

Ozark National Scenic Riverways

**Environmental Assessment for
Akers Ranger Station /Visitor Contact Facility**

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SUMMARY

The National Park Service (NPS), Ozark National Scenic Riverways (ONSR), is proposing the replacement of the existing single-wide trailer serving as the Akers ranger station with a ranger station/visitor contact facility. The proposed site is located at the Akers Ferry area of the upper Current River, Shannon County, Missouri, near the junction of state Highways K and KK.

This proposal would:

- fulfill the need for increased NPS visibility at the Akers site;
- provide adequate and improved working space for ranger staff;
- provide a NPS presence at Akers in the form of visitor contact with uniformed staff and/or improved signage;
- provide an improved visitor experience, with opportunities for public education and interpretation of the park in general, as well as the historic and prehistoric nature of the Akers area;
- utilize existing infrastructure (utilities, traffic patterns, roads) to the greatest degree possible; and
- provide facilities in keeping with the historic landscape and with minimal impacts to the National Register District.

This document discusses the no-action alternative, and three action alternatives designed to achieve these objectives, along with the potential impacts associated with each.

- Alternative A, the no-action alternative proposes no new development or changes in operations.
- The preferred alternative, Alternative B, includes construction of a ranger station/visitor contact facility and a septic system to provide for public restrooms at a site on the NE corner of the junction of Highways K and KK. The preferred alternative fulfills the needs addressed, is out of the floodplain, and minimizes harm to archeological values.
- Alternative C proposes the construction of a new ranger station/visitor contact facility and associated septic system adjacent to the existing concession store on the SE corner of Highways K and KK.
- Alternative D proposes the construction of a new ranger station/visitor contact facility and associated septic system across from the existing concession store on the SW corner of the junction of Highways K and KK.

The preferred alternative action would affect approximately 2.0 acres of mowed field; approximately 0.75 of an acre would be permanently altered. A 1.0 acre gravel parking lot would also be developed. All disturbed areas would be restored with native vegetation or cultivated plants as appropriate to the cultural landscape. Visitors would benefit from improved public safety access, modern restroom facilities, and improved interpretive resources of the Ozark cultural landscape.

We are seeking public and agency comments on this environmental assessment from August 12, 2005 through September 12, 2005.

You may post or mail your comments via any of these three methods:

1. Planning, Environment, and Public Comment (PEPC) website (select Ozark National Scenic Riverways from the dropdown menu): <http://parkplanning.nps.gov/publicHome.cfm>
2. ONSR park website (select "Contact Us" link): <http://www.nps.gov/ozar/>
3. ONSR park headquarters: Superintendent, Ozark National Scenic Riverways, P.O. Box 490, Van Buren, MO 63965

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1.0 PURPOSE AND NEED

In 1984, Ozark National Scenic Riverways (ONSR) initiated a General Management Plan (GMP) and Development Concept Plan (DCP) outlining goals for the park and developments to achieve those goals. Park managers have proceeded with these plans, revising them on a case-by-case basis to adhere to the current operational needs and address natural, cultural, and recreational values.

In keeping with the general plan for the Akers Ferry area of the upper Current River and to meet the needs of park visitors, the park is addressing the replacement of the existing ranger station at Akers. Building a ranger station/visitor contact facility is one component addressed in the Akers Ferry DCP revised in 1993. The need the Park is focusing on is the poor condition and location of the existing ranger station at Akers. The current facility, a skirted single-wide trailer, is no longer sufficient as office space (Figure 1). In addition, the current ranger station is located away from public view and does not offer visitors the opportunity to contact National Park Service (NPS) personnel. Without contact, the public may be unaware or unsure the area is managed by the NPS. Problems that have arisen due to a lack of NPS presence include limited visitor access to NPS personnel and a general lack of educational information conveyed to visitors about the historical, cultural, and biological importance of the Akers site. In addition, often the only contact with visitors tends to be “negative” in the sense that rangers arrive on scene in the event of a law enforcement issue.

Figure 1. Existing Akers ranger station.



In order to alleviate the issues presented and achieve the goals outlined by the NPS mission and the GMP, ONSR proposes to replace the existing ranger station with facilities to meet the following purpose:

- To increase NPS visibility at the Akers site;
- To provide adequate and improved working space for ranger staff;
- To provide a NPS presence at Akers in the form of visitor contact with uniformed staff and/or improved signage;
- To provide an improved visitor experience with opportunities for public education and interpretation of the park in general, and the historic and prehistoric nature of Akers Ferry;
- To utilize existing infrastructure (utilities, traffic patterns, roads) to the greatest degree possible; and

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- To provide facilities in keeping with the historic landscape and with minimal impacts to the National Register District.

2.0 APPLICABLE REGULATORY REQUIREMENTS & COORDINATION

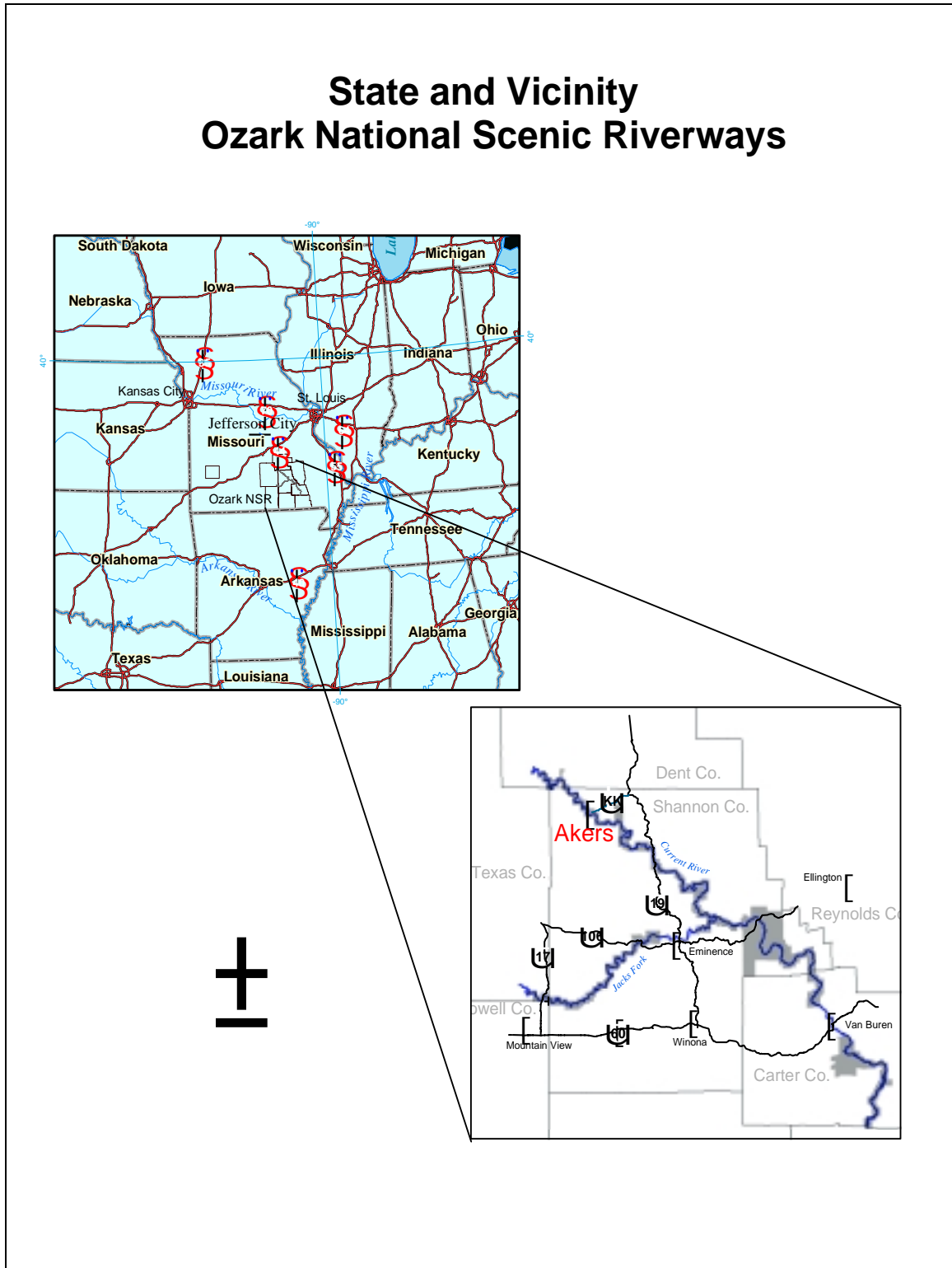
This Environmental Assessment (EA) has been prepared to evaluate the impacts of the alternatives described in Section 3.0. The EA is prepared in accordance with the *National Park Service's Director's Order No. 12: Conservation Planning, Environmental Impact Analysis, and Decision Making*, and its accompanying Handbook, and the provisions of the National Environmental Policy Act of 1969 (NEPA) (PL91-190, 42 USC 4321-4247). Detailed procedures for developing this document comply with the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508).

Regulatory requirements, which may be applicable to the activities addressed in this EA, include:

- Section 106 of the National Historic Preservation Act addressing any activities directly or indirectly impacting prehistoric or historic archeological sites, historic structures, or cultural landscapes eligible for or listed in the National Register of Historic Places.
- Section 106 consultation also includes coordination with any Native American Tribes as appropriate.
- Section 404 of the Clean Water Act permitting and state water quality certification through Section 401 of the Act.
- Section 7 consultation with the U.S. Fish and Wildlife Service under the Endangered Species Act.
- Executive Order 11990, Protection of Wetlands
- Executive Order 11988, Floodplain Protection
- Missouri 10 CSR 60 – 3.010, 60-16.010, and 60-16.030 – Public Drinking Water Systems
- Missouri 10 CSR 20 – 6010, 20-16.011, and 10 CSR 20–8 – Sewer or Sewage Treatment Construction.

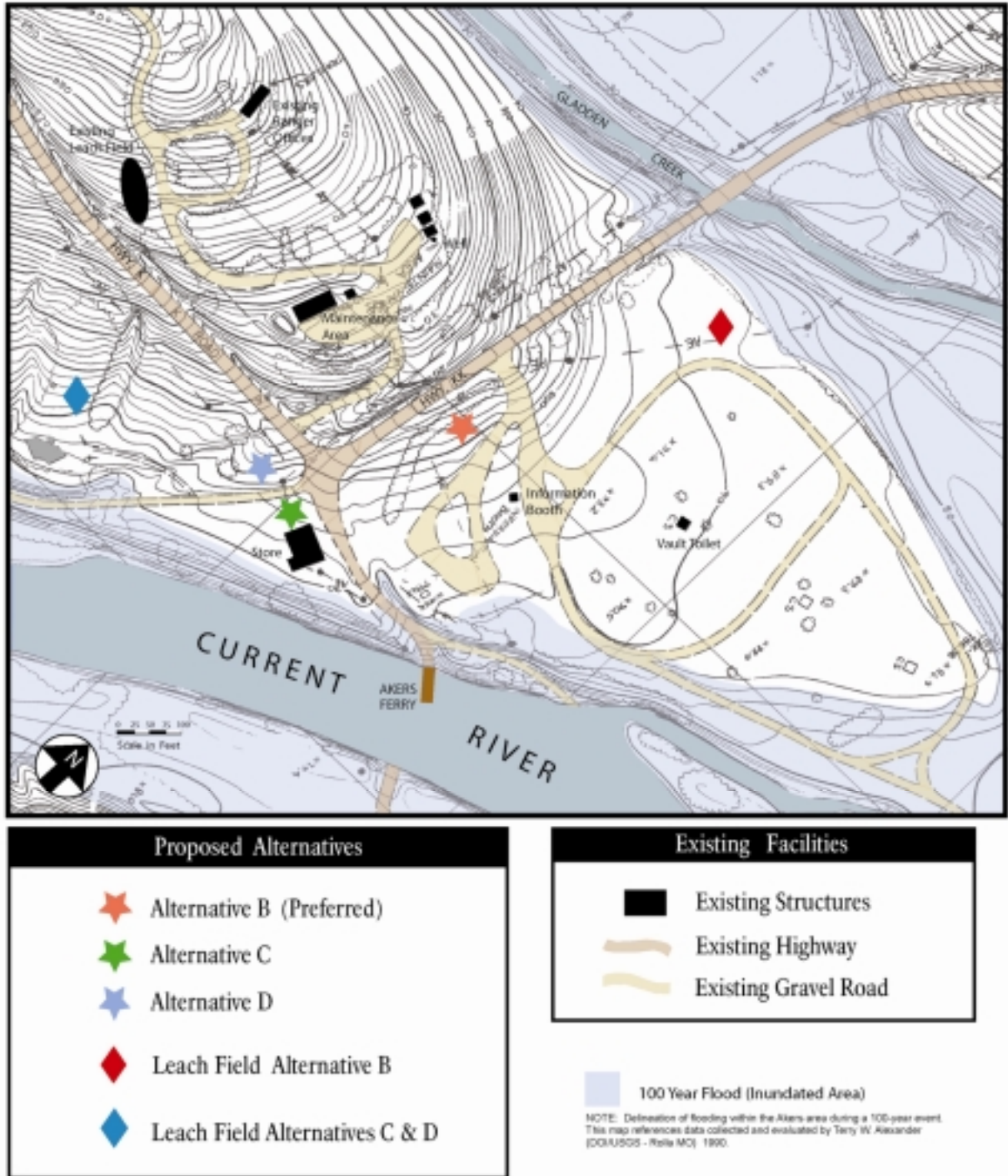
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Figure 2. State and Vicinity Location of Ozark National Scenic Riverways



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Figure 3. Akers area site map



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3.0 Alternatives

As a result of the internal scoping process, the no-action alternative and three alternatives for addressing the purpose and need were selected for analysis in this EA. The alternatives evaluated are:

- Alternative A – No-Action Alternative
- Alternative B – Preferred Alternative – Construct a new ranger station/visitor contact facility on the NE corner of the junction of Highways KK and K
- Alternative C – Construct a ranger station/visitor contact facility adjacent to the existing concession/store at the SE corner of Highways KK and K
- Alternative D – Construct a new ranger station/visitor contact facility west of the existing concession store on the SW corner of the junction of Highways KK and K

Although the proposed action alternatives are at the conceptual design stage, there are elements common to all alternatives. They are:

- Remove the existing ranger trailer at the Akers site.
- Removal of contact station and one vault toilet; rehabilitate sites to mitigate for previous resource damage.
- A new ranger station/visitor contact facility would incorporate rustic design elements with a square footage of approximately 2400 square feet and with construction affecting 1 acre of land; ¼ acre of the affected land would be permanently altered and ¾ acre would be revegetated with native plants.
- Modern men's and women's restrooms facilities each containing four stalls and one unisex restroom for the office.
- Construction would include a septic system consisting of three septic tanks (3500, 2000, & 500 gallons each) and a leach field affecting approximately 0.5 acre.
- Use of the existing well and electrical utilities currently at the Akers site with new linkages being installed. The facility would be equipped with radio and networking capabilities.
- Redesign parking situation using the existing parking areas and roads to the greatest degree possible and eliminate unnecessary parking areas to mitigate impacts to cultural and natural resources.

