

# Environmental Consequences of the Alternatives

## Impact Topics

### Selection Criteria

This section identifies the resources and values (impact topics) that were considered in the planning process and describes the criteria used to establish the relevance of each impact topic to long-term planning for the project area. The impact topics were used to focus the planning process and the assessment of potential consequences of the alternatives. The following criteria were used to determine the impact topics for the Niobrara National Scenic River:

- *Resources cited in the establishing legislation for the Niobrara National Scenic River.* The establishing legislation for the unit is reproduced in Appendix A.
- *Resources critical to maintaining the significance and character of the Niobrara National Scenic River.* The sections on "Significance of Area Features" and "Discussion of Outstandingly Remarkable Values" describe the defining features of the Niobrara River that were used to define the resources critical to maintaining its significance and character.
- *Resources recognized as important by laws or regulations.* Many of the important congressional acts and executive orders that guide the management of all National Park Service units, including the Niobrara National Scenic River, are listed in Appendix B.
- *Values of concern to the public that were mentioned during scoping for this plan.* The National Park Service conducted an extensive public information and scoping program to acquire input from the public and from other agencies. This helped the Service develop alternatives and identify resources and values that are of high interest in the Niobrara National Scenic River locale.

## Impact Analysis

While the issues topics discussed below describe the relationship between the alternative ways of achieving goals, impacts predict the magnitude of that relationship.

The National Environmental Policy Act and Director's Order 12 require a full exploration of the issues to determine the true magnitude of the impacts on the affected environment.

For each impact topic, the analysis includes a brief description of the affected environment and an evaluation of effects. The impact analysis involved the following steps:

- Identify the area that could be affected.
- Compare the area of potential effect with the resources that are present.
- Identify the intensity, context, duration, and type of effect, both as a result of this action and from a cumulative effects perspective. Identify whether effects would be beneficial or adverse.
- Identify mitigation measures that may be employed to offset or minimize potential adverse impacts.

Impacts are defined in terms of context, intensity, duration, and type. Evaluation of alternatives takes into account whether the impacts would be negligible, minor (barely detectable), moderate (clearly detectable), or major (a substantial alteration of current conditions). Duration of impacts is evaluated based on the short- or long-term nature of alternative-associated changes to 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 impact topic examined. Definitions of intensity levels vary by impact topic, but, for all impact topics, the following definitions for type of impact were applied:

**Beneficial** — a positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

**Adverse** — a change that declines, degrades, and/or moves the resource away from a desired condition or detracts from its appearance or condition.

**Direct** — an effect that is caused by an action and occurs in the same time and place.

**Indirect** — an effect that is caused by an action, but occurs later in time or is farther removed in distance, and is still reasonably foreseeable.

## Cumulative Impacts

The regulations that implement the National Environmental Policy Act 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 reasonably 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)

## Methodology for Analyzing Impacts

Each impact topic relative to these criteria is briefly described below. The planning team selected the impact topics for analysis based on the potential effect of the alternatives on those resources. The "Environmental Consequences" section contains a more detailed description of each impact topic and the effects on those resources of each of the three proposed management alternatives and three boundary alternatives.

### Cultural Resources

<b>Negligible</b>	The impact is at the lowest level of detection — barely measurable, with no perceptible (visible to the unaided human eye) consequences, either adverse or beneficial, to cultural resources.
<b>Minor</b>	The impact is perceptible and measurable and is confined to a small area or a single contributing element of a cultural resource.
<b>Moderate</b>	The impact is sufficient to cause a perceptible change in the character-defining features of a resource and generally involves a single or small group of contributing elements of a cultural resource.
<b>Major</b>	The impact results in substantial and highly-noticeable change in character-

defining features of a resource and involves a large group of contributing elements and/or an individually significant cultural resource.

### Paleontological Resources

<b>Negligible</b>	The impact is barely perceptible and not measurable, and is confined to a small area or a single contributing element of a paleontological resource.
<b>Minor</b>	The impact is perceptible and measurable and is confined to a small area or a single contributing element of a paleontological resource.
<b>Moderate</b>	The impact is sufficient to cause a perceptible change in the character-defining features of a resource and generally involves a single or small group of contributing elements of a paleontological resource.
<b>Major</b>	The impact results in substantial and highly-noticeable change in character-defining features of a resource and involves a large group of contributing elements and/or an individually-significant paleontological resource.

### Natural Resources

Resources falling under this impact topic include air, water, floodplains and wetlands, soil and vegetation, fish and wildlife, threatened and endangered species, and scenic resources.

### Air Quality

<b>Negligible</b>	No changes would occur, or changes in air quality would be below or at the level of detection, and, if detected, would have effects that would be considered slight and short term. Changes to visibility (e.g., visible smoke, plumes, or haze) would be imperceptible to the unaided human eye.
<b>Minor</b>	Changes in air quality would be measurable, although the changes would be

	small, short term, and the effects would be localized. No air quality mitigation measures would be necessary. Changes to visibility would be perceptible, and of short duration.	<b>Major</b>	Chemical, physical, or biological effects would be detectable, would have substantial consequences, and would be noticed on a regional scale. Mitigation measures associated with water quality would be necessary and the measures would not be guaranteed.
<b>Moderate</b>	Changes in air quality would be measurable, and would have consequences, although the effects would be relatively local. Air quality mitigation measures would be necessary and the measures would likely be successful. Visibility would be noticeably reduced over the long term.	<b>Duration</b>	short-term: following treatment, recovery would take less than one year; long-term: following treatment, recovery would take longer than one year.
<b><u>Floodplains and Wetlands</u></b>			
<b>Major</b>	Changes in air quality would be measurable, would have substantial consequences, and would be noticed regionally. Air quality mitigation measures would be necessary and the success of the measures could not be guaranteed. Visibility would be severely limited for long periods.	<b>Negligible</b>	An action that would cause no change in an existing wetland area and its hydrologic function, or the ability of a floodplain to convey flood waters.
<b>Duration</b>	short-term: recovers in less than seven days; long-term: takes more than seven days to recover.	<b>Minor</b>	An action that would cause no change in an existing wetland or floodplain area and function. Changes in floodplains would be measurable, although the changes would be small, would likely be short term, and the effects would be localized. No mitigation measures associated with water quality or hydrology would be necessary.
<b><u>Water Quality</u></b>			
<b>Negligible</b>	Chemical, physical, or biological effects would not be detectable, or if detected ( <i>i.e.</i> , trace), would be considered slight, local (site-specific), and short term.	<b>Moderate</b>	An action that would change an existing wetland area or floodplain function, but the impact could be mitigated by the creation of artificial wetlands, modification of proposed facilities in floodplains, and creation of backwater habitats. Changes in floodplains would be measurable and long term, but would tend to be local, although there would be potential for effects on a regional scale, depending on the extent of the effect on the watershed. Mitigation measures associated with water quality or hydrology would be likely and the measures would likely succeed.
<b>Minor</b>	Chemical, physical, or biological impacts would be detectable and short term, but the effects would be localized. No mitigation measures associated with water quality would be necessary.	<b>Major</b>	An action that would have drastic consequences for an existing wetland area or floodplain function. Mitigation
<b>Moderate</b>	Chemical, physical, or biological effects would be detectable, but would likely be short term, and relatively local, although there could be a regional effect. Mitigation measures associated with water quality would be necessary and the measures would likely succeed.		

	measures would be necessary and their success would not be guaranteed.		be affected as a result of the alternative, but there would be no effect on native species populations as a whole. The effects would be short term, on a small scale, and no species of special concern would be affected.
<b>Duration</b>	short term: following treatment, recovery would take less than one year; long term: following treatment, recovery would take longer than one year.		
<b><u>Soils</u></b>		<b>Minor</b>	The alternative would affect some individual native plants and would also affect a relatively minor portion of the species' population. Mitigation to offset adverse effects, including special measures to avoid affecting species of special concern, would be required and would be likely successful.
<b>Negligible</b>	Soils would not be affected or the effects to soils would be below or at the lower levels of detection. Any effects to soil productivity or fertility would be slight and no long-term effects to soils would occur.		
<b>Minor</b>	The effects to soils would be detectable. Effects to soil productivity or fertility would be small, as would the area affected. If mitigation were needed to offset adverse effects, it would be relatively simple to implement and would likely be successful.	<b>Moderate</b>	The alternative would affect some individual native plants and would also affect a sizeable segment of the species' population in the long term and over a relatively large area. Mitigation to offset adverse effects could be extensive, but would likely be successful. Some species of special concern could also be affected.
<b>Moderate</b>	The effect on soil productivity or fertility would be readily apparent, likely long term, and result in a change to the soil character over a relatively wide area. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.	<b>Major</b>	The alternative would have a considerable long-term effect on native plant populations, including species of special concern, and affect a relatively large area inside and outside of the park. Mitigation measures to offset adverse effects would be required, extensive, and the success of the mitigation measures would not be guaranteed.
<b>Major</b>	The effect on soil productivity or fertility would be readily apparent, long term, and substantially change the soil character over a large area within and outside of the park. Mitigation measures to offset adverse effects would be necessary, extensive, and their success could not be guaranteed.	<b>Duration</b>	short term: recovers in less than three growing seasons; long term: takes more than three growing seasons to recover.
<b>Duration</b>	short term: recovers in less than three years; long term: takes more than three years to recover.	<b><u>Wildlife</u></b>	
<b><u>Vegetation</u></b>		<b>Negligible</b>	There would be no observable or measurable impacts to native fish and wildlife species, their habitats, or the natural processes sustaining them. Impacts would be of short duration and well within the range of natural variability.
<b>Negligible</b>	No native vegetation would be affected, or some individual native plants could		

### Minor

Impacts would be detectable, but they would not be expected to be outside the natural range of variability and would not be expected to have any long-term effects on native species, their habitats, or the natural processes sustaining them. Population numbers, population structure, genetic variability, and other demographic factors for species may have small, short-term changes, but long-term characteristics remain stable and viable. Occasional responses to disturbance by some individuals could be expected, but without interference to feeding, reproduction, or other factors affecting population levels. Key ecosystem processes may have short-term disruptions that would be within natural variation. Sufficient habitat would remain functional to maintain viability of all species.

