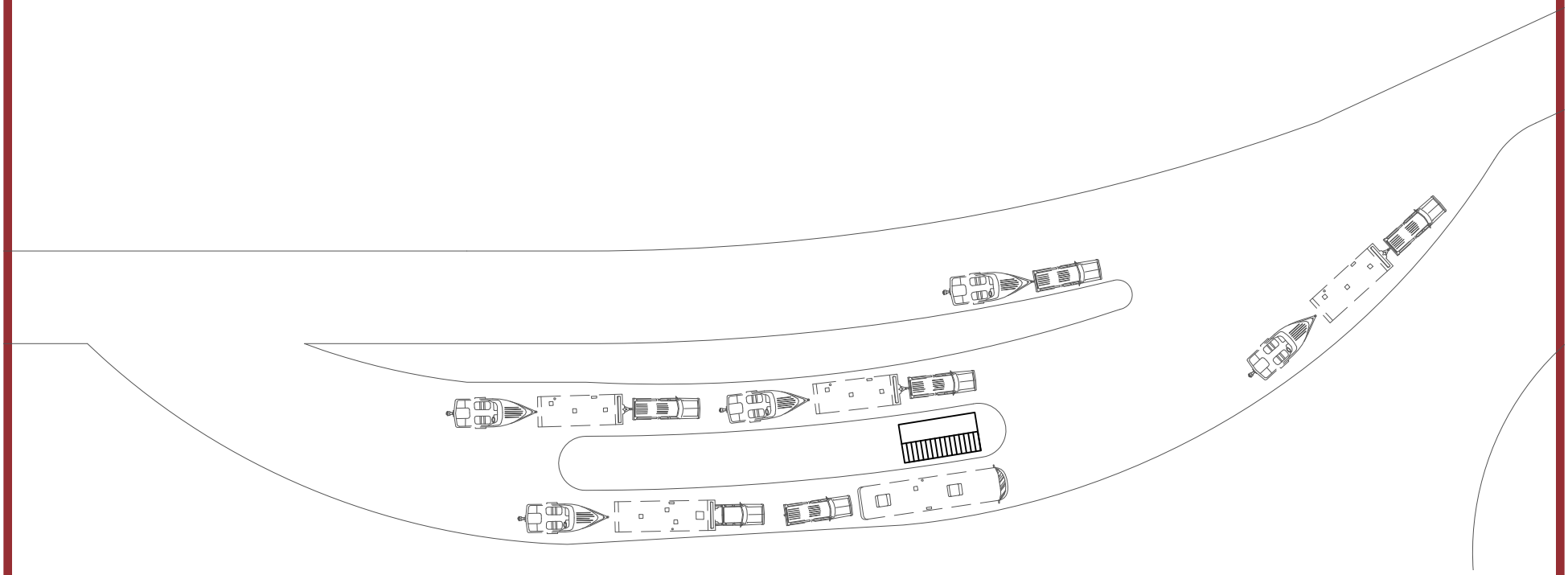
MONTANA STATE PARKS
stateparks.mt.gov
Explore More.