3.1 ALTERNATIVE A (No-Action Alternative)

The No-Action Alternative would maintain the existing trailer facilities, and the current ranger operation would continue to operate from this site. No new ranger station/visitor contact facility would be constructed. The only publicly visible NPS facility located at Akers would continue to be the concessioner operated store (Figure 4) where no NPS personnel or signage exists.

No soils would be disturbed beyond current operations. Current utilities would remain as is. The current wastewater treatment facility is a single 500 gallon septic tank and leach field located near the existing ranger offices. The current water supply is from an existing well located to the east of the existing ranger trailer. It supplies sufficient water supply for the existing ranger office. The current electric utilities are supplied by an above ground power line stretched from the main power source located approximately 100 feet east of the existing well and approximately 120 feet west of Missouri Highway KK on the east facing slope. The current road and parking lots of the Akers area are represented in Figure 3. No new roads or parking lots would be constructed under this alternative.

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Figure 4. Existing concession store at the junction of Highways K and KK.



**3.2 ALTERNATIVE B (Preferred Alternative) – Build new ranger station/
visitor contact facility on the NE corner of the junction of Highways K and KK
and construct septic system**

The preferred alternative, Alternative B, proposes the construction of a new ranger station/visitor contact facility on the NE corner of the junction of Highways K and KK, to the north of and across from the existing concession store (Figure 5). In addition, a leach field to accommodate visitor and office toilet facilities is proposed nearby.

Figure 5. Location of Alternative B (Preferred Alternative).



Construction of the new building under Alternative B would affect approximately 1 acre of land, $\frac{1}{4}$ of which would be permanently altered due to the new facility and $\frac{3}{4}$ acre would be revegetated with native plants. Building placement would require the movement of

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approximately 70 cubic yards of dirt and soil. The building and restrooms would comply with the accessibility requirements of the Americans with Disabilities Act.

A wastewater septic system with three tanks (3500 gals, 2000 gals, and 500 gals) and a 0.5 acre leach field capable of handling 3000 gals/day of septic and gray water is proposed for the new facility. Piping measuring 375 linear feet would carry wastewater to the leach field, where it would be distributed among 1600 feet of leach infiltrators. The leach field would be located in the mowed area to the north of the proposed ranger station site (see Figure 3). 589 cubic yard of soil would be removed for trenches and then replaced.

Connections would be added to existing water and electric utilities to service the new facility. These connections would be buried in a trench from the existing sources located in an area 100 to 200 feet west of Missouri Highway KK on the east facing slope. Electric and water lines would be buried in a shared trench for 225', after which an additional 50' of electric and 125' of water line would be needed to reach the existing lines. In total, trenches two feet wide totaling 400' would be required, affecting approximately 0.02 acre. Initial excavation of 58 cubic yards of soil would be followed by replacement in the dug trenches.

Due to the operation of a new restroom and office space, there would be an added demand in the amount of power used. However, operational costs would be offset due to having an energy efficient building verses the current trailer facility. Finally, a 1.0 acre gravel parking lot would be constructed by placing gravel on top of the existing grass surface adjacent to the proposed building.

3.3 ALTERNATIVE C – Build a new ranger station/visitor contact facility adjacent to the existing concession store, on SE corner of the junction of Highways K & KK and construct septic system

Alternative C proposes construction of a new ranger station/visitor contact facility adjacent to the existing concession store. A leach field west of the proposed building site would be placed along the SW-facing slope to treat wastewater (see Figure 3). Alternative C differs from Alternative B in the location of both the ranger station and leach field. It is similar to Alternative D in the location of the leach field.

Figure 6. Location of Alternative C - SE corner of the junction of Highways K and KK.



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Construction of the new building under Alternative C would also affect approximately 1 acre of land, ¼ of which would be permanently altered due to the new facility and ¾ acre would be revegetated with native plants. The building site would require the movement of approximately 70 cubic yards of dirt and soil. Excavated materials would be utilized as fill and landscaping and no extra dirt is anticipated.

As with the other build alternatives, septic tanks (3500 gals, 2000 gals, 500 gals) and a 0.5 acre leach field is proposed, capable of handling 3000 gallons/day of septic and gray water. Located south of Hwy K and west of the proposed building location (Figure 3) in an area called Dooley Fields, the proposed site is a grown-up old field, now wooded.

Construction of the leach field and placement of the septic tanks would require the use of a backhoe. Piping measuring 300 linear feet would carry wastewater to the leach field, where it would be distributed among 1600 feet of leach infiltrators. 577 cubic yards of soil would be removed for trenches and leach field, and then replaced. Excavated materials would be utilized as fill and no extra dirt is anticipated. A pump station would be added at the septic tank location to pump the wastewater to the leach field due to the higher elevation of the leach field site.

Connections to existing water and electric utilities would be made to service the new facility. These connections would be buried in a trench from the existing sources located 100 to 200 feet west of Missouri Highway KK on the east facing slope. The electric and water lines would be buried in a shared trench for 525' to the new facility. There would be two separate trenches dug for the initial 50' of electric and the initial 25' of water line. Electric and water lines would require 600' of trench total, approximately two feet wide. The utility trenches would affect an approximate total of 0.01 acre and 89 cubic yards of soil. Soil would be placed back in the trench.

As in Alternative B the operation of a new restroom and offices would increase demand in the amount of power used. However, the operational cost would be offset from the savings of having an energy efficient building verses the current trailer facility. Existing parking areas would be used to the greatest extent possible, with unnecessary parking areas eliminated to mitigate impacts to cultural and natural resources.

3.4 ALTERNATIVE D - Build a new ranger station/visitor contact facility on the SW corner of the junction of Highways K and KK and construct septic system

Alternative D also proposes construction of a new ranger station/visitor contact facility and associated septic system. The location of the building would be on the southwest corner of the junction of Highways K and KK, and the location of the leach field would be along a SW-facing slope, west of the proposed building site (Figure 3) and south of Highway K in an area known as Dooley Fields. This Alternative differs from Alternative B in the location of both the ranger station and leach field. It is similar to Alternative C in the location of the leach field.

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Figure 7. Location of Alternative D - SW corner of the junction of Highways K and KK.



As with Alternative B and C, construction of the new building under Alternative D would affect approximately 1 acre of land, $\frac{1}{4}$ of which would be permanently altered due to the new facility and $\frac{3}{4}$ acre would be revegetated with native plants. The new facility would require the movement of approximately 70 cubic yards of dirt and soil. Excavated materials would be utilized as fill and landscaping and no extra dirt is anticipated.

Located south of Highway K and west of the proposed building location (Figure 3) a 0.5 acre leach field is proposed. Designed to handle 3000 gals/day of septic and gray water, piping 250' long would link the septic tanks (3500 gals, 2000 gals, 500 gals) to the leach field, temporarily displacing 37 yds³ of soil.

Construction of the wastewater septic system facility would require the use of a backhoe. Excavated materials would be utilized as fill. A pump station would need to be added at the septic tanks to pump the wastewater to the leach field because there would be an increase in elevation from the septic tank location to the leach field.

Connections to existing water and electric utilities would be needed. These connections would be buried in a trench from the existing sources located between 100 and 200 feet west of Missouri Highway KK on the east facing slope. There would be two separate trenches dug for the initial 50' of electric and the initial 25' of water line. The electric and water lines would then be buried in a shared trench for 625' to the new facility. Electric and water lines would require a total of 700' of trench approximately two feet wide. The utility trenches would affect an approximate total of 0.03 acre and 103 cubic yards of soil. Soil would be placed back in the trench.

Again, the added cost of increased demand in power used would be offset by a more energy efficient structure. Existing parking areas would be used to the greatest extent possible, with unnecessary parking areas eliminated to mitigate impacts to cultural and natural resources.

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3.5 Alternatives Considered but Dismissed

Other alternatives have been considered, including moving or remodeling the existing trailer or staffing the old 12' X 12' campground contact station, but none satisfy the purpose and need. Other alternatives considered but eliminated by the planning team include:

- Knoll across from the Mt. Zion cemetery on the NW side of Highway KK – eliminated due to distance away from central activity near the existing store, junction, and river access. A facility here would be less accessible to river floaters or concession store users.
- Mt. Zion Church – also eliminated due to distance from central activity near the existing store and river access. With electricity but no plumbing, rehabilitation would be costly to provide modern utilities and maintain its historic character. This alternative would also do little to enhance the NPS presence along the river, contributing to continuing administrative problems.
- NW corner of Highways K and KK – this site placement would interfere with existing road infrastructure and require visitors to cross Highways K and/or KK, thereby creating a safety hazard.

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Table 1. Summary of the four alternatives for Akers ranger station/visitor contact facility.

COMPONENTS OF ALTERNATIVES

	ALTERNATIVE A – NO ACTION	ALTERNATIVE B — PREFERRED ALTERNATIVE –NEW FACILITY AT NE LOCATION	ALTERNATIVE C — NEW FACILITY AT SE LOCATION	ALTERNATIVE D — NEW FACILITY AT SW LOCATION
Building Location	Trailer off maintenance road on NW corner of the junction of Highways K and KK.	NE corner of the junction of Highways K and KK	SE corner of the junction of Highways K and KK adjacent to the existing concessioner store	SW corner of the junction of Highways K and KK
Toilet Facilities	Two vault toilets at old campground open year round.	Addition of four women's and four men's public restrooms available 24 hours a day during summer months. One staff toilet to be built in new administrative facilities. One vault toilet would remain on site for winter facilities. One vault toilet would be removed and site would be rehabilitated to mitigate previous resource damage.	Same as alternative B.	Same as alternative B.
Septic Tank and Leach Field location	North of Highway K, south of maintenance road leading to current ranger office	North of proposed building site in mowed field to the east of Highway KK.	West of proposed building site, south of Highway K in area known as Dooley fields	Same as Alternative C.
Visitor Parking	Visitors would continue to park in the existing floater parking areas and in the mowed field.	Gravel parking lot adjacent to proposed ranger station/visitor contact facility	Existing parking areas would be used to the greatest extent possible, with unnecessary parking areas eliminated to mitigate impacts to cultural and natural resources. If parking areas are created, they would be gravel placed on surface of existing soils.	Same as Alternative C.
Day Use Area	Day use facilities would stay as it is now with two vault toilets, picnic facilities and no information being given to visitors.	Current picnic facilities would remain. Informational signs with maps, visitor use guidelines, and safety information to be located outside new ranger station so accessible even when visitor contact facility is not open.	Same as alternative B.	Same as alternative B.
Utilities	Ranger Offices in trailer would continue to operate as is.	Use existing well and electric facilities; 400' of trench to dig, moving 58 yds ³ of soil and affecting 0.01 acre; radio and network capabilities included.	Use existing well and electric facilities; 600' of trench to dig, moving 89 yds ³ of soil and affecting 0.01 acre; radio and network capabilities	Use existing well and electric facilities; 700' of trench to dig, moving 103 yds ³ of soil and affecting 0.01 acre; radio and network capabilities

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3.6 Comparison of Alternative Effects

Table 2 presents a summary comparison of the effects of the alternatives based on the evaluations of resource areas in the Environmental Consequences section of this EA. Terms used to define the magnitude and intensity of the effects are described for each resource area in Section 5.0.

Table 2. Comparison of the effects of the alternatives.