### Moderate

Breeding species of concern are present; species are present during particularly vulnerable life stages, such as migration or juvenile states; mortality or interference with activities necessary for survival can be expected on an occasional basis, but is not expected to threaten the continued existence of the species in the park unit. Impacts on native fish and wildlife species, their habitats, or the natural processes sustaining them would be detectable, and they could be outside the natural range of variability for short periods of time. Species abundance, population structure, genetic variability, and other demographic factors may have short-term changes, but would be expected to rebound to pre-impact numbers and to remain stable and viable in the long term. Frequent responses to disturbance by some individuals could be expected, with some negative impacts to feeding, reproduction, or other factors affecting population levels. Key ecosystem processes may have short-term disruptions that would be outside natural variation, but would soon return to natural conditions. Sufficient

habitat would remain functional to maintain viability of all native fish and wildlife species. Some impacts might occur during critical periods of reproduction or key habitat for sensitive species.

### Major

Impacts on native fish and wildlife species, their habitats, or the natural processes sustaining them would be detectable, and they would be expected to be outside the natural range of variability for long periods of time or to be permanent. Species abundance, population structure, genetic variability, and other demographic factors might cause declines, with long-term population numbers significantly depressed. Frequent responses to disturbance by some individuals would be expected, with negative impacts to feeding, reproduction, or other factors resulting in a long-term decrease in population levels. Key ecosystem processes might be disrupted in the long term, or permanently. Habitat loss would likely affect the viability of several native species.

### Duration

short term: recovers in less than one year;  
long term: takes more than one year to recover.

### Threatened or Endangered Species

#### Negligible

No federally listed species are present, or the alternative would affect an individual of a listed species or its critical habitat, but the change would be so small that it would not be of any measurable or perceptible consequence to the protected individual, its population, or its habitat.

#### Minor

Nonbreeding animals of concern are present, but only in low numbers. Habitat is not critical for survival; other habitat is available nearby. Occasional flight responses by animals are expected, but without interference with feed-

ing, reproduction, or other activities necessary for survival.

**Moderate**

Breeding listed species are present; listed species are present during particularly vulnerable life stages such as migration or juvenile stages; mortality or interference with activities necessary for survival expected on an occasional basis, but not expected to threaten the continued existence of the listed species in the park.

**Major**

Breeding listed species are present in relatively high numbers, and/or listed species are present during particularly vulnerable life stages. Habitat that would be affected by watercraft use or other actions has a history of use by listed species during critical periods and is somewhat limited. Mortality or other effects are expected on a regular basis and could threaten continued survival of the listed species in the park. A taking under Section 7 of the Endangered Species Act could occur.

**Duration**

short term: recovers in less than one year;  
long term: takes more than one year to recover.

**Scenic Resources**

**Negligible**

An action that would introduce only the perception of some additional movement by cars or by people on bicycles or walking. The change to the viewshed would be so small or localized that it would have no measurable or perceptible consequence to the visitor experience of the viewshed.

**Minor**

An action that would introduce perceptible man-made additions to the viewshed. These actions would include structures that affect a relatively small portion of the viewshed, either the foreground, middleground, or background, and have barely perceptible visual consequences to the visitor experience of the viewshed.

**Moderate**

An action that would introduce perceptible man-made additions to the viewshed. These actions would include facilities, parking, and other man-made structures that would affect a moderate portion of the viewshed. This might include the foreground and middle-ground, or the foreground and background. These actions would not completely alter the viewshed, but would be a visual addition to the existing conditions.

**Major**

An action that would introduce multiple and drastic man-made additions that affect the entire viewshed as experienced by the visitor. These actions would include major facilities and parking, plus other man-made structures that would completely alter the foreground, middleground, and background of the existing viewshed.

**Duration**

short term: effects last less than a year;  
long term: effects last more than one year.

**Visitor Information, Education, and Experience**

**Negligible**

Visitors would not be affected or changes in visitor use and/or experience would be below or at the level of detection. Any effects would be short term. The visitor would not likely be aware of the effects associated with the alternative.

**Minor**

Changes in visitor use and/or experience would be detectable, although the changes would be slight and likely short term. The visitor would be aware of the effects associated with the alternative, but the effects would be slight.

**Moderate**

Changes in visitor use and/or experience would be readily apparent and could have a long-term effect on access, use, and availability of various aspects of the visitor experience.

**Major**

Changes in visitor use and/or experience would be readily apparent and



	could permanently alter access, use, and availability of various aspects of the visitor experience.	<b>Major</b>	The effects on economic conditions would be readily apparent, long term, and would cause substantial changes to economic conditions in the region. Mitigation measures to offset potential adverse effects would be extensive, and their success could not be guaranteed.
<b>Duration</b>	short term: occurs only during the action (e.g., construction); long term: occurs after the action has been completed.	<b>Duration</b>	short term: effects last one year or less; long term: effects last longer than one year.
<b><u>Local Economy</u></b>			
<b>Negligible</b>	No effects would occur or the effects to economic conditions would be below or at the level of detection. The effect would be slight and no long-term effects to economic conditions would occur.	<b><u>Local Government</u></b>	
<b>Minor</b>	The effects on economic conditions would be detectable, although short term. Any effects would be small, and if mitigation were needed to offset potential adverse effects, it would be simple and successful.	<b>Negligible</b>	The impact would have no discernible effect on the operations or roles of local government.
		<b>Minor</b>	The impact would not have an appreciable effect on the operations or roles of local government.
		<b>Moderate</b>	The impact could have an appreciable effect on the operations or roles of local government.
<b>Moderate</b>	The effects on economic conditions would be readily apparent and likely long term. Any effects would result in changes to economic conditions on a local scale. If mitigation were needed to offset potential adverse effects, it could be extensive, but would likely be successful.	<b>Major</b>	The impact would have a substantial, highly noticeable influence on the operations or roles of local government.
		<b>Duration</b>	short term: effects last one year or less; long term: effects last longer than one year.



*Brilliant fall colors are displayed by a tall aspen at Smith Falls State Park.*



# Impacts of Management Alternative A: Continue Existing Conditions (No Action Alternative)

## Cultural Resources

Cultural resources located on private land, but within the National Park Service boundary would be afforded protection through federal preservation laws such as the National Historic Preservation Act and other federal mandates, regulations, and policies. However, under this alternative, staffing and funding levels would be limited to adequately enforce these laws or to monitor cultural resource conditions.

The ranching cultural landscapes in and around the park define much of the region's physical surroundings and reflect traditional, regional land use. Zoning at the county level could help preserve these traditional landscapes. However, under this alternative, the National Park Service would have limited capability to influence county zoning.

*Cumulative Impacts:* Negative impacts on cultural resources from other past, present, and reasonably foreseeable future actions would continue under this alternative. The protection and management of cultural resources would be uncoordinated and inadequately funded/staffed. Over time, this would increase the possibility of cultural resources being adversely impacted by development, theft, and/or natural processes. Impacts on these nonrenewable resources could range from minor to major depending on the scope and duration of the impact and the significance of the resource.

Private land development would continue under county zoning, but zoning could be changed or repealed. Unmet costs of zoning enforcement could minimize its effectiveness, potentially resulting in incremental adverse impacts on scenic qualities and cultural resources. New development and construction projects on private lands would not be subject to regulations requiring archeological studies of sites prior to ground disturbance, but would depend upon voluntary compliance. Impacts could be mitigated through sensitive development, but permanent landscape impacts could be cumulative over the long term.

In addition, weathering, erosion, ice, and other natural processes through time potentially could damage National Register properties such as the historic bridges.

The wear and tear of traffic use on these structures could also have long-term adverse effects. Under this alternative, the park would have limited funding, staff, and jurisdictional authority to deal effectively with these long-term consequences.

*Conclusion:* Under Alternative A, significant and potentially significant cultural resources would be at risk of sustaining moderate to major, irreversible adverse impacts in the near and long term. Landowners who might wish to preserve potentially significant historic structures would not have access to the technical expertise or funding needed for structural preservation. Counties would continue to maintain several National Register bridges as part of county roads systems. Alteration or replacement could alter the historic integrity of these resources. In summary, Alternative A does not afford the park with the human or financial resources or means to adequately protect significant or potentially significant resources, which could impair cultural resources in the park.

## Paleontological Resources

Under Alternative A, the National Park Service would lack the administrative authority and resources needed to protect significant paleontological resources located on private lands. The ability to coordinate the actions of other agencies would be limited, and the National Park Service would have a negligible influence on actions taken by other land-managing agencies and private landowners.

Under this alternative, staffing and funding levels would be limited to adequately enforce these laws and policies and to monitor site conditions. Furthermore, the alternative's staffing and funding levels would limit the park's ability to protect important resources through the development of a paleontological resource component of a resource stewardship plan and other management plans.

Paleontological resources could be more vulnerable to theft, vandalism, or erosion. Some landowners might appreciate a resource, but might not have the means or skills needed to protect or preserve it, or might be unaware of federal, state, and private programs designed

to provide preservation assistance. In addition, the Service would have limited ability to influence construction and development activities on private property.

Zoning at the county level could be used to assist in preserving traditional landscapes, and thereby limiting disturbance of paleontological resources dotting the park. However, under this alternative, the National Park Service would have limited ability to influence county zoning, which could result in moderate to major adverse impacts on paleontological resources.

*Cumulative Impacts:* Negative impacts from other past, present, and reasonably foreseeable future actions would continue under this alternative. Damage from natural weathering and theft would remain a concern under Alternative A. Private land development would continue under county zoning, but zoning could be changed or repealed. Unmet costs of zoning enforcement could reduce its effectiveness, resulting in incremental, but significant, impacts to paleontological resources.

*Conclusion:* Under Alternative A, park funding and staffing levels, as well as the reduced influence of this land management agency, would greatly limit the park's ability to protect or manage paleontological resources. Landowners who might wish to preserve these resources would have difficulty accessing technical expertise or funding needed to preserve them. Through time, some significant paleontological resources could sustain moderate to major adverse impacts. Alternative A does not provide the resources or means to adequately protect significant or potentially significant paleontological resources.

## Natural Resources

### **Air Quality**

An indirect effect of implementing this alternative would be an increased potential for higher particulate matter emissions from uncontrolled wildland fires as fuel loads and understory biomass accumulated in areas not managed by or for fire. The increased emissions from wildland fires would constitute a periodic, short-term, negligible impact.

If the number of visitors increased, there would not be a management structure in place to reduce dust and particulate matter raised by automobile travel on unimproved roads.

*Cumulative Impacts:* Impacts on air quality from other past, present, and reasonably foreseeable future actions — vehicle emissions, use of dirt and gravel roads, wood burning for home heating, prescribed fires, and wildland fires — would continue. The levels of emissions from these sources could change slightly in the foreseeable future, but any change would be negligible and would not measurably change air quality. The implementation of Alternative A in combination with past, present, and foreseeable future action would result in periodic, short-term, minor adverse impacts on air quality.