APPENDIX E: SCHEMATIC DESIGN LAYOUT DETAILS

ENTRY AREA DETAIL



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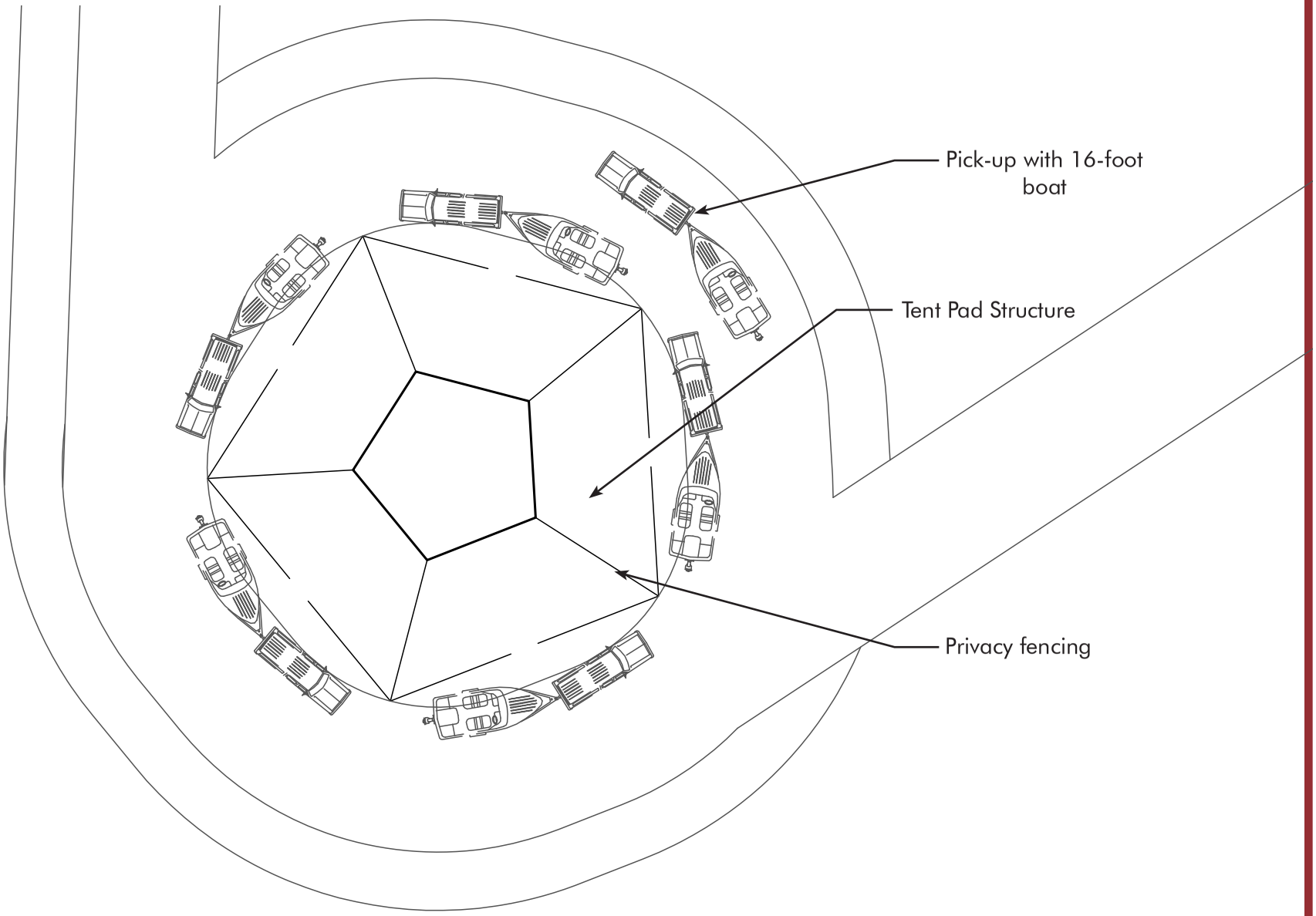
1″ = 40′

TENT WHEEL DETAIL



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1″ = 40′

APPENDIX F: CODE AND STATUTE REFERENCE TABLE

APPENDIX F: CODE & STATUTE TABLE

Code/ Statute	Title	Location in Document
§18-4-313, MCA	Contracts –terms, extensions, and time limits	Page 5
§37-42, Part 3, MCA	Water Treatment Plant Operators, Licensing	Page 18
§50-50, Part 2, MCA	Retail Food Establishments, Licensing	---
§50-52-103, MCA	Duty to obtain license and permit inspections	Page 10
§75-6, Part 1, MCA	Public Water Supplies, Distribution & Treatment, Public Water Supply	Page 18
§75-6, Part 2, MCA	Public Water Supplies, Distribution & Treatment, Drinking Water State Revolving Fund Act	Page 18
ARM 37.111.110 (4)(b)	Water Supply System General Requirements	Page 21
ARM 37.111.201	Definitions	Page 10
ARM 37.111.206	Layout Plan: Water Supply Requirements	Pages 10, 23
ARM 37.111.207	Layout Plan: Sewage System Requirements	Pages 10, 13
ARM 37.111.211 (7)	Licensure	Page 11
ARM 37.111.217	Solid Waste: Storage and Disposal	Pages 10, 26
ARM 37.111.226	Animals Running At-large	Page 9
ADA	Americans with Disabilities Act of 1990	Pages 8, 32
36 CFR §327.7(b)	Rules and Regulations Governing Public Use of Water Resource Development Projects Administered by the Chief of Engineers: Camping	Page 35

Notes:
[1]MCA stands for "Montana Code Annotated"
[2]ARM stands for "Administrative Rule of Montana"
[3]ADA stands for "Americans with Disabilities Act of 1990"
[4]CFR stands for "Code of Federal Regulations"