RESOURCE AREAS		ALTERNATIVE A — NO ACTION	ALTERNATIVE B — PREFERRED ALTERNATIVE — NEW FACILITY AT NE LOCATION	ALTERNATIVE C — NEW FACILITY AT SE LOCATION	ALTERNATIVE D — NEW FACILITY AT SW LOCATION
	Soil and Groundwater Resources	Negligible short and long-term impacts on soils and groundwater resources at the Akers site.	Moderate short- and long-term adverse impacts on the soils and groundwater resources at the proposed site.	Same as Alternative B.	Same as Alternative B.
	Vegetation	Negligible short and long-term impacts on the terrestrial vegetation communities.	Negligible short and long-term impacts on terrestrial vegetation.	Minor short and long-term adverse impact on the mixed deciduous hardwood forest community in the Akers vicinity.	Minor short and long-term adverse impacts on terrestrial vegetation communities in the Akers vicinity.
	Surface Water Quality	Negligible short and long-term impacts on the Current River or Gladden Creek.	Negligible short-term and moderate long-term adverse effect to surface water quality.	Same as Alternative B.	Same as Alternative B.
	Wetlands/ Floodplain	Negligible short and long-term impacts to wetlands or the floodplain.	Negligible short and long-term impacts to the floodplain or wetlands.	Same as Alternative B.	Same as Alternative B.
	Wildlife	Negligible short and long-term impacts to wildlife.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
	Threatened and Endangered Species	No effect to federal or state listed or candidate species.	May affect/not likely to adversely affect Indiana and Gray bat or the Ozark Hellbender.	Same as Alternative B.	Same as Alternative B.

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Table 2. continued

		ALTERNATIVE A — NO ACTION	ALTERNATIVE B — PREFERRED ALTERNATIVE — NEW FACILITY AT NE LOCATION	ALTERNATIVE C — NEW FACILITY AT SE LOCATION	ALTERNATIVE D — NEW FACILITY AT SW LOCATION
RESOURCE AREAS	Cultural Resources – Archeology and Cultural Landscape	Negligible short and long-term effect to archeological resources and cultural landscape resources.	Moderate, long-term adverse effect to archeological resources. Mitigation would involve additional subsurface testing as well as monitoring of ground disturbing activities associated with construction of a wastewater leach field and associated utility lines. Moderate, long-term, beneficial effect to the cultural landscape. Mitigation includes incorporating traditional Ozark architecture into building design, therefore negating adverse impacts to viewshed of the Cultural Landscape at Akers.	Moderate, long-term adverse effect to archeological resources. Mitigation would necessitate major data generation involving excavation of substantial areas and subsequent analysis of findings. Moderate long-term beneficial effect to the cultural landscape. Mitigation includes incorporating traditional Ozark architecture into building design, therefore negating adverse impacts to viewshed of the Cultural Landscape at Akers.	Moderate, long-term adverse effect to archeological resources. Mitigation required to reduce impact to cultural resources involves major data generation involving excavation of substantial areas and subsequent analysis of findings. Moderate, long-term, beneficial effect to cultural landscape. Mitigation includes incorporating traditional Ozark architecture into building design, therefore negating adverse impacts to viewshed of the Cultural Landscape at Akers.
	Visitor Experience	Moderate long-term adverse effect on visitor experience continued.	A negligible, short-term impact is expected on visitor use and experience. Following completion of facility would have a moderate, long-term beneficial effect Moderate, long-term beneficial impact on visitor services provided.	A minor, short-term negative impact is expected on visitor use and experience, however, following completion of the ranger station/visitor contact facility, a moderate, long-term beneficial effect is expected. Moderate, long-term beneficial impact on visitor services provided.	Same as alternative B.

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Table 2. continued

RESOURCE AREAS		ALTERNATIVE A — NO ACTION	ALTERNATIVE B — PREFERRED ALTERNATIVE — NEW FACILITY AT NE LOCATION	ALTERNATIVE C — NEW FACILITY AT SE LOCATION	ALTERNATIVE D — NEW FACILITY AT SW LOCATION
	Socioeconomics	Negligible short and long-term effect on socioeconomics.	Minor short-term beneficial effect becoming a negligible long-term effect to local businesses. Minor short-term adverse impact becoming a minor, long-term beneficial effect to the Akers concessioner. Negligible short and long-term effects to local economy.	Minor short-term beneficial effect becoming a negligible long-term effect to local businesses. Minor short term adverse impact becoming a minor long-term beneficial impact to Akers concessioner. Negligible short and long-term effect on local economy.	Same as Alternative B.
	Park Operations	Moderate long-term adverse effect on park operations at Akers.	Negligible short-term impact becoming a moderate long-term beneficial impact on park operations at Akers.	Same as alternative B.	Same as alternative B.

3.7 Environmentally Preferred Alternative

The environmentally preferred alternative is determined by applying the criteria suggested in NEPA, which is guided by the Council on Environmental Quality (CEQ). The CEQ provides direction that "...the environmentally preferable alternative is the alternative that would promote the national environmental policy as expressed in NEPA's Section 101." Using the six criteria from Section 101, it was determined that Alternative A, the No-Action Alternative, provides the greatest level of protection of resources of the alternatives evaluated in this EA.

Criterion 1 – Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.

Each of Alternatives B-D (build alternatives) offer negligible to major long-term impacts to natural and cultural resources at the Akers site. Without further mitigative measures, including other locations outside of existing archeological sites or higher treatment of septic effluent, Alternative A, the No-Action Alternative, currently offers the best adherence to this criterion in terms of continuity of high quality resources and avoidance of adverse, long-term, and lasting effects.

Criterion 2 – Assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings.

There is a compelling need to provide improved ranger, interpretive, and restroom services now and into the future, beyond those currently available to the staff and public visitors at Akers. Due to the high quality archeological, cultural landscape, and natural setting of the Akers site, maintaining these features at or above their current conditions is a goal of this

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criterion. Alternatives B, C, and D address this criterion from a staff and visitor services standpoint, though these provide adverse impacts, some significant, to the natural and cultural features.

Criterion 3 – Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.

The build alternatives, Alternatives B-D, each offer a much improved diversity of uses and experience for staff, visitors, and concession operations over Alternative A. Waysides, pamphlets, and other self-educational techniques would be available during and after staffed hours. Public restrooms with running water would replace existing facilities. Ranger staff would have adequate office space, security, storage, and connectivity to conduct their operations, while located in a site to provide for better public contact and services.

However, these uses as currently proposed within Alternatives B-D cannot occur without some degradation to the natural and cultural environment of Akers.

Criterion 4 – Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.

Despite archeological and cultural setting mitigation measures, significant long-term effects to both are anticipated with any build alternative. Therefore, Alternative A, the No-Action alternative best meets this criterion.

Criterion 5 – Achieve a balance between population and resource use that would permit high standards of living and wide sharing of life's amenities.

Alternative A would not permit high standards of living in terms of improved quality of NPS staff work space, availability of modern visitor restroom facilities, or improved visitor contact opportunities which permit the sharing of educational information and provide for safety services. The existing building also presents accessibility problems for physically challenged persons, including staff. Alternative B would best balance population and resource use, by providing services within an already disturbed area (old campground). Alternatives C and D would also provide a version of this balance, but with a higher degree of resource impact from a vegetation habitat perspective.

Criterion 6 – Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternatives B-D each allows the benefit of producing a more energy efficient structure than the current ranger station. However, the need to open some existing second-growth forest to construct leach field in Alternatives C and D would not “enhance the quality of renewable resources.” Thus, Alternative B would best meet this criterion.

3.8 Agency-Preferred Alternative

The Agency-Preferred Alternative is Alternative B - Build new ranger station/visitor contact facility on the NE corner of the junction of Highways K and KK and construct a septic system. The agency has chosen this build alternative because it fulfills the goals outlined in the purpose and need while causing the least amount of resource damage of the build alternatives. Issues having a strong impact on the decision making process were the

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significant archeological sites and the proximity to the Current River and the 100 year floodplain.

4.0 AFFECTED ENVIRONMENT

The Akers area, an historical hamlet located adjacent to the Current River in Shannon County, Missouri, has long been a central place at the junction of historic roads which are today Highways K and KK. The area sits on a toe slope and river terrace at the confluence of the Current River and Gladden Creek. The setting is a mosaic of open field on the river terrace, woodland on the upland slopes, and riparian buffer vegetation bordering Gladden Creek and the Current River. Current facilities include a concession store and canoe livery service, a mowed area historically used as an NPS campground, a ferry operation across the Current River, ranger office and maintenance sheds. The Akers Ferry area has earned a nomination and subsequent listing in the National Register of Historic Places for its significant archeological resources. Additionally, Akers Ferry is a nominee for the National Register of Historic Places as a hamlet vernacular landscape with its rolling landscape and rural character.

4.1 Impact Topics Selected for Analysis

The following topics were selected for further analysis: soils and groundwater, vegetation, surface water quality, wetlands and floodplain, wildlife, threatened and endangered species, cultural resources, visitor experience, socioeconomics, and park operations.

4.1.1 Soil and Groundwater Resources

The predominant soil type on the river terrace area is Bearthicket silt loam, a well drained soil with a seasonal high water table at a depth of more than 6 feet (CARES, 2005). The major soil group on the southwest facing slope to the west of the junction of Highways K and KK is Pomme fine silt loam, a well drained soil with a depth to bedrock greater than sixty inches (MDNR, 2005).

4.1.2 Vegetation

Located along the eastern valley wall, at the toe of a southwest-facing slope, the Akers site vegetation is primarily oak-hickory forest. Trees species typical of more mesic floodplain communities line the southwestern edge of the study area near the Current River, and include river birch, sycamore, and ash. The old campground area contains primarily pasture grasses, including tall fescue. The northeast corner of the project site is a recovering old field, with red cedar, box elder, and a variety of oaks.

4.1.3 Surface Water Quality

The Current River is designated as an Outstanding National Resource Water (ONRW) under Missouri's water quality standards. Any lowering of water quality is not permitted in these waters. The State of Missouri also designates losing streams, which have special protection regulations. A losing stream is one which loses a portion or all of its flow to the subsurface or underground discharge pathways. Gladden Creek is designated as a losing stream up to approximately the Hwy KK crossing (SESWW T31N R6W Sec 13).

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Water quality is generally excellent within the Current River, based on trends in surface water sampling from 1983 to present. The discharge of Current River and Gladden Creek average 333 cubic feet per second (cfs) and approximately 0.10 cfs, respectively, for the month of June for the data of record (USGS, 2005; NPS 2005).

4.1.4 Wetland/Floodplain

The Akers Ferry area has not been extensively mapped for wetlands under the U.S. Fish and Wildlife Service's National Wetlands inventory. Wetlands in this area are generally limited to riparian areas. Soils of the proposed site areas are moderately to well-drained.

The US Geological Survey (USGS) determined the 100-year and 500 year inundated area for the Akers site in 1990 (Alexander 1990). These delineations were refined using 2 foot site contours in 2005 by the NPS (see Figure 3). Flooding within the area is variable due to whether the Current River or Gladden Creek is the first to rise in a storm event.

4.1.5 Wildlife

The Akers Ferry site has a wildlife habitat mosaic of mowed fields, scattered hardwoods, and riparian forest adjacent to the Current River. This area is believed to support a relatively diverse number of forest wildlife species including white-tailed deer, raccoon, eastern cottontail rabbit, opossum, eastern chipmunk, striped skunk, eastern gray and fox squirrels, wild turkey, Northern bobwhite, and a variety of songbirds.

The mowed visitor use area containing a few scattered trees, provides limited foraging habitat for songbirds and species such as the white-tailed deer and eastern gray squirrel. Nesting opportunities for songbirds are limited to the scattered trees contained within the site and the forest edges along the periphery of the site. Due to its disturbed nature, the lack of natural vegetative cover, and intensive human activity, the value of this site to wildlife is limited.

A gravel parking area and sycamore-birch forest has some wildlife value. The forest fringe bordering this site provides nesting and foraging opportunities for a variety of wildlife species and provides cover for migratory birds during the spring and fall.

A portion of mid successional oak-hickory forest, supports the greatest diversity of wildlife species. Some wildlife species commonly occurring in this habitat type include the yellow-throated warbler, wood thrush, red-shouldered hawk, Cooper's hawk, eastern gray squirrel, and white-tailed deer.

4.1.6 Threatened and Endangered Species

Ozark NSR supports six federal and state listed threatened, endangered or candidate status species. They are the federally listed Indiana bat (*Myotis sodalis*), gray bat (*Myotis grisescens*), bald eagle (*Haliaeetus leucocephalus*), and federal candidate Ozark hellbender (*Cryptobranchus alleganiensis bishopi*), and in addition, the state endangered swainson's warbler (*Limnothlypis swainsonii*) and plains spotted skunk (*Spilogale putorius interrupta*).

No state or federally listed species have been recorded from the proposed sites. The federal candidate species Ozark Hellbender has been recorded in the Current River downstream from the Akers Ferry crossing site.

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4.1.7 Cultural Resources – Archeology and Cultural Landscapes

The Akers area has long been occupied by human populations. Archeological research in the area has demonstrated that prehistoric Native Americans lived there at least as early as 10,000 years ago. The area has attracted human populations for millennia due to its location at the juncture of Gladden Creek with the Current River. Throughout prehistoric and historic times there has been almost continuous occupation of the high alluvial landform between these two streams. Adjacent ridgetops were employed for mortuary practices evidenced by the presence of stone cairns.

Archeological investigations have revealed that Euro-American settlement occurred there as early as 1830. And, throughout the latter half of the 19th century, the area served as a crossing point on the Current River as well as a small hamlet. Because of these abundant and significant cultural resources, the area was nominated for inclusion in the National Register of Historic Places and was subsequently approved to hold that status.