*Conclusion:* Air quality at Niobrara National Scenic River could deteriorate at a local level, but remain good under Alternative A. The only noticeable impact on air quality from Alternative A would be that air quality and visibility would be locally impacted by prescribed fire or construction projects. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Water Quality and Aquatic Species**

Because of heavy recreational use on some reaches of the Niobrara River, coupled with livestock grazing and feedlots located on tributaries, the potential exists for contamination of the river with nutrients, and e.coli and fecal coliform bacteria from human and animal waste, as well as from pesticides and sediment loading. Combined sanitary and storm sewer overflow, or concentrated feedlot runoff, may also have an impact on the water quality of streams. Under the No-Action Alternative, there could be direct impact from poorly-planned construction, increased severity of flooding from elevated runoff levels, downstream chemical or sewage contamination, or restricted floodways.

Under this alternative, there would be minimal federal staff, resulting in reduced water quality monitoring by the park. The Nebraska Department of Environmental Quality currently monitors fecal coliform and e. coli concentrations on the Niobrara River once every five

years. Adverse impacts to water quality (e.g., increased turbidity, increased e.coli and fecal coliform levels) could go undetected due to an infrequent monitoring program.

Under Alternative A, Cornell Dam would remain under the management of the U. S. Fish and Wildlife Service. As the dam's owner, the U. S. Fish and Wildlife Service is responsible for regular safety inspections and maintenance. According to the Association of State Dam Officials, the average life span of a dam is fifty years. Cornell Dam was eighty-five years old in 2001. The dam's location at the head of a popular recreation area significantly increases the consequences of dam failure on human health and safety. Dam failure could also have short-term catastrophic environmental impacts both upstream and downstream.

*Cumulative Impacts:* If no action is taken to change current grazing practices or to control the heavy recreational use of the river, the sources of negative impacts on water quality and aquatic species outside and within the Scenic River could increase. In the event that Cornell Dam failed, water quality would be negatively impacted for a substantial period of time as a result of increased or potentially contaminated sediment load. In the long term, however, the impacts would probably be minimal, as the situation settled down, and could actually be beneficial, by returning the river to a more natural hydrograph.

*Conclusion:* Water quality and aquatic habitat at Niobrara National Scenic River could deteriorate under the no-action alternative. There would be perceptible impacts on water quality and aquatic species as a result of poor grazing practices and recreational overuse of the river. There would be, however, no irreversible adverse impacts on a resource whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Floodplains and Wetlands**

Along the river, people have used rock, concrete blocks, treated wood posts, and other stream flow barriers in attempts to keep ice from accumulating around bridges. Rip-rap and concrete used for bank stabilization also tend to constrict stream flows. This constriction or channelization causes the river flow to scour downward into the river bed and deepen the channel. These envi-

ronmentally damaging techniques could continue under the No-Action Alternative.

Wetlands would continue to be impacted by grazing along stream banks. There are beneficial effects from current state and federal stream bank and wetland vegetation restoration projects that would be expected to continue. Zoning ordinances require a two hundred-foot setback from the high water mark for new construction. Under this alternative, however, the National Park Service would lack the ability to influence other counties to adopt such ordinances. Unmanaged growth and development within and adjacent to the Scenic River could damage and threaten wetlands further.

*Cumulative Impacts:* No cumulative impacts on floodplains and wetlands would be expected under Alternative A.

*Conclusion:* The natural and beneficial values of floodplain areas would continue to be compromised by continued heavy use. Rip-rap used to protect bridge foundations and riverbanks would continue to constrict and channelize the river, deepening the riverbed. This could have long-term negative impacts on river habitats. Infrequent, periodic flooding could have short-term impacts on aquatic and wetlands resources. Some of these impacts would be mitigated by restoration projects. However, the potential for major, long-term impacts on wetlands and floodplains would remain.

### **Soil and Vegetation**

Soil and vegetation conditions are generally good along the Scenic River. Most landowners have implemented and maintained good stewardship practices on the land, which is predominantly privately-owned.

Alternative A would not result in any soil or vegetation disturbance except that caused by ongoing maintenance such as road grading and revegetation, foot traffic, and riverside grazing. Foot traffic would continue to compact soils, decrease permeability, alter soil moisture, and diminish water storage capacity, thereby increasing erosion. Prolonged trampling would decrease vegetation and increase overland runoff during precipitation events. Most livestock grazing occurs on private land. Ranches are typically large and have been owned by the same families for many years, resulting in sustainable ranching practices. Occasional pastures along the river

show obvious signs of over-grazing with fewer grass species and more coarse broadleaf species present. Trees have been cut on a selective basis with little knowledge of long-term soil and vegetation impacts. Some potential impacts have been prevented by landowners consulting with a state forester regarding harvest and stand management plans. However, not all private landowners do this.

Negative impacts to soil and vegetation could result from construction of new buildings, access roads, and recreational facilities unless previously impacted sites are selected. Construction of houses, access roads, and recreational facilities would likely continue over time on a low density, site-by-site basis. Impacts could be mitigated by following proper design techniques and site selection procedures, which would avoid areas with rare or sensitive plants or steep slopes and highly erodible soils. County zoning would influence site selection and construction impacts.

Other impacts can include reduction of native plants that are sensitive to grazing, introduction of non-native plants, and increased spread of weeds. Lack of fire has resulted in an increase of red cedar and reduction of meadows. Private landowner action, and a few state and federal conservation programs have resulted in restoration of some impacted sites and reduction of potential impacts on soil and vegetation.

*Cumulative Impacts:* Agriculture and ranching have reduced some native plants and led to the alteration and erosion of soils. Under Alternative A, these impacts would be expected to continue. The implementation of Alternative A in combination with past, present, and foreseeable future action would result in periodic, short-term, minor, adverse impacts on soil and vegetation.

*Conclusion:* Under the no action alternative, impacts on soil and vegetation would continue, and erosion would continue to increase. Consultation with experts would remain voluntary, and timber management and grazing practices would be employed sporadically, resulting in continued adverse impacts to the resource. The proliferation of red cedar would continue because of the lack of a systematic prescribed management plan. Implementing Alternative A would result in minor, long-term, adverse impacts on soil and vegetation, due mainly to development and agricultural practices. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific pur-

poses identified in the establishing legislation of the Niobrara National Scenic River.

### **Wildlife**

Wildlife habitat and populations are generally in good condition along the river. Under Alternative A, wildlife habitat would continue to be fragmented by roads, trails, facilities, residential homes, and building construction. Wildlife behavior and movement would continue to be altered by residents and visitors. Recreational use on the river displaces some birds and mammals during times of heavy use. Most common birds and mammals adapt to human use, and species using optimum habitat are not significantly affected. Some studies have been performed in the area, particularly of birds and butterflies. A recent research project conducted on the Fort Niobrara National Wildlife Refuge by Kansas State University from 2000-2002 found that at recreation levels of 15,000-18,000 people, there were no clear effects of recreational disturbance on songbirds breeding on the Refuge. However, there was a documented negative behavioral effect of recreation on waterbirds using the Niobrara River within the Fort Niobrara National Wildlife Refuge.

*Cumulative Impacts:* Agricultural practices, such as grazing, development, and recreational use have displaced wildlife and caused the loss of wildlife habitat. Development of private or state lands for residential or other uses would further fragment wildlife habitat and disrupt wildlife behavior and movement. Implementation of Alternative A in combination with past, present, and foreseeable future action would result in periodic, short-term, minor adverse impacts on wildlife.

*Conclusion:* Overall, alteration of wildlife habitat and interruption of wildlife movement resulting from implementing Alternative A would have a long-term minor adverse impact. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Threatened or Endangered Species**

Implementing Alternative A would have no effect on the federally-protected blowout penstemon, western fringed prairie orchid, or American burying beetle because populations of these species are not found within the Scenic



River boundary. There is no anticipated effect on migrating whooping cranes, and useable habitat would not be expected to change. There would be no effect on bald eagles from recreational river use because they are infrequently observed during the recreational season. There is sufficient evidence documenting piping plovers using sandbars along the Scenic River for nesting habitat that the U. S. Fish and Wildlife Service has designated a portion of the river extending from Norden Bridge to the Nebraska Highway 137 bridge as critical habitat. There is minimal effect from recreational river use on interior least terns and piping plovers nesting along the river during the summer, because their habitat preferences are in areas not heavily used for boating recreation. Effects from ranch uses on individual birds or habitat is minimal.

Under this alternative, the U. S. Fish and Wildlife Service and the Nebraska Game and Parks Commission would be largely responsible for protecting threatened and endangered species. The National Park Service would have minimal involvement in protecting and surveying threatened and endangered species.

*Cumulative Impacts:* The potential effects on federally-protected species from enactment of Alternative A are not known. The minimal National Park Service staff could have a moderate impact on the protection of nesting birds along the Scenic River. The implementation of Alternative A in combination with past, present, and foreseeable future action would result in long-term, minor, adverse impacts on threatened and endangered species.

*Conclusion:* There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Scenic Resources**

Under Alternative A, scenic resources of the valley would continue to be impacted by building construction and signage. Design and site choices made by developers would continue to be contingent upon county zoning regulations and decisions of planning commissions, and land protection oversight rendered by the Niobrara Council consistent with its enabling legislation from the State of Nebraska. Inasmuch as the Council is largely

federally funded, however, with no active National Park Service involvement their financial underpinnings would be seriously curtailed. Insensitive development could change the general appearance of the area over time, resulting in a significant long-term reduction in visual quality.

*Cumulative Impacts:* Private development would be expected to continue without further restrictions under Alternative A. Without National Park Service involvement, there would not be funds available to provide additional oversight of land protection through zoning or an easement program.

*Conclusion:* There would be minor to moderate, long-term adverse impacts on scenic resources under Alternative A. The National Park Service would be restricted in its ability to influence county zoning or enforcement. These factors could cause adverse impacts to the Scenic River's visual quality, a value requiring conservation.