4.1.8 Visitor Experience

Traffic counters at the junction of Missouri Highways K and KK have recorded monthly totals of 12-15 thousand vehicles per month during the core visitor season from Memorial Day to Labor Day. Visitor counts during the off season range from 1000-3500/monthly.

The need for increased education and interpretive services was brought up in the 1984 General Management Plan and the 1993 Draft Revised Akers Ferry Development Concept Plan/Environmental Assessment. The 1984 GMP states that at Akers Ferry “(t)he interpretive features are somewhat limited” and makes no suggestions of improvements on this topic (NPS 1984). In the 1993 Draft Revised Akers Ferry Development Concept Plan/EA, multiple alternatives were presented addressing a variety of issues concerning the development of Akers. This document states the following:

“The new visitor contact/ranger station would enhance the NPS presence at the river, the focal point for visitor activity, and enable staff to better assist visitors. The structure would house NPS interpretive, orientation, and safety displays, public restrooms, a sales area operated by the Ozark National Riverways association that includes local crafts and administrative work space for NPS and cooperative association staff. Short-term parking, including parking for visitors with disabilities, would be available so visitors could pick up maps and safety information and see interpretive exhibits. Information kiosks would be installed near the new concessioner store, at the campground, and at the river entry points to provide essential orientation and safety information to people who do not use the new visitor contact/ranger station” (NPS 1993).

Both documents provide good guidelines for the developments of the Akers area.

4.1.9 Socioeconomics

The primary reason for visitors coming to Akers is to float the Current River. There is currently one concessioner renting canoes, tubes and rafts directly from the Akers store. There are nine concessioners with approximately 1,250 canoes and kayaks who have permits with the NPS to put-in or take-out at the Akers site. These concessioners are primarily local businesses, some of which have been operating on the Current River for generations. In addition to concessioners, there are three outfitters that guide clients on the Current River for fly-fishing.

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4.1.10 Park Operations

The Akers area presently contains a group campground, concession store, canoe rental, picnic day use area, two vault toilets, two canoe/tube launch areas, Mt. Zion historical church and administrative facilities in the form of a maintenance area and a ranger station. There are two large parking areas in the old abandoned family campground and on the Gladden Knoll.

Throughout the park, and particularly at Akers because of its high visitor use statistics, there has been an increased level of aberrant behavior associated with alcohol and drug use. The Akers sub-district, which includes the primitive and back country areas of Flying W and Cedargrove, has consistently led the park in documented cases of illegal possession of drugs, alcohol, and disorderly conduct as well as crimes related to natural resource issues. The ONSR has been averaging close to 1000 citations and 25 physical arrests per year for several years. Approximately 20% of those issues occur each year in the Akers sub-district.

At one time the Akers area included a large 82 site family campground. Now closed, this area is presently mowed but camping is not allowed.

5.0 ENVIRONMENTAL CONSEQUENCES

This section of the EA forms the scientific and analytic basis for the comparisons of alternatives as required by 40 CFR 1502.14. This discussion of impacts (effects) is organized in parallel with Section 4.0 (Affected Environment) and is organized by resource area. For each resource area, a brief description of the methodologies used to evaluate the impacts is presented, followed by discussions of the No-Action Alternative and each action alternative. To the extent possible, the direct, indirect, short-term, long-term, beneficial, and adverse impacts of each alternative are described for each resource area. Cumulative impacts are discussed in the context of the definition given in 40 CFR 1508.7.

The impact analysis involved the following steps:

- Identifying the area that could be affected.
- Comparing the area of potential effect with the resources selected for evaluation.
- Identifying the intensity (negligible, minor, moderate or major), context (Are the effects site-specific, local, or even regional?), duration (Are the effects short-term or long-term?), and type (direct or indirect) of effect, both as a result of this action and from a cumulative effects perspective. Identifying whether effects would be beneficial or adverse. The criteria used to define the intensity of impacts associated with the analyses are presented in the methodologies of the individual impact topics.
- Identifying mitigation measures that may be employed to offset or minimize potential adverse impacts.

The impact analyses were based on professional judgment using information provided by park staff, relevant references and technical literature citations, and subject matter experts.

Impairment Analysis—The following excerpt is taken from the National Park Service Management Policies 2001 section 1.4.5, “What Constitutes Impairment of Park Resources and Values.”

“The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

“An impact to any park resource or value may constitute impairment. Impairment may result from National Park Service activities in managing the park, from visitor activities, or from activities undertaken by concessioners, contractors, and others operating in the park. Impairment of resources can also occur from activities occurring outside park boundaries. An impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the ONSR;
- Key to the natural or cultural integrity of the ONSR or to opportunities for enjoyment of the park; or

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- Identified as a goal in the park's general management plan or other relevant National Park Service planning documents.” (NPS 1991)

Using these guidelines, resource specialists analyze potential effects to determine whether or not actions would impair park resources or values.

Cumulative Impacts: The CEQ regulations, which implement NEPA, require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” (40 CFR 1508.7).

Intensity, Duration, and Type of Impact—Intensity thresholds are evaluated on a continuum scale from barely detectable (negligible) to substantial alteration of current conditions (major) with certain measurable milestones in between (minor and moderate). Duration of impacts are evaluated based on the short-term or long-term nature of alternative-associated changes on existing conditions. Type of impact refers to the beneficial or adverse consequences of implementing a given alternative. More exact interpretations of intensity, duration, and type of impact are given for each resource area examined. Professional judgment is used to reach reasonable conclusions as to the intensity and duration of potential impacts.

5.1 Soil and Groundwater Resources

Methodology

Field site mapping from state soil scientist, Statsgo II GIS shapefiles, leach field construction soil morphology report, and various references on leach field structure and functioning were used. Findings of these assessments and professional knowledge of park Natural Resource Management Specialist were used to estimate the effects of the actions on the soil and groundwater resources.

Thresholds for Intensity, Duration, and Type of Impact:

- **Negligible**—Soil and groundwater resources would not be affected or effects would be below or at the lower levels of detection. Any effects to soil erosion or productivity and groundwater quantity or quality would be slight and no long-term effects would occur.
- **Minor**—The effects to soil and groundwater resources would be detectable. Effects to soil erosion potential or productivity and groundwater flow quantity or quality would be small, as would be the area affected. If mitigation were needed to offset adverse effects, it would be relatively simple to implement and would likely be successful.
- **Moderate**—The effect on soil erosion potential or productivity and groundwater quantity or quality would be readily apparent and likely long-term. The resulting change to soil character would cover a relatively wide area and the change to groundwater would be persistent. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.
- **Major**—The effect on soil productivity and groundwater quality would be readily apparent, long-term, and substantially change the character of the soils over a large area and impact local groundwater flow and/or quality in and out of the monument.

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Mitigation measures to offset adverse effects would be needed, extensive, and their success could not be guaranteed.

- **Duration:**
 - **Short-Term**—Lasting only during the construction period or no longer than the first growing season thereafter
 - **Long-Term**—A permanent post-construction impact.

ALTERNATIVE A – No-Action Alternative

Analysis: The No-Action Alternative would leave the existing Akers site unchanged in terms of surface or subsurface soil disturbance. Erosion or soil productivity would not be of concern since existing vegetative cover would remain unchanged. No alteration of groundwater conditions would occur.

Cumulative Impacts: The No-Action Alternative would result in no construction within the proposed site locations, having no cumulative effects with historic or current facility and operations.

Conclusion: The No-Action Alternative would have negligible short-term and long-term impacts on soils or groundwater at the Akers site.

Impairment: There would be no impairment of the soil or groundwater resources from Alternative A.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: Activities associated with Alternative B would involve construction of a ranger station/visitor contact facility, parking lot, utility lines, and septic system within the mowed area at the Akers site. Construction activities would disturb approximately 2.0 acres during building of the new facility, placement of septic tanks, utility lines, and construction of leach field and involve the excavation and then replacement of approximately 717 cubic yards of soil. Of the 2.0 acres disturbed, 1.75 acres would be revegetated, reducing long-term soil erosion. During and following construction, soil erosion control measures would mitigate runoff potential. Construction of a 1.0 acre parking lot would involve gravel placed on top of existing soils rather than their loss from excavation.

Leach field operations would result in an additional maximum discharge to subsurface soils of 3000 gallons per day (gpd). Soil morphology tests at the proposed leach field location show soils appear suitable for a conventional system as planned. Leach fields are a widely accepted and efficient means of disposing of waste water. However, in the recent past it has been found that low levels of certain chemicals and hormones may not be removed from wastewater via traditional methods of purification. With this knowledge, when nutrients and/or contaminants are not removed by soil absorption or decomposition, some nutrients may reach groundwater, and ultimately surface water resources.

Cumulative Impacts: The Akers site currently is a crossroads area, containing 2 state highways, buildings, concession operation, campground opening, river access, and ferry crossing. Additional soil disturbance to the area from the proposed activities would be moderately augmented by the proposed additions of a structure and leach field, but would utilize existing open areas and roads to minimize effects. Current distributed parking would be consolidated into a graveled lot. Long-term soils impacts would be restricted to leach field operation. Groundwater effects would be long-term, due to subsurface discharge from the leach field.

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Conclusion: Alternative B would have moderate short and long-term adverse impacts on the soils and groundwater resources at the Akers site.

Impairment: There would be no impairment of the terrace soils, but impairment to groundwater resources may result from subsurface leach field discharge.

ALTERNATIVE C – New Facility at SE Location

Analysis: Activities associated with Alternative C would involve construction of a ranger station/visitor contact facility, parking lot, and septic system adjacent to the existing concession store and on a nearby slope. Construction activities would disturb approximately 2.0 acres during building construction, placement of septic tanks, and construction of leach field. Of this, 1.75 acres would be revegetated. This alternative would result in excavation and replacement on-site of 736 cubic yards of soil for development of the building, leach field, utilities, and piping between the tanks and the leach field. Soils excavated for the septic system would be placed back into the excavated sites.

Addition of the leach field operation would add a persistent potential source of nutrients to groundwater where not removed by soil adsorption or vegetative uptake. Septic tanks and leach field systems are widely accepted means of dealing with waste water. As discussed in Alternative B, low levels of hormones and other contaminants may not be removed from wastewater via traditional methods of purification. In the event that these contaminants make it to the surface water, they would more than likely be found in small amounts and may even be undetectable.

Cumulative Impacts: Alternative C would concentrate the grouping of structures within the landscape by placing a new facility adjacent to the existing concession store, within an unpaved parking area, thereby minimizing effects to undisturbed soils. Placement of the leach field would require new soil disturbance and clearing within a reforested area. The existing ranger station leach field would be abandoned, and would not be cumulative with the proposed site.

Conclusion: Due to the installation and operation of a leach field, Alternative C would have moderate short and long-term impacts on the soils and groundwater resources at the proposed site.

Impairment: There would be no impairment of the footslope soils, but impairment of groundwater resources would result from addition of the leach field.

ALTERNATIVE D – New Facility at SW Location

Analysis: Activities associated with Alternative D are similar to Alternative C and would involve construction of ranger station/visitor contact facility, parking lot, and septic system across from the existing concession store and on a nearby shoulder slope. This alternative would require excavation and refilling of 743 cubic yards of soil and disturb approximately 2.0 acres. Of this, 1.75 acres would be revegetated, reducing any long-term soil erosion. As discussed in Alternatives B and C, addition of the leach field operation would add a persistent potential source of nutrients to groundwater where not removed by soil adsorption or vegetative uptake.

Cumulative Impacts: Same as Alternative C.

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Conclusion: Same as Alternative C.

Impairment: Same as Alternative C..

5.2 Vegetation

Methodology

An on-site visit, GIS data of ecological land types, Natural Heritage Database data, and the professional knowledge of the park's Natural Resource Management Specialist were combined to estimate the effects of the proposed actions on vegetation.

Thresholds for Intensity, Duration, and Type of Impact:

- **Negligible**— Direct or indirect impacts would have perceptible but small changes in native terrestrial plant community size, integrity, or continuity.
- **Minor**—Disturbance of regionally typical native terrestrial plant communities would be limited to under one acre for terrestrial communities and to highly localized areas of small tributaries to the Current River.
- **Moderate**—Disturbance from 1 to 5 acres of regionally typical native terrestrial plant communities would occur.
- **Major**—Disturbance of more than five acres of regionally typical terrestrial plant community or any acreage of federally listed plant species.
- **Duration:**
 - **Short-Term**—Complete disturbance recovery in less than five years.
 - **Long-Term**—Disturbance recovery requiring more than five years to return to pre-disturbance level.

ALTERNATIVE A – No-Action Alternative

Analysis: Existing mowed and wooded areas with the Akers area would not be affected by the No-Action Alternative. Existing activities involving campground mowing would continue.

Cumulative Impacts: Because no changes to existing vegetation management activities are expected, cumulative impacts on vegetation resources from Alternative A would be negligible.

Conclusion: Alternative A would have a negligible short and long-term impact on the terrestrial vegetation communities.

Impairment: There would be no impairment of the park's vegetation resources or values from Alternative A.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: Alternative B activities would disturb 2.0 acres of mowed grasses from construction of a building and septic system. 1.75 acres would be revegetated to pre-disturbance vegetation and native landscaping. This alternative would also cover mowed grass with gravel for a 1.0 acre parking lot.

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Cumulative Impacts: Historic vegetation management at the Alternative B site has been annual mowing and campground activities. The addition of the proposed building and leach field will not further impact the quality of the site vegetation. The building site itself would be revegetated with native grass and landscaping species, the cumulative impacts from Alternative B on vegetation resources would be negligible, or improved.

Conclusion: Alternative B would have a negligible short and long-term impact on terrestrial vegetation communities in the Akers vicinity.

Impairment: There would be no impairment of the park's vegetation resources or values from Alternative B.

ALTERNATIVE C – New Facility at SE Location

Analysis: Alternative C would require the placement of a pipe trench and leach field in a mosaic of shrub and mixed deciduous hardwood forest. The 0.5 acre disturbance would be seeded with grass and maintained as a mowed area thus creating an opening within the forested area. The new building site would be landscaped with native species, increasing the currently non-vegetated area by 0.75 acres.

Cumulative Impacts: Building construction at this site would be within a graveled parking area, and therefore would not cumulatively impact vegetation. Leach field development would create an opening of shrub vegetation within a currently forested slope, cumulatively adding to the dispersion of developed areas within the Akers landscape.

Conclusion: Alternative C would have a minor short and long-term adverse impact on mixed deciduous hardwood forest community in the Akers vicinity.

Impairment: There would be no impairment of the park's vegetation resources or values from Alternative C.

ALTERNATIVE D – New Facility at SW Location

Analysis: Alternative D activities are similar to Alternative C in that construction of the septic system would involve the placement of a pipe trench and leach field in mowed grass, shrub and wooded habitat creating a 0.5 acre mowed clearing in the forest. Similarly, the proposed site for the new building is currently vegetated partially by mowed grass and partly by woodland. Following construction activities this area would be landscaped with native species. The new building site would be revegetated, increasing the currently non-vegetated area by 0.75 acre.

Cumulative Impacts: While the construction of the building would primarily impact a mowed roadside buffer, the leach field placement would create an opening of shrub vegetation within a currently forested slope, cumulatively adding to the dispersion of developed areas within the Akers landscape.

Conclusion: Alternative D would have minor short and long-term adverse impacts on terrestrial vegetation communities in the Akers vicinity.

Impairment: There would be no impairment of the park's vegetation resources or values from Alternative D.

5.3 Surface Water Quality

Methodology

An on-site visit, NPS surface water quality datasets, USGS gage data, on-site discharge measurement of Gladden Creek, various leach field operation references and professional knowledge were combined to estimate the effects of the proposed alternatives on surface water quality.

Thresholds for Intensity, Duration, and Type of Impact

- **Negligible**—Very slight changes in surface water quality or hydrology. Impacts barely detectable.
- **Minor**—Changes in surface water quality or hydrology would be measurable, although the changes would likely be small and the effects would be localized. No mitigation measures would be necessary.
- **Moderate**—Changes in surface water quality and/or hydrology would be measurable and potentially long-term but would be relatively local. Mitigation measures would be necessary and would be effective.
- **Major**—Changes in surface water quality and/or hydrology would be measurable, long-term, and broad-scale. Mitigation measures would be necessary and their success would not be guaranteed.
- **Duration:**
 - **Short-Term**—Recovery in less than a year.
 - **Long-Term**—Permanent post-construction impact.

ALTERNATIVE A – No-Action Alternative

Analysis: The No-Action Alternative would not change the amount or location of impervious surfaces, the existing drainage patterns, or the quality or quantity of storm water discharged from the Akers area to the Current River or Gladden Creek. No sub-surface discharge would be added via a septic system.

Cumulative Impacts: Because no changes are anticipated to existing conditions, cumulative impacts from Alternative A on surface water quality or quantity would be negligible.

Conclusion: The No-Action alternative would have a negligible short and long-term impact on the Current River or Gladden Creek.

Impairment: There would be no impairment of the park's surface water resources or values from Alternative A.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: Alternative B would add a new building, gravel parking lot, and septic system to the river terrace area. Apart from the building, no impervious areas would be added. Existing surface topography would be changed slightly for the leveling of the building, but surface drainage patterns should remain relatively unchanged, therefore storm water discharge from the site should not be significantly increased. The placement of the parking lot would encourage greater vehicular use and increase automotive fluid concentrations during runoff.

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Nutrients are potential input from a septic system to groundwater. The subsurface discharge of a maximum of 3000 gpd would add nutrients to soils, portions of which may eventually leach to groundwater and potentially to surface water. During times of soil inundation (i.e. the spring season), there is a greater chance that septic discharge would percolate through the soil without other constituents, including pathogens and contaminants, being removed.

Cumulative Impacts: This Alternative would slightly increase the cumulative effect of runoff from impervious surfaces at Akers with the construction of a building, but not significantly so. An increase in nutrient loading to groundwater and ultimately surface water may occur through leaching.

Conclusion: Alternative B would have a negligible short-term and moderate long-term adverse effect to surface water quality.

Impairment: There will be no impairment of surface water quality to either Gladden Creek or the Current River due to the successful mitigation efforts of a leach field wastewater treatment facility.

ALTERNATIVE C – New Facility at SE Location

Analysis: Alternative C would add a new building, gravel parking lot, and septic system adjacent to the existing concession store and on nearby shoulder slopes. Apart from the building, no impervious areas would be added. Existing surface topography would be leveled slightly for construction of the building and planning for storm water discharge patterns should take the adjacent concession store into consideration. The placement of the parking lot would encourage greater vehicular use and increase automotive fluid concentrations during runoff.

Subsurface discharge of a maximum of 3000 gpd from the leach field would add nutrients to soils on the shoulder slope, potentially leaching to groundwater and surface water. The soil located at the leach field site of Alternative C is Pomme silt loam, a well-drained soil (MDNR, 2005). The ability of water to drain through the soil faster will reduce the absorption of effluent at this site as opposed to the other proposed site.

Cumulative Impacts: The leach field in this Alternative may add a subsurface discharge along the slopes bordering the Current River, clustering with surface runoff from park facilities and operations in the Akers corridor.

Conclusion: Alternative C would have a negligible short-term and moderate long-term adverse effect to surface water quality.

Impairment: If mitigated by leach field function, there will be no impairment of surface water quality to the Current River from subsurface discharge.

ALTERNATIVE D – New Facility at SW Location

Analysis: Alternative D would add a new building, gravel parking lot, and septic system to the river terrace and side slope area of the SW corner of Highways K and KK. Apart from the building, no impervious areas would be added. Existing surface topography would be leveled slightly for the construction of the building, but surface drainage patterns should remain relatively unchanged. Storm water discharge from the site should consider the adjacent drainage ditches from Highway K. The placement of the parking lot would encourage greater vehicular use and increase automotive fluid concentrations during runoff.

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Since the leach field location for Alternative D is the same as Alternative C, the analysis of the leach field location is the same as that under the Analysis of Alternative C. Subsurface discharge of a maximum of 3000 gpd from the leach field would add nutrients to soils on the shoulder slope, potentially leaching to groundwater and surface water. The soil located at the leach field site of Alternative C is Pomme silt loam, a well-drained soil (MDNR, 2005). The ability of water to drain through the soil faster will reduce the adsorption of effluent at this site as opposed to the other proposed site.

Cumulative Impacts: Same as Alternative C.

Conclusion: Same as Alternative C.

Impairment: Same as Alternative C.

5.4 Wetlands and Floodplain

Methodology

On-site visits, USGS floodplain delineation maps, NPS refinement of floodplain delineation (2 foot contour base), National Wetland Inventory mapping and professional knowledge were used to estimate the effects of the actions in the various alternatives.

Thresholds for Intensity, Duration, and Type of Impact:

- **Negligible**—Wetlands or “other waters of the U.S.” neither directly impacted by fill nor indirectly impacted by changes in drainage patterns. 100-yr floodplain not developed.
- **Minor**—Wetlands filled below nationwide Permit thresholds (0.1 acre fill or less) and/or indirect impacts from changes in drainage patterns. Developments within 100-yr floodplain restricted to minor facilities of 0.5 acre or less, which directly require proximity to stream course.
- **Moderate**—Fill of 0.1—0.5 acre of wetland requiring a Nationwide Permit with mitigation and/or indirect impacts on wetlands of exceptional high quality from changes in drainage patterns. 100-yr floodplain developments of between 0.5 and 1 acre which may not directly require proximity to stream course.
- **Major**—Fill of any size of wetlands of exceptional quality and/or any other wetlands requiring an individual Section 404 permit with mitigation (greater than 0.5 acre of impact). Floodplain developments greater than 1.0 acre which do not directly require proximity to stream course.
- **Duration:**
 - **Short-Term**—Impacts from temporary modifications to surface flows to wetland and floodplain areas during construction.
 - **Long-Term**—Permanent construction/post-construction impacts to wetlands or 100-yr floodplain either directly through fill/development or indirectly through drainage changes.

ALTERNATIVE A – No-Action Alternative

Analysis: Alternative A does not propose any activities or developments in wetlands or 100-yr floodplain areas. There would be no new facilities and no change in existing operations.

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Cumulative Impacts: Alternative A would not impact wetlands or floodplains because no changes in facilities or function are proposed.

Conclusion: Alternative A would have negligible short and long-term impacts to wetlands or the floodplain.

Impairment: There would be no impairment to wetland or floodplain resources from Alternative A.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: Within Alternative B, the location of all proposed facilities would be above the 100-yr floodplain of Gladden Creek. No wetlands are known from any of the proposed construction areas.

Cumulative Impacts: Alternative B would not place any facilities within the 100-yr floodplain and would therefore have no cumulative effects with existing structures which currently lie within this zone.

Conclusion: Alternative B would have negligible short and long-term impacts to the floodplain or wetlands.

Impairment: There would be no impairment to floodplain or wetland resources from Alternative B.

ALTERNATIVE C – New Facility at SE Location

Analysis: Alternative C proposes placement of the new ranger station/visitor contact facility above the 100-yr floodplain. The leach field would also be located outside of the floodplain. No wetlands are within the proposed construction areas.

Cumulative Impacts: Alternative C would not place any facilities within the 100-yr floodplain and would therefore have no cumulative effects with existing structures which lie within this zone.

Conclusion: Alternative C would have negligible short and long-term impacts to wetlands or floodplains.

Impairment: There would be no impairment to wetland or floodplain resources from Alternative C.

ALTERNATIVE D – New Facility at SW Location

Analysis: Alternative D does not propose any activities or developments in wetlands or 100-yr floodplain areas.

Cumulative Impacts: Alternative D would not impact wetlands or add facilities within the floodplain.

Conclusion: Alternative D would have negligible short and long-term impacts to wetlands or floodplain.

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Impairment: There would be no impairment to wetland or floodplain resources from Alternative D.

5.5 Wildlife

Methodology

On-site visits, Ecological Classification System data, cave data, wildlife references, and professional knowledge were used to estimate the effects of the proposed actions in the various alternatives.

Thresholds for Intensity, Duration, and Type of Impact:

- **Negligible**— Wildlife would not be affected or the effects would be at or below the level of detection, would be short-term, and the changes would be so slight that they would not be of any measurable or perceptible consequence to the wildlife species' population.
- **Minor**—Disturbance of native terrestrial and/or aquatic wildlife habitat would be limited to less than one acre for terrestrial communities and to highly localized aquatic areas of small tributaries to the Current River.
- **Moderate**—Disturbance of regionally typical native terrestrial and/or aquatic wildlife habitat would occur. The area of disturbance would be from one to five acres of terrestrial habitat and the localized areas along length of a Current River tributary from the point of construction disturbance to the Current River.
- **Major**—Disturbance of more than five acres of regionally typical terrestrial wildlife habitat. Disturbance of both a tributary of the Current River and a measurable portion of the Current River itself.
- **Duration:**
 - **Short-Term**—Complete disturbance recovery in less than five years.
 - **Long-Term**—Disturbance recovery requiring more than five years to return to pre-disturbance levels.

ALTERNATIVE A – No-Action Alternative

Analysis: The No-Action Alternative proposes no changes to the facilities or operations at the Akers site. Grasses within the historic campground area would continue to be mowed. This alternative would not modify current wildlife habitat or use patterns.

Cumulative Impacts: No activities from this Alternative would modify existing wildlife use within the Akers area.

Conclusion: There would be negligible short and long-term impacts to wildlife from Alternative A.

Impairment: There would be no impairment of wildlife resources from Alternative A.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: Alternative B would include soil, structural, and operational changes to the proposed site. Soils would be enriched, growing more nutrient rich grasses to attract browsers. Construction of a new building would encourage greater human activities in the daytime and evening hours. A security night light may increase insect and foraging by bats and birds. Human activity may discourage small and mid-size mammal activity within the field.

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Cumulative Impacts: When combined with the mowed area, canoe parking and activity, this Alternative may discourage wildlife due to increase in human activity, mainly during summer months.

Conclusion: There would be negligible short and long-term impacts to park and regional wildlife from activities associated with Alternative B.

Impairment: There would be no impairment to the wildlife resources from Alternative B.

ALTERNATIVE C – New Facility at SE Location

Analysis: Alternative C would locate a new facility and parking lot immediately adjacent to an existing building. Because of the activity at the current concession store, and the lack of habitat at the proposed ranger station/visitor use facility sites, the likely impacts to available wildlife habitat and use patterns would be small. The septic system would remove 0.5 acres of wooded vegetation and replace it with grass temporarily. Succession to wooded communities and small area of vegetation removed within the forest matrix would minimize impacts.

Cumulative Impacts: May expect that very localized use by woodland species of the area where trees and shrubs are removed for septic system construction would change to primary succession species, but would progress as mature vegetation re-grows. Mitigation would include periodic inspection of site to retard pioneering of non-native species.