---

### **Visitor Information, Education, and Experience**

Under the No-Action Alternative, the National Park Service would have limited resources necessary to meet National Park Service standards for interpretive programming, and key visitor services (e.g., publications, exhibits, interpretive programs) would be lacking. Accordingly, this alternative would implement the Wild and Scenic Rivers Act, but at a level less than what Congress directed and intended. Moreover, the long-term protection of the river and adjacent lands, and the provision of good quality visitor experiences, would be marginal. The park would have insufficient funding and staffing to develop a long-term interpretive vision and visitor use plan, and opportunities to collaborate with partners would be limited. On-going education outreach programs could continue as staff and funds permitted, but there would be little prospect of expanding and building upon these programs.

Private outfitters and local chambers of commerce would continue to be the main sources of park information. The information distributed by these sources would be mainly logistical in nature ("how to get to the park" and "what activities are available"). There would continue to be limited available information on the natu-

ral and cultural resources of the river. Services provided by external outfitters would continue to be uncoordinated and the park would have limited ability to influence how these entities operated. Visitors would leave the area with little knowledge of what makes the landscape and park resources special, a situation that limits the quality of the visitor experience.

Under the No-Action Alternative, the park would have no visitor/research center that could serve as an orientation point. Interpretive and other park staff would not have limited on-site office space and there would be no formal setting for interpretive programs, exhibits, or visitor information. Additionally, the trends of seasonal overcrowding would continue, and probably worsen as river float traffic increases. Visitors to the Scenic River and Fort Niobrara National Wildlife Refuge would continue to compete for limited parking and launch facilities. Congestion along certain segments of the river and at the limited number of launch sites — already a management concern for the Fort Niobrara National Wildlife Refuge on the wilderness portion of the river — would increase. Under Alternative A, there would be no new toilet facilities. The current facilities along the river and in private campgrounds would continue to be inadequate in number, especially between Fort Niobrara National Wildlife Refuge and Norden Bridge. In addition, the low maintenance outhouses with pits or portable toilets found in private campgrounds pose contamination and health concerns if not adequately maintained. In addition, these facilities — and the campgrounds themselves — generally do not comply with accessibility requirements of the Americans with Disabilities Act.

The increasing trend of tubing, often associated with rowdy behavior and alcohol consumption, would increase the number of visitor use conflicts with visitors seeking solitude on the river. With the limited staff under this alternative, the park would conduct minimal law enforcement patrols and responses to incidents such as drunkenness, disorderly behavior, trespassing, unauthorized fires, littering, and vandalism. County, state, and other federal law enforcement agencies would still provide these services on a jurisdiction driven basis, but they probably would remain underfunded and unable to meet the demands of growing visitation.

Fishing, hunting, and trapping would continue to be permitted and managed by the state and counties.

Hiking/biking trails would not be built under Alternative A. The opportunity would be missed to use trails to benefit and enhance the overall visitor experience, reduce negative impacts on resources, provide variety of and access to recreational activities, and help disperse visitors evenly throughout the park.

Collectively, these inactions would negatively impact and degrade the visitor experience.

*Cumulative Impacts:* Through time, the trends of seasonal overcrowding, visitor use conflicts, visitation related resource damage, trespassing, littering, and vandalism most likely would persist and worsen as visitation increases. These trends would limit the range and quality of recreational activities. In the absence of a viable interpretive program, most visitors would not have the opportunity to learn about, and appreciate, the unique and fragile resources of the Scenic River. These adverse impacts would significantly degrade the overall visitor experience.

*Conclusion:* Under Alternative A, the park would not be able to effectively interpret park resources or foster public appreciation and stewardship of them, nor effectively manage visitation. Launch sites and some segments of the river would be increasingly overcrowded, and facilities such as toilets would remain inadequate. The park would not have the ability to respond to vandalism, hunting and fishing violations, and other incidents and would continue to rely on external law enforcement agencies. Collectively and cumulatively, these trends would result in major adverse impacts on the park's visitor experience.

## Local Economy

General factors that could directly affect the local economy include visitor numbers and spending. Under Alternative A, future spending would directly correlate with visitor use, which is expected to increase at a moderate rate as the urban population and economy grow. Promotion and marketing could expand tourism in the area.

Under Alternative A, current uses and trends would continue with respect to outfitters. Outfitters currently operate under permits issued by the U. S. Fish and Wildlife Service for operation on the Fort Niobrara

National Wildlife Refuge. No refuge permits for new outfitters will be issued until the U. S. Fish and Wildlife Service completes a river management plan; this situation benefits current outfitters by preventing new competition. Regulations in regard to insurance, safety, and liability are minimal, and would remain so under Alternative A.

Many outfitters who own land along the river exclude other outfitters, limiting access sites available to those outfitters. Outfitters with land along the river would continue operating campgrounds, camp stores, and food service as business dictates. Business in general would be conducted with little attention paid to state and federal regulations regarding sanitation, disability access, signage, and health and safety codes. Outfitter businesses are small and locally owned, with limited investment capital, making it difficult to improve facilities in a revenue-producing season of only ten to twelve weeks.

*Cumulative Impacts:* An increase in the number of visitors would bring increased revenues to local businesses. Under Alternative A, greater numbers of visitors utilizing the services of outfitters could overburden the campgrounds and food services. At the same time, there would be a reduction in the already minimal enforcement of health and safety regulations.

*Conclusion:* Under Alternative A, the park's impact on local economies would remain basically the same. As visitation increases, local outfitters and support service providers would experience increases in incomes. If, however, increased, unmanaged visitation led to a decline in the visitor experience, the trend of increased incomes could stall or even reverse, which would negatively impact local economies. Under this alternative, no new outfitter permits would be issued until the U. S. Fish and Wildlife Service completes its river management plan. This would limit competition and could influence the quality or increase the cost of services provided. Over the long term, this situation could lead to moderate adverse impacts on the local economy.

### Landownership

Under Alternative A, there would be no direct National Park Service action affecting landowners, such as easement purchase, technical assistance, or cost-share assistance. The current pattern of limited public purchase of

land or easements would continue. It is assumed that zoning and local land protection practices would continue as they do currently in Brown, Cherry, Keya Paha, and Rock counties. Zoning could have the general effect of preserving the predominantly agricultural use and lifestyle of the valley by controlling future development. Some landowners would benefit from increased protection from development while others would resent increased regulation of their use of land. Restrictions on subdivision of large properties into smaller lots might preclude maximum profits; prices of smaller developable properties could increase. Recreational use along the river would continue without coordinated management between public agencies and private interests. Public land boundaries are unmarked and little effort has been made to educate visitors about the rights of private landowners. Protection of scenery and natural features will continue to depend on existing and developing programs.

*Cumulative Impacts:* Under Alternative A, there would not be any central organization funded or staffed to coordinate services among different agencies or to directly respond to development needs. The Niobrara Council, land-managing agencies, and individuals would probably act on a site-by-site or case-by-case basis with little coordination for consistency along the river. Funding for services provided by public agencies would compete with other priorities of those agencies.

Private land development would continue under county zoning, but zoning could be changed or repealed. Unmet costs of zoning enforcement could reduce its effectiveness, resulting in incremental, but significant, impacts on scenic quality, and on natural and cultural resources. New development and construction projects would not be subject to regulations requiring archeological studies of the site prior to groundbreaking, but would depend upon voluntary compliance. Impacts could be mitigated through sensitive development, but permanent adverse landscape impacts could add up over the long term.

No federal funds would be available from Congress through the National Park Service to purchase easements to protect land from development or other adverse uses. There would be continued impact on landowners from trespass by river users, who often do not understand or care that most of the land is privately owned and not open to recreational use.

*Conclusion:* Alternative A would have a negligible long-term impact on landownership.

---

### Local Governments

Under Alternative A, the cost of county road maintenance would continue to increase as a result of additional recreational traffic on gravel roads. Costly emergency services such as law enforcement, search and rescue, fire control, and ambulance service would continue to be provided by county governments. Revenue from recreational spending received by the counties from the state would probably be minor compared to expenses.

New residential or recreational development in the river valley would increase county government costs for basic services, and would generate new property taxes from development. It is unknown whether this would result in a net gain or cost to county government. County governments would bear all expenses related to zoning,

including advisory fees charged by consultants, continued administrative costs for county staff, and any legal actions. Zoning could stabilize county service costs over the long term.

*Cumulative Impacts:* Local governments would bear most, if not all, of the costs of infrastructure repairs and upkeep as a result of increased recreational traffic, as well as costs of emergency services.

*Conclusion:* Unmanaged development under Alternative A could increase infrastructure costs for local county and municipal governments. These costs could relate to services such as road maintenance, emergency services, county extension services, and county ordinance enforcement. Sales taxes and other revenue relating to increased recreational use and new property taxes from increased development would offset these increased expenses. However, whether local governments would experience a net gain or loss is unknown. If a net loss occurred, local governments would experience a minor to moderate, adverse impact to their revenue streams.

---



# Impacts of Management Alternative B: National Park Service Manages with Assistance from Partners (Preferred Alternative)

## Cultural Resources

Cultural resources on private and public land would be afforded protection through federal preservation laws such as the National Historic Preservation Act and other federal mandates, regulations, and policies. Under this alternative, staffing and funding levels would be sufficient to adequately enforce these laws and to monitor cultural resource conditions.

The staffing and funding levels under Alternative B would enhance the park's ability to work with partners to develop a volunteer monitoring program for cultural resources; to formally evaluate resources identified as being potentially eligible for listing in the National Register; and to respond to inadvertent or unexpected discoveries of cultural resources or damage to significant resources resulting from theft, vandalism, or natural processes (e.g., erosion).

The proposed staffing levels would provide flexibility for the park to:

- provide technical assistance for protecting significant cultural resources on private land;
- assist landowners to preserve sites and structures through external Service funding programs, tax incentives, and/or partnerships with preservation entities to protect, preserve, or stabilize significant resources; and/or
- develop Service partnerships or agreements with cultural resources preservation groups and other interested parties to leverage funds and resources.

National Park Service staff would develop a resource stewardship plan containing a cultural resource component. The Service would also develop resource standards and indicators that would signal when cultural resources were sustaining an unacceptable level of negative impact, as well as management prescriptions that would define how cultural resources would be managed.

The ranching landscapes in and around the park define much of the region's physical character and reflect traditional, regional land use. Under this alternative, the park would work closely with the Niobrara Council and the counties to develop and enforce consistent zoning ordinances that should protect significant and potentially significant cultural landscape resources.

The construction of a new research/education center, river access sites, restrooms, and hiking/biking trails could also result in adverse impacts on significant or potentially significant cultural resources. However, the Service and partnering land management agencies would ensure that federal and state cultural resource compliance procedures were met and would work with counties, landowners, and other partners to do the same, in order to mitigate adverse impacts on significant resources.