Conclusion: There would be negligible short and long-term impacts to park and regional wildlife from activities associated with Alternative C.

Impairment: There would be no impairment to the wildlife resources from Alternative C.

ALTERNATIVE D – New Facility at SW Location

Analysis: Alternative D would place a new facility and parking lot straddling a mowed buffer strip along the gravel road leading to the boat access and adjacent woodland. Because of current activity at the concession store, boat access, and Highway K traffic, the likely impacts to undisturbed wildlife habitat and use patterns would be relatively small. The septic system would remove 0.5 acres of wooded vegetation and replace it with grass temporarily. Succession to wooded communities and small area of vegetation removed within the forest matrix would minimize impacts.

Cumulative Impacts: May expect that very localized use by woodland species of the area where trees and shrubs are removed for the building and septic system construction would change to primary succession species, but would progress as mature vegetation re-grows. Mitigation would include periodic inspection of site to retard pioneering of non-native species. A security night light may attract a nighttime insect concentration and increase foraging by bats and birds at the site.

Conclusion: There would be negligible short and long-term impacts to park and regional wildlife from activities associated with Alternative D.

Impairment: There would be no impairment to the wildlife resources from Alternative D.

5.6 Threatened and Endangered Species

Methodology

On-site visits, Missouri Natural Heritage Data, herpetological inventory data, Hellbender Working Group experience, cave data, riparian bird inventories, Fire Plan environmental assessment information, and professional knowledge were used to estimate the effects of the actions in the various alternatives.

The Endangered Species Act terminology used to assess impacts to listed species follows:

- **No effect:** When a proposed action would not affect a listed species or designated critical habitat.
- **May affect/not likely to adversely affect:** Effects on special status species or designated critical habitat are discountable (i.e., extremely unlikely to occur and not able to be meaningfully measured, detected, or evaluated) or completely beneficial.
- **May affect/likely to adversely affect:** When an adverse effect to a listed species or designated critical habitat may occur as a direct or indirect result of proposed actions and the effect is either not discountable or completely beneficial.
- **Is likely to jeopardize proposed species/adversely modify proposed critical habitat:** The appropriate conclusion when the National Park Service or the U.S. Fish and Wildlife Service identify situations in which the proposed activities could jeopardize the continued existence of a proposed species or adversely modify critical habitat to a species within or outside park boundaries.

ALTERNATIVE A – No-Action Alternative

Analysis: The current situation at Akers has no known effect on federally listed or candidate species, therefore, Alternative A, the no-action alternative, would continue to have negligible effects.

Cumulative Impacts: Because no changes to existing ranger operations are expected, cumulative impacts on protected species would be negligible.

Conclusion: There would be no effect on federal or state listed or candidate species.

Impairment: There would be no impairment to federal or state listed or candidate species.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: Due to the current mowed vegetation at the Alternative B site, no trees which may provide Indiana bat roosting sites are proposed to be removed. The addition of a new night light may attract a nighttime concentration of insects, potentially causing a small increase in foraging activity of bats at the site during the summer months. To reduce unnatural foraging of insects by bats and to protect nightsky resources, security lighting associated with new ranger station/visitor contact facility would be recessed in the roof over the porches.

There is some preliminary evidence that endocrine disrupters may affect Ozark hellbenders, but more work is needed to understand this relationship and whether leach fields may be a source. Since this is a young and controversial science, the ability to correctly identify impacts to the hellbender is inconclusive.

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Cumulative Impacts: The proposed activities would add a new potential source of septic discharge to the subsurface area, potentially reaching the surface water. Added lighting to the existing night lights associated with the concession store would increase opportunities for insect foraging by bats. Mitigation efforts as described in the analysis would be followed to reduce this unnatural foraging and to protect nightsky resources.

Conclusion: Alternative B may affect/not likely to adversely affect the Indiana and Gray bat and Ozark Hellbender.

Impairment: There would be no impairment to federal or state listed or candidate species.

ALTERNATIVE C – New Facility at SE Location

Analysis: While building construction would not affect potential roosting tree habitat, clearing for the proposed leach field site would require removal of trees within the valley corridor. This may remove some trees with roost potential, which tend to be greater than 9 inches in diameter at breast height (dbh) (greater than 20 inches dbh is optimal), with loose bark. A new night light may attract a nighttime concentration of insects, potentially increasing foraging activity of bats at the site during the summer months.

As stated in the analysis of Alternative B, there is some preliminary evidence that endocrine disrupters may affect Ozark hellbenders, but more work is needed to understand this relationship and whether leach fields may be a source.

Cumulative Impacts: This alternative would increase the amount of cleared area within the Akers vicinity by 0.5 acres, minimally reducing roosting habitat available to bats.

Conclusion: Alternative C may affect/not likely to adversely affect the Indiana and Gray bat and the Ozark Hellbender.

Impairment: There would be no impairment to federal or state listed or candidate species.

ALTERNATIVE D – New Facility at SW Location

Analysis: Same as Alternative C.

Cumulative Impacts: Same as Alternative C.

Conclusion: Same as Alternative C.

Impairment: There would be no known impairment to federal or state listed or candidate species.

5.7 Cultural Resources – Archeology & Cultural Landscape

This topic includes an analysis of the archeological resources located at the three locational alternatives and the cultural landscape in the Akers area, including features listed in the National Register of Historic Places.

Methodology

Archeologists from the Midwest Archeological Center, Lincoln, Nebraska have conducted Phase II cultural resource assessment in the form of subsurface excavations in the Akers

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District. Findings from these assessments combined with Park Archeologist knowledge were used to estimate the effects of the actions on the archeology resource. Park Archeologist knowledge combined with personal observation was used to estimate the effects of the actions on the vernacular landscape, including the Ozark Hamlet.

Thresholds for Intensity, Duration and Type of Impact:

- **Negligible**—Impact is at the lowest levels of detection, barely perceptible, and not measurable.
- **Minor—Adverse:** disturbance of archeological site(s) and/or alteration of a pattern(s) or feature(s) of the landscape results in little, if any, loss of integrity. The determination of effect for Section 106 would be *no adverse effect*. **Beneficial:** maintenance and preservation of an archeological site(s). For Cultural Landscapes, landscape patterns and features preserved in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. The determination of effect for Section 106 would be *no adverse effect*.
- **Moderate—Adverse:** disturbance of archeological site(s) and/or alteration of a pattern(s) or feature(s) of the landscape would result in an overall loss of integrity. The determination for Section 106 would be *adverse effect*. A memorandum of agreement is executed among the National Park Service and applicable state or tribal historic preservation officer and, if necessary, the Advisory Council on Historic Preservation in accordance with 36 CFR 800.6(b). Measures identified in the MOA to minimize or mitigate adverse impacts reduce the intensity of impact under NEPA from major to moderate. **Beneficial:** stabilization of a site and/or rehabilitation of a landscape or its patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. The determination of effect for Section 106 would be *no adverse effect*.
- **Major—Adverse:** disturbance of archeological site(s) and/or alteration of a pattern(s) or feature(s) of the landscape would result in an overall loss of integrity. The determination of effect for Section 106 would be *adverse effect*. Measures to minimize or mitigate adverse impacts cannot be agreed upon and the National Park Service and applicable state or tribal historic preservation officer and/or Advisory council are unable to negotiate and execute a memorandum of agreement in accordance with 36 CFR 800.6(b). **Beneficial:** active intervention to preserve a site and/or restore a landscape or its patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. The determination of effect for Section 106 would be *no adverse effect*.
- **Duration:**
 - **Short-Term**—Disturbance only during construction activities.
 - **Long-Term**—Disturbance lasting longer than construction activities.

ALTERNATIVE A – No-Action Alternative

Analysis: Since no actions would occur there would be no impact to the present Akers Cultural Landscape.

Cumulative Impacts: Since there would be no adverse impacts with this alternative, no mitigative measures are mandated.

Conclusion: This alternative would have a negligible short and long-term effect on cultural resources located at Akers.

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Impairment: Given no action there would be no impairment to any archeological or cultural landscape resource.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: This proposed location is known to contain abundant prehistoric archeological deposits of substantial depth, covering a long time span. This area is inside the Akers District listed in the National Register of Historic Places. Construction of a structure and the associated leach field as well as buried utility lines would adversely impact subsurface archeological deposits. No historic structure lies in the direct impact zone of this alternative. One structure would be introduced but it is designed with a traditional Ozark architectural scheme and would not adversely impact the viewshed of the Cultural Landscape at Akers.

Cumulative Impacts: This alternative would directly cause adverse impacts to subsurface archeological resources lying within the direct impact zone of construction. Mitigation of adverse impacts would be carried out by the staff of The Midwest Archeological Center, Lincoln, Nebraska and would involve additional subsurface testing as well as monitoring of ground disturbing activities associated with construction of a building, installation of a wastewater leach field, and associated utility lines. Although a new structure would be introduced to the Cultural landscape, its design would be consistent with traditional Ozark architecture.

Conclusion: Ground-disturbing undertakings in this area would have a moderate, long-term adverse impact on these sites and would necessitate mitigative measures following Section 106 procedures. There would be a moderate, beneficial long-term effect to the cultural landscape due to the structure addition.

Impairment: There would be no impairment on buried archeological deposits associated with this alternative due to the mitigation of adverse effects. No impairment is anticipated involving the Cultural Landscape in that the new structure introduced would be designed consistent with traditional Ozark Architecture.

ALTERNATIVE C – New Facility at SE Location

Analysis: This proposed location is known to contain abundant prehistoric archeological deposits of substantial depth, covering a long time span. This area is inside the Akers District listed in The National Register of Historic Places.

Cumulative Impacts: Impacts in the area of this alternative would adversely affect buried archeological deposits along the terrace margin. Mitigation of adverse impacts in this alternative area would necessitate a major data generation project involving excavation of substantial areas and subsequent analysis of findings. Such mitigative measures would be carried out by the staff of the National Park Service Midwest Archeological Center, Lincoln, Nebraska in accordance with the mandates of Section 106 procedures and directed by a research design approved by the Missouri State Historic Preservation Officer.

Conclusion: Construction in this alternative area would have moderate long-term adverse impacts on buried archeological deposits and require extensive mitigative measures. There would also be a moderate long-term beneficial effect to the cultural landscape due to the addition of a structure.

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Impairment: There would be no impairment to cultural resources with this alternative due to the mitigation of adverse impacts and the incorporation of Ozark design elements in the building of the new facility.

ALTERNATIVE D – New Facility at SW Location

Analysis: This proposed location is in an area disturbed by erosional ravines and past construction of an amphitheater. However, the area has buried archeological deposits which would require assessment prior to a ground-disturbing undertaking. No historic structures lie within this area. A structure would be added and it would be consistent with traditional Ozark architecture.

Cumulative Impacts: Mitigation measures would be necessary in this area to alleviate adverse impacts caused by ground-disturbing activities associated with construction. Mitigation in the form of substantial excavations for data generation would be necessary. Such mitigative measures would be carried out by the staff of the National Park Service Midwest Archeological Center, Lincoln, Nebraska in accordance with the mandates of Section 106 procedures.

Conclusion: Construction in this alternative area would have a moderate, long-term adverse impact on buried archeological deposits and require extensive mitigative measures. There would be a moderate, long-term beneficial impact on the view shed of the Cultural Landscape at Akers.

Impairment: There would be no impairment on buried archeological deposits associated with this alternative due to the mitigation of adverse impacts. No impairment is anticipated involving the Cultural Landscape in that the new structure introduced would be designed consistent with traditional Ozark Architecture.

5.8 Visitor Experience

This section analyzes visitor experience and satisfaction of the Akers area and facilities. Items specifically addressed are: restroom facilities, parking, the provision of interpretation through personal and non-personal services, and the ability to participate in the traditional recreational activity of the area, canoeing.

Methodology

Personal observation of what is available to visitors under current management combined with information obtained from NPS personnel on visitation patterns, law enforcement problems encountered, and concession operations were used to estimate the effects of the actions in the various alternatives.

Thresholds for Intensity, Duration, and Type of Impact:

- **Negligible**—Visitors would not likely be aware of the effects associated with changes proposed for visitor use and enjoyment of park resources.
- **Minor**—Visitors would likely be aware of the effects associated with changes proposed for visitor use and enjoyment of park resources; however the changes in visitor use and experience would be slight and likely short term. Other areas in the park would remain available for similar visitor experience and use without derogation of park resources and values.
- **Moderate**—Visitors would be aware of the effects associated with changes proposed for visitor use and enjoyment of park resources. Changes in visitor use and experience would be readily apparent and likely long term. Other areas in the park would remain

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available for similar visitor experience and use without derogation of park resources and values, but visitor satisfaction might be measurably affected (visitors could be either satisfied or dissatisfied). Some visitors who desire to continue their chosen activity would be required to pursue their choice in other available local or regional areas.

- **Major**—Visitors would be highly aware of the effects associated with changes proposed for visitor use and enjoyment of park resources. Changes in visitor use and experience would be readily apparent and long term. The change in visitor use and experience proposed in the alternative would preclude future generations of some visitors from enjoying park resources and values. Some visitors who desire to continue their chosen activity would be required to pursue their choice in other available local or regional areas.
- **Duration:**
 - **Short-Term**—during construction
 - **Long-Term**—past construction and 10 years into future.

ALTERNATIVE A – No-Action Alternative

Analysis: Under the “No-Action” alternative the current visitor experience and satisfaction would continue. Vault toilets and a lack of hand washing stations would continue to provide substandard facilities for the large volume of visitors and pose a possible threat to public health and safety. There would continue to be a lack of orientation facilities for visitors therefore missing an opportunity to educate visitors on safety concerns and provide interpretation of the natural resources and cultural features of ONSR.

Cumulative Effects: Prior to 1993 a family and group campground was situated in the open field northeast of the junction of Highways K and KK. With the campground and subsequent amenities removed, visitor services were reduced. Under current operations park visitors are uninformed on many topics, including safety concerns and the fact that the Current River is part of the Ozark National Scenic Riverways. Continuing operations as is would lead to a generally uninformed clientele of the ONSR which adds to problems such as litter in river and danger to resources, wildlife and visitors. For those who are aware that the Current River is within the ONSR, the existing facilities and lack of information provided at the Akers site could have a negative affect on their perception of the ONSR as part of the NPS. Since Akers is a popular launching site for canoeists and other boaters on the Current River, it is easy to assume that the number of visitors will increase with a general desire for the outdoor experience. Not providing information regarding river safety or interpretation of the local and surrounding areas would be a disservice to park visitors.

Conclusions: The “No Action” Alternative would have a moderate long-term adverse effect on visitor experience at Akers.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: Visitor experience and satisfaction as well as education and interpretation opportunities would be improved with the addition of a facility that increases NPS visibility and provides modern facilities for park visitors. An adequate ranger station built in this prominent location at Akers would increase the visible presence of law enforcement rangers and discourage the inappropriate behavior that has been a growing problem at Akers and the surrounding district.

Incorporating a visitor contact station in the facility would provide a means to educate the public on potential safety hazards as well as provide interpretive services on the natural and cultural resources present at Akers and the ONSR. Providing interpretive services through

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exhibits, literature, information kiosks, and NPS personnel would enhance visitor experience and improve resource protection.

The new comfort stations would improve public health and safety by providing hand washing stations and would eliminate contamination potential associated with vault toilets.

Cumulative Effects: Prior to closing the group and family campground in 1993, Akers served a diverse population of park visitors. The increase in aberrant behavior observed by law enforcement rangers of the district would decrease with the new ranger station being built in a prominent location. Discouraging the deviant behavior would eventually encourage other user types, including families, to return to the area thereby improving the reputation of Akers.

The lack of adequate interpretive and visitor contact facilities has been a concern at Akers since the writing of the General Management Plan and Development Concept Plan in 1984. Educating the public on the cultural and natural resources of the area, informing floaters of safety concerns on the river, and providing sanitary bathroom facilities is a beneficial and appreciated service to park visitors. Since this has been noted as a priority for park managers multiple times in the past, it will remain as such as the number of visitors increase with the general desire for the outdoor experience.

Conclusion: The proposed changes under Preferred Alternative B would have a negligible, short-term impact on visitor use and experience during construction; however, following completion of the ranger station/visitor contact facility there will be a moderate, long-term beneficial effect. The Preferred Alternative would have a moderate, long-term beneficial impact on visitor services provided.

ALTERNATIVE C – New Facility at SE Location

Analysis: As with the Preferred Alternative B, the visitors' experience would be improved by providing new comfort stations and a ranger station/visitor contact facility. However, unlike the preferred Alternative B, Alternative C would place the new facility adjacent to the existing concessioner's operation. Although the store could continue to operate largely as normal, there would be some negative effects during the construction phase of the new ranger station/visitor contact facility including noise, dust, and other inconveniences which might interfere with a visitor's experience in the area.

Cumulative Effects: The cumulative effects would be similar to Preferred Alternative B with the added element of the concessioner store and NPS facilities in one confined area. The park has relied on the concessioners to distribute information regarding park rules, regulations and any information requested by park visitors. Since the general reason people visit Akers Ferry is to float/canoe the Current River, building the new ranger station/visitor contact facility adjacent to the existing concessioner would be a positive combination to provide everything for the visitor in one location. However, the current state of the concessioner store is going to require maintenance in the upcoming years. When this takes place, there would be impacts on the NPS facilities similar to those during the construction of this proposed facility.

Conclusions: The proposed changes under Alternative C would have a minor, short-term impact on visitor use and experience. Following completion of the ranger station/visitor contact facility, the effects would be moderate, long term, and beneficial on visitor use and experience. There would be a moderate, long-term beneficial impact on visitor services provided.

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ALTERNATIVE D – New Facility at SW Location

Analysis: Visitor experience and satisfaction would improve under Alternative D as it would under the other build alternatives due to upgraded visitor facilities, visible law enforcement rangers, and increased opportunities for education and interpretation.

Cumulative Effects: As discussed in Alternative B, the number of visitors to Akers Ferry will increase with the growing desire for the outdoor experience. Providing modern facilities, prominent law enforcement, and improved interpretive services will be an appreciated service to the increasing number of visitors to the park.

Conclusions: The proposed changes under Alternative D would have a negligible, short-term effect on visitor use and experience; however, following completion of the ranger station/visitor contact facility there will be a moderate, long-term beneficial effect. Alternative D would have a moderate, long-term beneficial impact on visitor services provided.

5.9 Socioeconomics

This topic includes a broad analysis of the private businesses that depend on the Akers area as a means of income or those businesses that might be affected by activities taking place at Akers. Items specifically addressed are: concessioners permitted to use Akers as a put-in/take-out site, outfitters using the Akers area as a field site, other local businesses that might be affected by the construction of a new facility at Akers, and local employment.

Methodology

Personal observation of the current businesses operating out of Akers combined with information obtained from park personnel on concessioner operations were used to estimate the effects of the actions in the various alternatives.

- **Negligible**— Little or no noticeable change in economic activity, employment and income levels, or population migration or immigration.
- **Minor**— Local changes in economic activity, employment and income levels, or population migration or immigration.
- **Moderate**— Regional changes in overall economic activity, employment and income levels, or population migration or immigration. .
- **Major**— Widespread, significant changes in overall economic activity, employment and income levels, or population migration or immigration.
- **Duration:**
 - **Short-Term**—Disturbance only during construction activities.
 - **Long-Term**—Disturbance lasting longer than construction activities.

ALTERNATIVE A – No-Action Alternative

Analysis: Under the “No Action” alternative, no changes would be made to the existing facilities or operations taking place at Akers. The current socioeconomic status of Akers is dominated by concessioner operations on site as well as those concessioners and outfitters that use the Akers area. Continuing the current status of Akers would not noticeably affect the concessioners, outfitters, local businesses or communities.

Cumulative Effects: Guiding on the river has been a livelihood for generations of Ozark inhabitants. Today, this is still the case as concessioners operate canoe livery services and

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anglers guide fly-fishing trips throughout the ONSR. Akers is no exception with ten concessioners, one of which is housed at Akers Ferry, and three fly-fishing guides permitted for the site. Leaving Akers as is would not affect the concessioners, outfitters, local businesses or communities operation from a socioeconomic standpoint.

Conclusions: The “No Action” Alternative would have a negligible short and long-term effect on the socioeconomics at Akers.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: During construction of the new facility, local businesses could expect a minor increase in business due to construction services needed or because park visitors opted to shop somewhere other than the concession store because of construction traffic. However, the long-term effects on the socioeconomics would not have much of an impact. Concessioners operating out of Akers might experience a slight impact during construction of the new facility because park visitors may not choose to go to an area undergoing construction or the concessioner might choose to limit trips to Akers due to construction traffic. However, this would be a short-term negative impact on concessioners and business would return to normal if not increase due to improved visitor facilities on site following the completion of the construction activities.

Cumulative Effects: There is the potential for long-term benefits to the local economy due to improved visitor services at Akers. Concessioners and outfitting guides have been operating on the Current River for many generations. With a general increase in the number of visitors due to a desire for the outdoor experience, improved visitor facilities might attract more business to the Akers area. Another possible long-term socioeconomic effect is the need for staffing and maintenance of the new facilities. This could bring employment to the local economy.

Conclusion: There would be a minor, short-term beneficial effect to local businesses becoming a negligible long-term effect. Concessioners operating out of Akers would experience a minor, short-term adverse effect during construction that would become a minor, beneficial effect in the long term. There would be negligible short and long-term effects on the local economy.

ALTERNATIVE C – New Facility at SE Location

Analysis: Alternative C would have the greatest impact to the concessioner operating at Akers. During construction of the new facility, it is expected that the concessioner’s store would experience noise, dust and other inconveniences associated with major construction. During this time, the concessioner might experience a slight decrease in store business, however, it is not likely to experience any effects to floating or ferry operations. Building a new facility in this location would reduce the land assignment designated for the concessioner operating at Akers. This would require the concessioner to split their operations and move equipment to another designated area. Even if the storage space were not far away, there would still be an added expense of time and money when equipment needed to be retrieved. Other concessioners and outfitters would probably not experience any changes in business due to the construction efforts. Local businesses might experience a slight boost in business due to construction needs and long-term maintenance and staffing of the new facility.

Cumulative Impacts: Similar to the preferred Alternative B, concessioner and outfitter operations should not be appreciably affected. Visitors would still take advantage of the

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concessioner-run camp store's convenient location for shopping and canoe rental. However, the concession efficiency would be reduced due to the separation of operations and the added expense of time and money when equipment needed to be retrieved from the storage outpost.

Another cumulative impact to be considered is the need for renovation of the existing concessioner store. When the time comes to do repairs or replacement of this existing facility having the new ranger station/visitor contact facility located adjacent to the store could affect the design and implementation possibilities as well as the cost. If future structural improvements included combination of the two buildings, perhaps costs would be lower due to the presence of utilities and other necessities.

Conclusion: The proposed changes under alternative C would have a minor, short-term adverse effect on the concessioner business operating at Akers, however, the long-term impact would be a minor, beneficial effect on the Akers concessioner. A minor, short-term beneficial effect becoming a negligible long-term effect is expected for local businesses. A negligible long-term effect is expected for other concessioners, outfitters and the local economy.

ALTERNATIVE D – New Facility at SW Location

Analysis: Same as Preferred Alternative B.

Cumulative Effects: Same as Preferred Alternative B.

Conclusions: Same as Preferred Alternative B.

5.10 Park Operations

This topic includes a broad analysis of public health and safety, the facilities available to park visitors as well as park administrative staff and other supporting operations of the ONSR.

Methodology

Operational efficiency, for the purpose of this analysis, refers to the ability of staff to effectively protect and preserve vital park resources and provide for a successful visitor experience. This includes an analysis of the condition and usefulness of the facilities and developed features used to support the operations of the park. Facilities include visitor facilities and the necessary administrative buildings (office and workspace for park staff). In addition to the above, a discussion of impacts to park operations focuses on employee and visitor health and safety as well as existing and needed facilities. Park staff knowledge was used to evaluate the impacts of each alternative and is based on the current description of park operations presented in section 4.0 of this document.

Thresholds for Intensity, Duration, and Type of Impact:

- **Negligible**—Improvement or deterioration of park operations would be barely detectable and create no noticeable change in existing functioning.
- **Minor**—Facility functioning in terms of visitor services and administrative facilities (including working conditions, office and storage space utilization and layout) would improve/worsen to some extent.
- **Moderate**—There would be substantial changes in terms of improved/worsened visitor services and administrative facilities.

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- **Major**— Changes would be substantial in all areas of operational efficiency.
- **Duration:**
 - **Short-Term**—during construction
 - **Long-Term**—past construction and 10 years into future.

ALTERNATIVE A – No-Action Alternative

Analysis: Under Alternative A, the “No Action” alternative, public health and safety would continue to be an issue at Akers. The current administrative facility, a FEMA flood disaster trailer, lacks needed, required physical security and storage. This “ranger station” is hidden in a maintenance area that is off-limits to the public. As a result park visitors are denied the opportunity to become aware of law enforcement rangers in the area to assist them, inform them, and respond to their law enforcement and medical emergency needs. Alternative A would not allow NPS to become proactive daily to expose the public to messages concerning expectations for their behavior while on the river. Alternative A would require the continued use of vault toilets which may be unpleasant, but are sanitary unless not maintained properly.

Cumulative Effects: An ongoing lack of NPS presence would allow for continued occurrences of law enforcement issues as well as general public health and safety concerns due to inadequate visitor services. Regardless of whether a new ranger station/visitor contact facility is built, Akers would continue to be a popular destination for canoeists and park visitors. Continuing the current park operations at Akers would be a disservice to park visitors.

Conclusion: The “No Action” alternative would have a negligible short and long-term impact on park operations at Akers.

ALTERNATIVE B – Preferred Alternative – New Facility at NE Location

Analysis: The construction of a visitor center/ranger station with modern restrooms would provide a much needed service to a large number of ONSR visitors. Public education efforts aimed at curtailing aberrant behavior, unsafe acts such as diving into the river, and children not wearing PFD's would be greatly enhanced. Public health and safety would be improved by the use of modern restrooms with wash facilities. The physical presence of rangers in the area utilized by the public would have a deterrent effect on unruly and illegal behavior thereby increasing public safety. As long as the new facility is built in a visible area providing access to park visitors, location would have a negligible effect on the goals of park operations.

Cumulative Effects: Building the new facility at the junction of K and KK would increase NPS visibility at the location thereby deterring misbehavior of visitors to the Akers area and encourage a family setting. Not having a strong visible presence in the area has led to an increasing problem with drugs/alcohol and general aberrant behavior as well as a lack of safety information for the public.