*Cumulative Impacts:* Over the long term, the coordinated partnership and strong National Park Service leadership with oversight authority over actions would result in open communication, cooperation, and increased opportunities to match and leverage funding and staffing resources among the partners. Some significant resources (historic bridges) could sustain moderate to major, unavoidable and irreversible adverse impacts due to wear and deterioration or natural processes. However, the park and its partners would be able to respond to and mitigate these impacts.

*Conclusion:* Under Alternative B, significant cultural resources reflecting past lifestyles would be protected through the Service's developed leadership role and oversight authority over federal actions. The Service would wield considerable influence by working closely with the Niobrara Council and counties to develop consistent zoning ordinances that would reduce or slow the conversion of agricultural lands to residential or commercial properties, thus preserving the cultural landscapes characterizing the region. The Service would also work closely with counties to maintain historic bridges listed in the National Register and would administer any funds needed to support maintenance activities.

Bridge replacement or construction of new park facilities, including the proposed joint-agency education center, potentially could unavoidably and irreversibly impact significant cultural resources. However, most of the adverse impacts could be mitigated. In summary, Alternative B provides sufficient funding/staffing, jurisdictional authority, and leadership to ensure that significant cultural resources remain unimpaired.

## Paleontological Resources

Under Alternative B, the National Park Service would have the administrative authority, leadership, and resources to help protect significant paleontological resources. The proposed coordinated partnership would ensure a consistent and comprehensive approach to protecting and managing these resources. Equally important, the Service would have final review and approval authority over all activities implementing federal actions. This authority would allow the Service to directly shape how paleontological resources are managed in the park. Through its strong leadership role, the National Park Service would have increased opportunities to provide technical advice regarding these resources and to function as liaisons between park partners and outside paleontological resource professionals. The proposed staffing levels would provide flexibility for the park to:

- develop a volunteer resource-monitoring plan for resources on public and private land;
- educate visitors and landowners about the value of resources;
- develop Service partnerships or agreements with paleontological resource preservation groups and other interested parties to leverage funds and resources; and
- respond to unexpected discoveries of paleontological resources or damage to significant resources resulting from theft, vandalism, development, and/or natural processes (e.g., erosion).

Paleontological resources on federal lands would be afforded protection through federal preservation laws such as the Antiquities Act and other federal preservation mandates and regulations. Under this alternative, staffing and funding levels would allow the park staff to enforce these laws and monitor resource conditions.

Funding under Alternative B would also increase the park's ability to purchase easements from willing sellers in order to extend federal protection to a number of resources. In addition, through its strong leadership role and partnering, the park could encourage federal, state, local, and land trust entities to acquire conservation/scenic easements in order to extend protection to sensitive resources. Furthermore, Alternative B calls for discontinuous tracts of existing federal land within the park to be transferred to the National Park Service for management. All of these mechanisms could produce beneficial impacts on paleontological resources.

Under Alternative B, National Park Service staff would develop a resource stewardship plan with a paleontological component. With partners, the Service would also develop resource standards and indicators that would signal when these resources were sustaining an unacceptable level of negative impacts, as well as develop management prescriptions that would define how fossil resources would be managed. The combination of standards, indicators, and management prescriptions would allow the Service and its partners to effectively manage these resources, which would have a moderate to major beneficial impact on significant paleontological resources.

In construction of a new research/education center, river access sites, restrooms, and hiking/biking trails, the Service and its partnering land-managing agencies would ensure that federal and/or state resource compliance procedures were met, and would work with counties, landowners, and other partners to do the same. These actions would ensure that adverse impacts on significant resources would be avoided or mitigated.

*Cumulative Impacts:* Over the long term, the coordinated partnerships and strong National Park Service leadership with oversight authority over federal actions would result in open communication, cooperation, and opportunities to match and leverage funding and staffing resources among the partners. This would provide protection for significant paleontological resources through integrated law enforcement, education and interpretation programs, and coordinated maintenance and development. These actions could reduce the risk of adverse impacts on sensitive paleontological resources. Some significant paleontological resources could sustain moderate to major unavoidable and irreversible adverse impacts as a result of construction and/or natural processes. The park, however, would be able to respond to and mitigate these impacts through maintenance or formal documentation.

*Conclusion:* Under Alternative B, significant fossil resources would be better protected through the National Park Service's expanded leadership role and oversight authority over federal actions. The Service would wield considerable influence by working closely with the Niobrara Council and counties to develop consistent zoning ordinances that would reduce or slow the conversion of agricultural lands to residential or commercial properties. Alternative B provides sufficient funding/staffing, jurisdictional authority, leadership, and

flexibility to ensure that important paleontological resources remain unimpaired.

---

## Natural Resources

### **Air Quality**

Alternative B would involve use of prescribed fire as part of landscape restoration and management. Prescribed burns would increase smoke production and reduce visibility, but they would be initiated under conditions conducive to good smoke dispersal so that the extent and duration of these impacts would be limited. Weather forecasts, smoke management forecasts, atmospheric stability, fuel loadings, fuel moisture, and local and upper level winds would all be evaluated to minimize the effects of smoke from any prescribed fire. Use of prescribed fire would result in periodic, short-term, minor adverse impacts on air quality.

Other impacts on air quality would be localized. Short-term dust results from traffic on gravel roads during dry weather. Dust from increased traffic would cause minor inconvenience to travelers on the roads and to people living nearby. Dust would increase over time if traffic increased on gravel roads, but the overall impacts would be minor. The increase in staffing would augment the response to unplanned/uncontrolled wildland fires, reducing the impact of short-term particulate matter emissions and reduced visibility.

*Cumulative Impacts:* Impacts on air quality from other past, present, and reasonably foreseeable future actions—vehicle emissions, use of dirt and gravel roads, wood burning for home heating, prescribed fires, and wildland fires—would continue. The levels of emissions from these sources could change slightly in the foreseeable future, but any change would likely be negligible and not measurably change air quality. The implementation of Alternative B in combination with past, present, and foreseeable future action would result in periodic, short-term, minor, adverse impacts on air quality.

*Conclusion:* Air quality at Niobrara National Scenic River could deteriorate periodically at a local level, but generally remain good. The only noticeable impact on air quality from Alternative B would be that air quality and visibility would be locally and temporarily impacted by prescribed fire or construction projects. There would

be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Water Quality and Aquatic Species**

Because of heavy recreational use of some reaches of the Niobrara River, coupled with the presence of wildlife and livestock grazing, the potential exists for river contamination with nutrients and fecal coliform and e. coli bacteria from human and animal waste, as well as from pesticides and sediment loading. Combined sanitary and storm sewer overflow, or concentrated feedlot runoff, could have an impact on stream water quality. Under Alternative B, the National Park Service would develop and implement a resource stewardship plan under which controls on recreational use and additional or improved restrooms would reduce impacts on water quality.

The Nebraska Department of Environmental Quality currently monitors fecal coliform and e. coli bacteria on the Niobrara River once every five years. Under Alternative B, the National Park Service would monitor the waters under its control year-round for fecal coliform and e. coli bacteria. Alternative B would provide additional protection of water resources from pollution or bank erosion through zoning enforcement, stream-bank restoration projects, and offering technical advice to developers. Construction of river access sites could result in short-term erosion and sedimentation; however, this could be minimized by incorporating appropriate design and mitigation measures along riverbanks (e.g., sediment/silt screens and restoring vegetation).

Under Alternative B, the National Park Service and its management partners would conduct studies of the potential ramifications of removing Cornell Dam, an abandoned hydroelectric structure serving no continuing purpose. As the dam's owner, the U. S. Fish and Wildlife Service is responsible for regular safety inspections and maintenance. According to the Association of State Dam Officials, the average life span of a dam is fifty years. Cornell Dam was eighty-five years old in 2001. Today the dam is stable, but future stability cannot be assured. The dam's location at the head of a popular recreation area significantly increases the consequences of dam failure on human health and safety. Dam failure could also have catastrophic environmental impacts both upstream and downstream.

Dams frequently have both negative and positive ecological impacts. For example, loss of habitat for one species may be balanced by an increase in habitat for others. Complete or partial dam removal is one component of river enhancement. However, while dam removal is generally considered beneficial to riverine systems, significant research is required to verify this before any action can be taken. The untimed release of deconstruction debris and decades' worth of accumulated and potentially contaminated sediment can have deleterious downstream effects on both biological and physical resources. Sudden exposure of the basin bottom may also have negative impacts that must be anticipated and mitigated. While water impoundment behind Cornell Dam has improved habitat conditions for purple loosestrife, a Nebraska noxious weed, the vast mud flat that would be exposed by draining the basin could allow the weed to expand exponentially.

*Cumulative Impacts:* Impacts on water quality and aquatic species from other past, present, and reasonably foreseeable future actions such as livestock grazing, heavy recreational use along the river, pesticide use, sediment loading, and concentrated feedlot runoff, in conjunction with the impacts of Alternative B described above, could result in moderate, adverse, long-term impacts on water quality. Employing best management practices (e.g., sediment/silt screens, vegetation buffer strips) could protect riverbanks from excessive impacts, which would likely reduce undue siltation and fecal coliform and e. coli bacteria counts. On the other hand, best management practices might not be effective on sediment loading since its sources may be outside the Scenic River's reaches, and fluctuating sediments are inherently natural in prairie stream ecosystems.

With respect to Cornell Dam, there are three possible scenarios, as discussed above: no action; catastrophic failure, a one-time event with immediate, but short-term, repercussions; or planned/controlled removal. In the event that the Cornell Dam failed, water quality would be negatively impacted for a short period of time as a result of increased and potentially contaminated sediment load and fecal coliform and e. coli bacteria flushing concurrent with that release. In the long term, however, the impacts would probably be minimal, as things settled down, and could actually be beneficial, by returning the river to a more natural hydrograph. Consequently, no cumulative impacts on water quality or aquatic species would be expected under Alternative B as a result of the removal of Cornell Dam.