Conclusion: Building the new ranger station/visitor contact facility in the proposed location of the northeast corner of the junction of K and KK would have a negligible short-term effect becoming a moderate long-term beneficial impact on the park operations located at Akers.

ALTERNATIVE C – New Facility at SE Location

Analysis: As stated in the analysis of Alternative B, construction of a visitor center/ranger station would provide much needed visitor services in terms of education and public

Environmental Assessment for Akers Ranger Station

restrooms as well as the increased and prominent presence of law enforcement. The location of alternative C, that being adjacent to the existing concessioner store, would consolidate visitor services. A drawback of this proximity could be congestion and confusion for visitors and employees of the concessioner and the ONSR over services provided.

Cumulative Effects: Same as Preferred Alternative B.

Conclusion: Building the new ranger station/visitor contact facility on the southwest corner of the K and KK junction would have a negligible short-term impact becoming a moderate, long-term, beneficial impact on park operations at Akers.

ALTERNATIVE D – New Facility at SW Location

Analysis: As stated in the analysis of Preferred Alternative B, construction of a visitor center/ranger station would provide much needed presence and facilities lacking at Akers. The location of alternative D, that being on the southwest corner of the junction of highways K and KK, would not have an effect on the goals determined by park operations.

Cumulative Effects: The cumulative impacts for park operations under Alternative D are the same as the Preferred Alternative B.

Conclusion: Building the new ranger station/visitor contact facility would have a negligible short-term impact becoming a moderate, long-term, beneficial impact on park operations at Akers.

6.0 CONSULTATION AND COORDINATION

6.1 Public Involvement

On June 1, 2005, the ONSR notified local, state, and federal representatives, interested agencies, and the general public of the proposed action at Akers through a public scoping letter. This letter was electronically posted along with contact information on how to obtain more information or comment on the action. To date, four responses to the scoping letter have been received. The responses were reviewed and filed in the administrative record kept at the ONSR headquarters in Van Buren, MO.

6.2 Agency Consultation

Ethnographic Review

An ethnographic tribal identity study has been completed for Ozark National Scenic Riverways by Dr. Maria Zedeno which identified those Native American tribes that have historic cultural affiliation with lands now included in the park. Native American groups having demonstrable affiliation to the region are:

- . Cherokee Nation
- . Keetoowah Band Cherokee
- . Osage Nation
- . Delaware Tribe
- . Delaware Nation
- . Eastern Shawnee Tribe
- . Shawnee Tribe
- . Absentee Tribe

In August 2003, Noel Poe, Superintendent of ONSR, and James E. Price, Ph.D., Archeologist, ONSR, consulted with leaders of these tribes in Oklahoma in compliance with Section 101(d)(6)(b) of the NHPA. No historic accounts or archeological evidence have been found associating these tribes with the subject tracts of land at Akers.

Section 106 – State Historic Preservation Officer Consultation

In July of 2005, the Midwest Archeological Center (MWAC), Lincoln Nebraska, conducted Archeological investigations at the Akers Ferry Site in preparation for consultation with the State Historic Preservation Officer (SHPO). Dr. James Price, Archeologist at ONSR, will discuss MWAC's recommendations and solidify the mitigative measures to be followed during Section 106 Consultation to be held concurrent with the public comment period of this EA.

Section 404 – Clean Water Act and State Water Quality Certification through Section 401 of the Act

On 6/17/05 in consultation between ONSR Superintendent and U.S. Army Corps of Engineers, Little Rock District, regarding applicability of Section 404, the COE stated that if there would not be any discharge of fill material into the Current River or Gladden Creek and there are no adjacent wetland areas that would be impacted then a section 404 permit would not be required from the US Army Corps of Engineers.

Environmental Assessment for Akers Ranger Station

Section 7 – Endangered Species Act Compliance

On June 3, a letter regarding the intended action was sent to the US Fish and Wildlife Service Field Officer in Missouri to obtain information on Threatened and Endangered species and habitat in the proposed action location.

7.0 REFERENCES

- Alexander, Terry W. 1990. Delineation of flooding within the Ozark National Scenic Riverways in southeastern Missouri – Akers and Alley Spring. U.S. Geological Survey. Hydrologic Investigations Atlas HA-712, sheets 1-3.
- Center for Agriculture, Resource and Environmental Systems. 2005. Interactive Map Room. University of Missouri – Columbia. <http://ims.missouri.edu> 6/2005
- Missouri Department of Natural Resources. 2005. Soils map of Akers area. GIS layer and attribute table.
- Nigh, T. and J. Krstansky. 2002. Current River Hills Subsection Ecological Landtype Coverage (GIS ArcView Layers). Missouri Department of Conservation. 8 layers.
- National Park Service. 1984. Ozark National Scenic Riverways General Management Plan. Ozark National Scenic Riverways, Van Buren, MO.
- National Park Service. 2005. Discharge measurements of Gladden Creek. June 2005. unpublished data
- National Park Service. 2005. Refined 100 and 500 year floodplain. Contours for the Akers Ferry Area. Unpublished data.
- National Park Service. 1993. Draft Revised Akers Ferry Development Concept Plan/Environmental Assessment. Ozark National Scenic Riverways, Van Buren, MO.
- National Park Service. 2000. National Park Service Management Policies 2001. National Park Service, Department of the Interior.
- US Geological Survey. 2005. Surface Water Monitoring. Akers Ferry gage data.

8.0 LIST OF PREPARERS

The following persons assisted with the preparation of this document:

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Joey Suttles, Upper Current Maintenance Foreman

Peggy Tarrence, Concessions Specialist

Bill Terry, Supervisory Ranger

APPENDIX

Environmental Assessment for Akers Ranger Station

Appendix 1: Public Scoping Letter



IN REPLY REFER TO:
D18 (xL76)

1 June 2005

United States Department of the Interior

NATIONAL PARK SERVICE
Ozark National Scenic Riverways
404 Watercress Drive
P.O. Box 490
Van Buren, Missouri 63965

Greetings:

The National Park Service (NPS) seeks your input on the proposed replacement of the Akers Ranger Station. Following you will find information on the proposed action. We ask that you take a few moments to read this information and consider the impacts and benefits associated. If inclined, please respond to this proposed action by June 30, 2005, via the methods listed below.

Akers is situated at the confluence of the Current River and Gladden Creek near the north end of the Current River within the Ozark National Scenic Riverways (ONSR) in south-central Missouri. Access is via county roads KK and K with a ferry crossing operating at the site.

Prior to coming under the ownership of the U.S. Department of the Interior, NPS, in 1965, the Akers site served as an important local, rural crossroads for Euro-American settlers and pre-historic peoples. In recognition of this role, Akers has earned a place on the National Register of Historic Places as a historic vernacular landscape and an archaeological district.

Currently, Akers serves as a major canoe launching site on the Current River where it is common for hundreds of canoes to put in or take out on weekends and holidays at the two river access points. Akers also includes group, family and floater camping, concession store and canoe rental, picnic day use facilities and NPS administrative facilities.

In 1984 ONSR initiated a General Management Plan (GMP) and Development Concept Plan outlining goals for the Park and developments to achieve those goals. Park managers have proceeded with these plans, revising them on a case-by-case basis to adhere to the current needs and the biological and cultural values. In keeping with the general plan for Akers and to meet the needs of park visitors, the park is addressing the replacement of the existing Ranger Station at Akers Ferry. The current facility, a skirted single-wide trailer, is in poor condition and is no longer sufficient as office space. In addition, the current Ranger Station is located away from public view and does not offer visitors the opportunity to contact NPS personnel. Without contact, the public may be unaware or unsure the area is managed by the NPS. Problems that have arisen due to a lack of NPS presence is that there is limited visitor contact; no message is being conveyed to visitors about the historical, cultural and biological importance of the Akers site and the park; and the only contact with visitors tends to be "negative" in the sense that rangers arrive on scene in the event of a law issue.

Environmental Assessment for Akers Ranger Station

Appendix 1: continued

In order to alleviate the issues presented and achieve the goals outlined by the NPS mission and the GMP, we intend to replace the existing Ranger Trailer with facilities to meet the following purpose and needs:

- To provide adequate and improved working space for Ranger staff;
- To provide a NPS presence at Akers in the form of visitor contact with uniformed staff and/or improved signage;
- To provide an improved visitor experience with opportunities for public education and interpretation of the park in general and the historic and prehistoric nature of Akers Ferry;
- To utilize existing infrastructure (utilities, traffic patterns, roads) to the greatest degree possible; and
- To provide facilities in keeping with the historic landscape and with minimal impacts to the National Register District.

The park needs to consider a range of reasonable alternatives to accomplish the purpose and need. Some alternatives have been looked at, including moving or remodeling the existing trailer or staffing the existing contact station, but none satisfy the purpose and need. The park intends to minimize impacts to resources in Akers Ferry by combining the need for staff space with the need to provide a NPS presence. Three preliminary location alternatives for a replacement facility are proposed. They are (see attached map):

Site #1 - the northeast corner of the junction of KK and K, across from the existing concession/store

Site #2 - adjacent to the existing concession/store

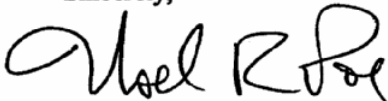
Site #3 - the southwest corner of the junction of KK and K, across from the existing concession/store

Each alternative has certain features in common, including:

- Ranger office space and visitor contact station will be combined in one building
- Visitor contact station will contain education and interpretive features, as well as visitor services including modern restrooms
- The contact station will have a leach field for treatment of wastes
- The contact station will be designed in a manner sensitive to the cultural landscape of Akers Ferry
- The existing trailer and one vault toilet and the old campground entrance station in the mowed field will be removed

Ozark National Scenic Riverways is interested in hearing from you on this topic. Please respond with your comments by June 30, 2005, via one of the methods listed below. In writing, send your comments to Ozark National Scenic Riverways, Attention Russ Runge, P.O. Box 490, Van Buren, MO 63964, or send your comments on e-mail to Russ_Runge@nps.gov or to Noel_Poe@nps.gov. Thank you for your time and consideration and we look forward to collaborating with you on this project and others.

Sincerely,



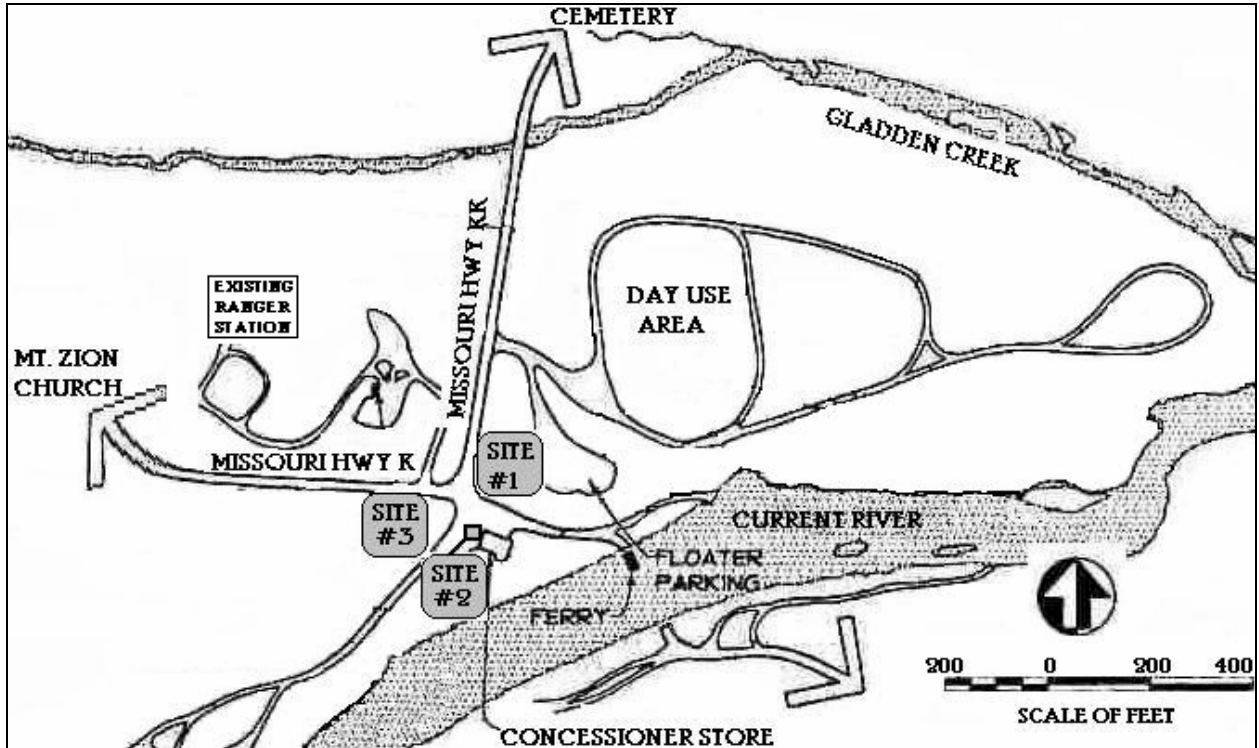
Noel R. Poe
Superintendent

Enclosure

Environmental Assessment for Akers Ranger Station

Appendix 1: continued

Map of Akers



The three site alternatives for the replacement Akers Ranger Station as previously described are situated at the junction of Missouri Highways K and KK near the existing concession store.