*Conclusion:* Water quality and aquatic habitat of the Niobrara National Scenic River would improve with implementation of Alternative B, and any effects on aquatic habitat from proposed developments and park operations would result in a short-term, negligible, adverse impact. In the long term, best management practices would protect riverbanks from excessive impacts, water quality would not be impaired, and a natural hydrograph and natural flow patterns would be restored. Properly managed removal of Cornell Dam could restore the natural turbidity of the river and associated food sources, as well as allow for free upstream migration of fish. An agency-driven dam removal action would seek to mitigate deleterious downstream effects before, during, and after the action. Controlled removal would allow restoration to occur simultaneously, preventing sudden and vast exposures of impoundment and river bottoms. Consequently, there would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Floodplains and Wetlands**

There would be no direct adverse impact on floodplains or wetlands from Alternative B. Construction of public river access sites would not reduce floodway capacity, divert floodwaters, or result in measurable water contamination. Federal construction regulations and National Park Service policy require site surveys and avoidance of wetlands as part of the facility design process. Additionally, funding could be increased for cost-share incentives that foster best management practices to mitigate and help control further habitat degradation on private agricultural land. This would encourage increased restoration of wetlands and stream bank vegetation utilizing environmentally sound techniques. Ecologically sound measures to alleviate ice buildup around bridges could be employed by river managers.

*Cumulative Impacts:* No cumulative adverse impacts on floodplains and wetlands would be expected under Alternative B.

*Conclusion:* The development and implementation of a river management plan and best management practices called for in this alternative would benefit floodplain and wetlands resources. The ability to cost-share and leverage funds and resources among partners would permit more and better-coordinated restoration proj-



ects. Environmentally sound methods for preventing ice build up would reduce stream channelization and prevent the use of "hard" bank stabilization measures (e.g., rock, rip-rap). Collectively, these factors would result in major, long-term beneficial impacts on wetlands and floodplains.

### **Soil and Vegetation**

Under Alternative B, soil and vegetation impacts would result from construction of the proposed cooperative research and education center, other new buildings, access roads, and recreational facilities, unless previously-impacted sites are selected. Some soil and vegetation would be disturbed by construction of public river access sites. Construction of the center would subject about five acres of soil to short-term disturbance. Erosion on construction sites could be accelerated at least temporarily, until drainage structures were fully operational and vegetation had recovered. To mitigate adverse impacts, construction activity would be restricted to the minimum area required for building or rehabilitating, and topsoil would be retained and replaced where possible to conserve the available organic matter. Soil and vegetation on each site would be graded and covered with gravel or paved for road and parking lot construction. No through roads are proposed. The adverse impacts on soils from increased erosion would be minor and short term.

A net increase in paved surfaces in this alternative is not anticipated. In areas with hardened surfaces, the direct inflow of water to soil would be partially or totally eliminated, and precipitation would be collected and diverted to natural drainages. Runoff not collected and diverted would pour out onto adjacent areas, increasing the local soil moisture regime. Increased runoff in these areas could result in localized increases in erosion, changes in soil nutrient transport, and changes in the natural composition of vegetation.

In addition to conserving and replacing topsoil from disturbed areas to minimize the loss of organic material, the National Park Service would reseed these areas with native species to speed the rate of recovery and to minimize encroachment of invasive species. Altered vegetative composition could create slight changes in soil chemistry. The adverse impacts on soil erosion, soil nutrient transport, and vegetative composition from an increase in hardened surfaces would be minor and long term.

Management in Alternative B could increase conservation technical assistance and cost-share financial assistance. Maintaining vegetation would depend on maintaining agricultural uses and avoiding conversion of agricultural land to small residential or commercial properties. Various land protection methods (excluding acquisition), including county zoning, voluntary landowner agreements, and conservancies would be pursued to maintain agricultural uses. In addition, acquisition of conservation easements on private land by the National Park Service or cooperating agencies could be used to maintain ranches if other methods are ineffective.

Lack of fire has resulted in a proliferation of eastern red cedar and ladder fuels, and a corresponding reduction of meadows. Prescribed burning and programs to help control exotic plants would positively impact native plants.

*Cumulative Impacts:* Approximately five acres of native vegetation could be lost during construction and rehabilitation projects under Alternative B. Such projects could also increase runoff and soil compaction, alter soil regimes and vegetation, and cause the loss of plants in some areas.

*Conclusion:* A small part of the natural soil profile would be lost on five to ten acres. With proper mitigation, little soil would be eroded where construction and rehabilitation would be carried out. Relative abundance of invasive species could be increased by clearing some native vegetation during construction. Alternative B would provide support to private landowners through technical assistance and economic incentives to manage their holdings using best management practices.

Overall, implementation of the preferred alternative would result in minor long-term adverse impacts on soil and vegetation. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Wildlife**

Wildlife habitat and populations are generally in good condition along the river. Under Alternative B, the managing partners could limit recreational use on the river during critical times in the life cycles of species that might be significantly affected by human use. A recent

research project conducted on the Fort Niobrara National Wildlife Refuge by Kansas State University from 2000-2002 found that at recreation levels of 15,000-18,000 people, there were no clear effects of recreational disturbance on songbirds breeding on the Refuge. However, there was a documented negative behavioral effect of recreation on waterbirds using the Niobrara River within the Fort Niobrara National Wildlife Refuge.

*Cumulative Impacts:* Wildlife habitat and populations would benefit from the implementation of a wildlife management plan and best management practices.

*Conclusion:* Implementing Alternative B would result in long-term, moderate, beneficial impact, due mainly to implementation of wildlife management programs. Partnerships would allow the park and partners to implement management actions more effectively through shared resources and leveraged funds. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Threatened or Endangered Species**

Under Alternative B, protection of state-listed sensitive species, and state- and federally protected threatened and endangered species and their habitats must be considered in all management actions. The National Park Service would be involved in annual spring/early summer inventory and monitoring of least tern and piping plover nesting sites, which could result in improved long-term habitat protection and better information about migratory bird populations and their habitat. Management of the river would discourage recreational use of tern and plover nesting habitat during critical nesting periods. Also, inventory and monitoring of terrestrial, aquatic, and plant species would most likely result in habitat protection and restoration.

*Cumulative Impacts:* Threatened and endangered species would be expected to benefit from implementation of Alternative B because of the increased inventory and monitoring activities of the Service, and implementation of protective actions in the resource stewardship plan.

*Conclusion:* Resource stewardship and other management plans would afford protection to threatened and

endangered species. Partnerships called for under this alternative would allow the Scenic River and its partners to leverage staff and funds. This would afford more opportunities and flexibility to carry out inventories, monitoring, protection of threatened and endangered species and their designated critical habitats, or restore or enhance any other associated habitats. These factors could result in moderate to major beneficial impacts to these species.

### **Scenic Resources**

Building construction and proliferating signage are adversely impacting the scenic resources of the Niobrara National Scenic River. Technical design assistance could be offered to private developers to mitigate the negative effects of construction and signage. Cooperation among various management entities could provide additional landscape preservation through conservation easements, landowner agreements, and land trusts.

*Cumulative Impacts:* Implementation of Alternative B would be expected to have a minor, long-term positive impact on the scenic resources of the Niobrara River.

*Conclusion:* The National Park Service could provide its partners with technical assistance to limit development and reduce signage impacts. Partners could protect scenic resources through easements, cooperative and other agreements, and land trusts. These actions would reduce impacts to scenic resources that are required to be conserved by the unit's enabling legislation.

### **Visitor Information, Education, and Experience**

In the preferred alternative, the park would collaborate with its partners to provide a wide array of visitor services and education and interpretive opportunities. The National Park Service would manage core functions such as interpretation and public safety.

Under this alternative, the interpretive staff and Scenic River partners would develop a long-range interpretive vision and expand the interpretation and outreach education programs. These programs would educate the public about the types of resources found in the park, their value and significance, and current threats to these resources. Through partnerships, the park could work with other land management entities to share and lever-

age interpretive/educational resources and coordinate visitor use services. Coordinated interpretation and visitor services potentially could directly and indirectly benefit cultural and paleontological resources, threatened and endangered species, and other park values.

Rather than rely on private outfitters and local chambers of commerce to provide the main source of park information, the park and its partners would promote recreational opportunities, resource protection, the appreciation of park values, and visitor safety through:

- interpretive and educational outreach programs;
- brochures and maps depicting natural features and park values;
- exhibits and interpretive/informational signs;
- public contacts (interpretive and law enforcement patrols);
- a park Web site; and
- the cooperative research and education center.

Outfitters and local chambers of commerce would continue to play an important role in providing logistical information. However, under this alternative, the National Park Service and its partners would coordinate this information and ensure its accuracy by working closely with its concessionaires and with external outfitters and local chambers. By producing a wide range of informational materials in a variety of media, a large spectrum of local and regional visitors could receive comprehensive information about the park. These actions could indirectly benefit park resources by promoting resource awareness, which potentially could reduce the threat of impacts on resources. The enhanced visitor experience gained through these coordinated efforts could result in longer and/or more frequent visits to the park, which in turn could directly benefit local service economies (e.g., restaurants and motels) in surrounding gateway communities.

Construction of the visitor education center proposed under this alternative would provide a central location for visitors to receive an orientation to the park, learn more about the river and its resource values through exhibits and park brochures, and attend interpretive programs.

Fishing and hunting would continue unless the Service and its partners determined that it should develop management regulations. Trapping would be prohibited on the small number of acres of National Park Service land.

These actions could limit the range of recreational activities, but overall would not directly negatively impact the visitors experience.

Under Alternative B, the Service would seek to develop or improve permanent restroom facilities along the river. The addition of new public river access sites with maintained toilet facilities, which meet Americans with Disabilities Act requirements, would improve visitor satisfaction and reduce trespass on private land. It also would encourage visitor distribution over more of the canoeable river and could reduce Saturday float congestion originating at the Fort Niobrara launch site.

Building other facilities such as parking areas and hiking/biking trails would benefit and enhance the overall visitor experience, provide access to a variety of recreational activities, and help disperse visitors evenly throughout the park.

Collectively, these actions could directly and indirectly benefit the park's visitor experience. Given the emphasis of partnering under this alternative, there would be numerous opportunities to match funds and leverage resources among the park and its partners, which could give the park more resources and flexibility to develop and implement an effective interpretive vision and visitor use plan.

*Cumulative Impacts:* Through time, this alternative would result in quality visitor facilities, management of visitor crowding, comprehensive education and information, coordinated management of commercial services, and minimized visitor conflicts. In addition, this alternative would provide a wider range of visitors with increased opportunities to learn about park resources and values, and their significance. This would increase the likelihood of visitors and park neighbors becoming better resource stewards. In turn, this potentially would lead to fewer negative impacts on park resources and values.

*Conclusion:* Alternative B would provide a greater variety of activities and visitor experiences than currently exists. Funding and staffing levels under this alternative would permit the park to:

- develop active interpretive and educational outreach programs;
- draft river management plan that would reduce visitor use conflicts;

- provide and maintain facilities needed for high-quality recreation; and
- create opportunities to leverage funds and resources among the park and its partners.

These actions would help maintain visitor satisfaction and ensure that the visitor experience at the park would remain unimpaired. There would be moderate to major long-term beneficial impacts.

## Local Economy

Future visitor use would be influenced by the same factors as in Alternative A — visitor numbers and spending. A river use management plan developed collaboratively by the park, other public agencies, outfitters, and other stakeholders could coordinate river use and distribute visitors over a larger portion of the river. The plan could limit river use on weekends to reduce overcrowding. The park, working closely with outfitters and area chambers of commerce and local businesses could promote increased weekday river use. The collaborative relationships stressed in this alternative could facilitate implementing river use changes and make those transitions less contentious. Collectively, these actions could expand overall visitation and encourage longer visits and/or more frequent revisits, which would provide additional revenue to local economies.

New river access sites would benefit many outfitters by providing additional launch and retrieval sites, and increased trip flexibility. However, the addition of public access sites could negatively impact some riverfront landowners and outfitters who charge for use of their access sites.

Increased park staff and cooperative agreements with other federal and local agencies would allow the park to better enforce sanitation, disability access, and health and safety codes among outfitters. This could have an adverse financial impact on small, locally owned outfitters because of the expense of improving facilities for a revenue-producing season of only ten to twelve weeks. Some of these costs could be offset through cost-share assistance for resource protection and/or visitor use improvements. Additionally, river management partners could provide no-cost technical advice to outfitters with regard to facility design, location, and operation.

*Cumulative Impacts:* The park could work with outfitters and other stakeholders to expand and shift the times of river use to reduce overcrowding and increase visitor numbers and spending. This could encourage longer and more frequent visits, and increase revenues for local economies through time. Because of the partnerships and collaborative efforts stressed in this alternative, implementing changes that would result in local economic gains could be achieved more quickly and with less political or social stress.

*Conclusion:* Through collaboration and partnerships, the park would have more opportunities to influence river use changes that could result in an increase in managed visitation. Overall there would be long-term, moderate, beneficial impacts on local businesses. There would be no irreversible adverse impacts on local economies.

## Landownership

Under Alternative B, there could be direct public action affecting landowners, such as easement purchase, technical assistance, or cost-share assistance. There could be direct public purchase of easements, primarily through the Niobrara Council, with appropriated funding.

The river managers would work with county officials to manage zoning that would help to preserve the predominant agricultural use and lifestyle of the valley by limiting future development. Some landowners would benefit from increased protection from development, while others would resent increased regulation of their use of land. Restrictions on the subdivision of large properties into smaller lots might preclude maximum profits; prices of smaller developable properties could increase, leading to an increase in property taxes.

Efforts would be made to educate visitors about the rights of private landowners. Most visitors do not realize that much of the land inside the Scenic River boundary is privately owned and not open to recreational use. As a result of public education and interpretation activities conducted by the river managers, there could be reduced impacts on landowners from trespass by river users.

*Cumulative Impacts:* Alternative B would produce a central entity that provides consistent management or over-



sight along the river and across various jurisdictions. Impacts on significant resources of the river from private land development would be reduced by county zoning regulations. Agricultural and natural landscapes would have better protection through improved design and management of development. Landowners could be affected by new restrictions in county zoning regulations, but they would also be protected from impacts from neighboring developments.

*Conclusion:* Implementing Alternative B would have a moderate, long-term, beneficial impact on landownership. Coordinating with local zoning officials and purchasing land in fee title and easements through partnerships would help protect scenic landscapes and resources from development, which would be a long-term benefit. There would be no irreversible adverse impacts.

---

## Local Governments

The cost of county road maintenance would probably increase as a result of recreational traffic generated by increased visitation under Alternative B. Partnerships and collaborative federal, state, and local management of the river stressed in this alternative would allow these increased costs to be spread out among several entities. This would minimize negative impacts to local governments' infrastructure expenses.

The amount of private property to be purchased in fee title could be twenty-five acres, spread out between several counties. These purchases would have minimal impacts to local government tax bases. Lands protected through easements would continue to be taxed at an agricultural-use rate. Easements would slow development and cap increases in property tax that local governments might have gained under other scenarios.

However, managed growth would also cap infrastructure expenses local governments could encounter with unmanaged growth.

The increase in quality of visitor experience assumed under this alternative would probably lead to longer visitor stays and/or increased visits to the Scenic River. Extended or increased stays would give visitors more opportunities to spend money in local communities, which would increase local governments' sales tax revenues.

Partnerships and collaborative approach to management encouraged under this alternative would increase local government involvement in the unit's management. This could foster a sense of citizen-based resource stewardship both within and around the park. Increased coordination among land managing agencies and local governments would also encourage local government buy in and support of management decisions and policies.

*Cumulative Impacts:* Visitation would probably increase in counties bordering the unit. However, increased costs for road maintenance, emergency services, and other infrastructure needs would be spread among the land managing agencies. This could be accomplished through cooperative agreements, leveraged funding, and personnel sharing.

*Conclusion:* There would be no long-term, adverse impacts to local government economies due to increased visitation because related costs would be spread among several partnering entities. Longer and more frequent visits (due to an enhanced visitor experience) would increase sales taxes, which could have a moderate to major beneficial impact on local government revenues. A close working relationship among land managers and local governments would foster resource stewardship and increased cooperation, benefiting both local governments and unit managers.

---



# Impacts of Management Alternative C: National Park Service Manages Independently

## Cultural Resources

As lands came under National Park Service fee title or easement ownership, cultural resources would be subject to federal preservation mandates and regulations. Staffing and funding levels under this alternative should be sufficient to allow the park staff to enforce these laws and monitor site conditions.

National Park Service staff would develop a resource stewardship plan that would include a cultural resource component. The Service would also develop resource standards and indicators to signal when cultural resources were sustaining an unacceptable level of negative impacts, and to prescribe how to manage cultural resources.

The proposed staffing levels would provide flexibility for the park to:

- provide technical assistance for protecting significant cultural resources on private land;
- assist landowners to preserve sites and structures through external Service funding programs, tax incentives, and/or partnerships with preservation entities to protect, preserve, or stabilize significant resources; and/or
- develop Service partnerships or agreements with cultural resources preservation groups and other interested parties to leverage funds and resources.

The ranching landscapes in and around the park define much of the region's physical character and reflect traditional, regional land use. As a major land manager, the Service would have influence over activities occurring outside the Scenic River's boundaries that would impact sensitive cultural resources, but would not have direct control over those activities.

Construction of a new research/education center, river access sites, restrooms, and hiking/biking trails could result in adverse impacts on significant cultural resources. However, the Service would ensure federal cultural resource compliance procedures were met. These actions would ensure that any adverse impacts on significant resources would be mitigated through avoidance or formal documentation. However, funding for

these actions might need to be diverted from other management areas.

Alternative C also calls for removing Cornell Dam. If the decision were made to remove the dam, it would need to be evaluated for National Register significance to ensure that a National Register eligible site would not be adversely impacted.

*Cumulative Impacts:* Over the long term, acquiring more lands in fee title as well as conservation/scenic easements would extend federal preservation protection to a number of significant or potentially significant cultural resources. The extension of federal protection potentially would directly and indirectly reduce the risk of minor to major, adverse impacts on sensitive cultural resources.

*Conclusion:* Under Alternative C, significant cultural resources reflecting past lifeways would be protected through the enforcement of federal preservation mandates and regulations as the park acquired more lands in fee title or easements. The proposed staffing and funding levels would allow the park to ensure cultural resource compliance would be attained prior to ground-disturbing projects and would permit development of cultural resource components of various management plans.

In addition, the park could work closely with the Niobrara Council and counties to develop consistent zoning ordinances that would reduce or slow the conversion of agricultural lands to residential or commercial properties, which potentially could conserve the scenic cultural landscapes characterizing the region.

Under Alternative C, bridge replacement, removal of Cornell Dam, and construction of new park facilities could impact significant cultural resources. However, most of the potential adverse impacts could be mitigated through avoidance or formal documentation, leaving cultural resources unimpaired.

## Paleontological Resources

On any lands coming under National Park Service management through conservation or scenic easements or

fee title, paleontological resources would be subject to federal preservation mandates, regulations, and policies. Staffing and funding levels under this alternative should be sufficient to allow park staff to enforce these laws, monitor site conditions, and develop a volunteer site-monitoring plan for paleontological resources on private lands. Proposed staffing levels would provide flexibility for the park to:

- develop a volunteer resource monitoring plan for resources on public and private land;
- educate visitors and landowners about resource values;
- develop Service partnerships or agreements with paleontological resources preservation groups and other interested parties to leverage funds and resources; and
- respond to unexpected discoveries of paleontological resources or damage to significant resources resulting from theft, vandalism, or natural processes (e.g., erosion).

Under Alternative C, National Park Service staff would develop a resource stewardship plan that would include a paleontological resource component. The Service would also develop resource standards and indicators that would signal when paleontological resources were sustaining an unacceptable level of negative impacts. The Service would also develop management guidelines that would define how these resources would be managed, resulting in beneficial impacts on important paleontological resources.

The construction of a new research and education center, river access sites, restrooms, and hiking/biking trails could result in moderate to major unavoidable and irreversible adverse impacts on paleontological resources. However, the Service would ensure federal resource compliance procedures were met. These actions would ensure that any adverse impacts on significant resources would be mitigated.

*Cumulative Impacts:* Over the long term, acquiring more lands in fee title as well as conservation/scenic easements would extend federal preservation protection to a number of fossil sites. Provided that the proposed funding and staffing proved to be sufficient, the extension of federal protection could minimize the risk of adverse impacts on sensitive paleontological resources. Some significant paleontological resources could sustain moderate to major unavoidable and irreversible adverse

impacts due to construction and/or natural processes. However, the park would be able to respond to and mitigate these impacts through maintenance or formal documentation.

*Conclusion:* Under Alternative C, important paleontological resources would be protected through the enforcement of federal preservation mandates and regulations as the park acquired more lands in fee title or easements. The proposed staffing and funding levels would also allow the park to ensure resource compliance would be attained prior to ground-disturbing projects and would permit the development of paleontological resource components in various management plans. The park also would work closely with the Niobrara Council and counties to develop consistent zoning ordinances that would minimize or slow the conversion of agricultural lands to residential or commercial properties, thus conserving traditional landscapes potentially containing paleontological resources. Collectively, these actions would benefit paleontological resources and minimize the risk of impairment.

## Natural Resources

### Air Quality

Alternative C would involve use of prescribed fire as part of landscape restoration efforts. This would increase smoke production and reduce visibility, but the extent and duration of these impacts would be limited. Prescribed burns would increase smoke production and reduce visibility, but they would be initiated under conditions conducive to good smoke dispersal so that the extent and duration of these impacts would be limited. Weather forecasts, smoke management forecasts, atmospheric stability, fuel loadings, fuel moisture, and local and upper level winds would all be evaluated to minimize the effects of smoke from any prescribed fire. Use of prescribed fire would result in a short-term, minor, adverse impact on air quality.

Other impacts on air quality would be localized, such as short-term dust resulting from traffic on unimproved and gravel roads during dry weather. Dust from increased traffic would cause minor inconvenience to travelers on the roads and to people living nearby. Dust could increase over time if traffic increased on gravel roads, but the overall impacts would be minor.



Increases in staffing would augment the response to unplanned/uncontrolled wildland fires, reducing the impact of short-term particulate matter emissions and reduced visibility.

*Cumulative Impacts:* Impacts on air quality from vehicle emissions, use of gravel roads, wood burning for home heating, prescribed fires, and wildfires would continue under this alternative. Emission levels from these sources could change slightly in the near future, but any change would be short-term and would not measurably change air quality. The foreseeable future action that would most likely impact air quality at the Scenic River would be increased traffic on gravel roads.

*Conclusion:* No direct impacts would be expected from implementing Alternative C, and air quality at Niobrara National Scenic River would remain good. Implementation of Alternative C in combination with past, present, and foreseeable future action would result in periodic, short-term, minor, adverse impacts on air quality. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Water Quality and Aquatic Species**

Because of heavy recreational use of some reaches of the Niobrara, coupled with the presence of wildlife in the refuge and livestock grazing in the river and on tributaries, the potential exists for river contamination. Nutrients, fecal coliform and e. coli bacteria from human and animal waste, pesticides, and sediment loading are potential contamination sources. Combined sanitary and storm sewer overflow, or concentrated feedlot runoff could impact stream water quality. The National Park Service would monitor the waters under its control throughout the year and would alert users of the river in a timely manner should there be elevated counts. Under Alternative C, management actions to control recreational use and provide more restrooms could be implemented in order to reduce impacts on water quality. This alternative would provide protection of water resources from pollution or bank erosion through zoning enforcement, promoting best management practices, and offering technical assistance to developers.

Construction of river access sites could result in minor short-term erosion and sedimentation; however, this could be minimized by appropriate design and mitiga-

tion measures along riverbanks (e.g., sediment/silt screens).

Alternative C advocates the removal of Cornell Dam, an abandoned hydroelectric structure serving no continuing purpose. As the dam's owner, the U. S. Fish and Wildlife Service is responsible for regular safety inspections and maintenance. According to the Association of State Dam Officials, the average life span of a dam is fifty years. Cornell Dam was eighty-five years old in 2001. Today the dam is stable, but future stability cannot be assured. The dam's location at the head of a popular recreation area significantly increases risks and consequences of dam failure on human health and safety. Dam failure could also have catastrophic environmental impacts both upstream and downstream. Before such an action would be taken, the National Park Service and the U. S. Fish and Wildlife Service would conduct studies of the potential ramifications of removing the dam.

Dams frequently have both negative and positive ecological impacts. For example, habitat loss for one species may be balanced by an increase in habitat for others. Complete or partial dam removal is one component of river enhancement projects. However, while dam removal is generally considered beneficial to riverine systems, significant research is required to verify this before any action can be taken. Releasing deconstruction debris and decades' worth of accumulated and potentially contaminated sediment can have serious deleterious downstream effects on both biological and physical resources. Sudden exposure of the impoundment bottom may also have negative impacts that must be anticipated and mitigated. While water impoundment behind Cornell Dam has improved habitat conditions for purple loosestrife, a Nebraska noxious weed, the vast mud flat that would be exposed by draining the area could allow the weed to expand exponentially.

*Cumulative Impacts:* The sources of impacts on water quality and aquatic species outside and within the Scenic River would remain at or near existing levels over the long term. With respect to Cornell Dam, there are three possible scenarios: no action; catastrophic failure, a one-time event with immediate short-term, repercussions; or planned/controlled removal. In the event that the Cornell Dam failed, water quality would be negatively impacted for a period of time as a result of increased sediment load and fecal coliform and e. coli bacteria flushing concurrent with that release. In the long term, however, the impacts would probably be minimal, as

things settled down, and could actually be beneficial, by returning the river to a more natural hydrograph. Consequently, no cumulative impacts on water quality or aquatic species would be expected under Alternative C.

*Conclusion:* Water quality and aquatic habitat on the Niobrara National Scenic River would improve with implementation of Alternative C, and any effects on aquatic habitat from proposed developments and park operations would result in a short-term, negligible, adverse impact. In the long term, best management practices would protect riverbanks from excessive impacts, water quality would not be impaired, and a natural hydrograph and flow patterns would be restored. Properly managed removal of Cornell Dam could restore the natural turbidity of the river and attendant food sources, as well as allow for free upstream migration of fish. An agency driven dam removal action would seek to mitigate deleterious downstream effects before and during the action. Controlled removal would allow restoration to occur simultaneously, preventing sudden and vast exposures of river bottoms. Consequently, there would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Floodplains and Wetlands**

There would be no direct impact on floodplains or wetlands from Alternative C. Construction of public river access sites would not reduce floodway capacity, divert floodwaters, or result in measurable water contamination. Federal construction regulations and National Park Service policy require site surveys and avoidance of wetlands as part of the facility design process. Additional funding and staffing would allow the Service to implement and coordinate best management practices to mitigate and help control further habitat degradation on Service lands and to encourage such practices on private lands. In addition, funding could be increased for cost-share incentives that encourage best management practices to mitigate and help control further habitat degradation on private agricultural land. Ecologically sound measures to alleviate the problem of ice buildup around bridges would be employed by the river managers. Under Alternative C, the National Park Service eventually would own the land within its boundaries to the fullest extent possible and would not permit new construction on lands it controlled.

*Cumulative Impacts:* Through time, wetlands and floodplains would benefit from National Park Service implementation of best management practices. As more land and easements were acquired, the benefits would be extended to more floodplains and wetland resources.

*Conclusion:* Development and implementation of a river management plan and best management practices called for in this alternative would benefit floodplain and wetlands resources. Increased funding and staff would permit the Service to carry out more restoration projects. Environmentally sound methods for preventing ice build-up would reduce stream channelization. Collectively, these factors would result in moderate-to-major, long-term beneficial impacts on wetlands and floodplains.

### **Soil and Vegetation**

Under Alternative C, soil and vegetation impacts would result from construction of the research and education center, other new buildings, access roads, public river access sites, and recreational facilities unless previously impacted sites are selected. Some soil and vegetation would be disturbed by construction of public river access sites. Construction of the center would subject about five acres of soil to short-term disturbance. Erosion on construction sites would be accelerated, at least temporarily, until drainage structures were fully operational and vegetation had recovered. To mitigate adverse impacts, construction activity would be restricted to the minimum area required for building or rehabilitating, and topsoil would be retained and replaced where possible to conserve the available organic matter. Soil and vegetation on each site would be graded and covered with gravel for road and parking lot construction. No through roads are proposed. Adverse impacts on soils from increased erosion would be minor and short-term.

A net increase in paved surfaces in this alternative is not anticipated. In areas with hardened surfaces, the direct inflow of water to soil would be partially or totally eliminated, and precipitation would be collected and diverted to natural drainages. Runoff not collected and diverted would pour out onto adjacent areas, increasing the local soil moisture regime. Increased runoff in these areas would result in localized increases in erosion, changes in soil nutrient transport, and changes in the natural vegetation composition.

In addition to conserving and replacing topsoil from disturbed areas to minimize the loss of organic material, the Service would ensure the reseeding of these areas with native species to speed the rate of recovery and to minimize the encroachment of invasive species. Altered vegetation composition could create slight changes in soil chemistry. Adverse impacts on soil erosion, soil nutrient transport, and vegetative composition from an increase in hardened surfaces would be minor and long term.

Management could increase conservation technical assistance and cost-share financial assistance. Maintaining vegetation would depend on maintaining agricultural uses and avoiding conversion of agricultural land to small residential or commercial properties. Various land protection methods (excluding acquisition), including county zoning and voluntary landowner agreements and conservancies, would be pursued to maintain agricultural uses. In addition, acquisition of conservation easements on private land by the National Park Service or local agencies could be used to maintain ranches, if other methods are not effective.

Lack of fire has resulted in a proliferation of red cedar and ladder fuels, and a corresponding reduction of meadows. Introduction of prescribed burning and programs to help control noxious plants would positively impact native plants.

*Cumulative Impacts:* Approximately five acres of herbaceous vegetation in the proximity of the prospective visitor center could be lost during construction and rehabilitation projects under Alternative C. Such projects could also increase runoff and soil compaction, and could alter soil regimes and vegetation communities, as well as cause the loss of plants in some areas.

*Conclusion:* A small part of the natural soil profile would be lost on five acres. Despite efforts to mitigate soil erosion, some soil probably would be eroded on areas where construction and rehabilitation are carried out. Relative abundance of invasive species could be increased by clearing some vegetation during construction. Adverse impacts on vegetation and soil could be alleviated by the National Park Service offering support to private landowners through technical assistance and economic incentives to manage their holdings using best management practices.

Overall, implementation of the preferred alternative would result in minor short-term adverse impacts on

soil and vegetation, but, in the long term, effects would be beneficial, particularly on lands managed by the National Park Service. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Wildlife**

Wildlife habitat and populations are generally in good condition along the river. Under Alternative C, the National Park Service could limit recreational use on the river during critical times in the life cycles of species that might be significantly affected by human use. A research project conducted on the Fort Niobrara National Wildlife Refuge by Kansas State University from 2000-2002 found that at recreation levels of 15,000-18,000 people, there were no clear effects of recreational disturbance on songbirds breeding on the Refuge. However, there was a documented negative behavioral effect of recreation on waterbirds using the Niobrara River within the Fort Niobrara National Wildlife Refuge.

*Cumulative Impacts:* Wildlife habitat and populations would benefit from implementing a wildlife management plan and best management practices, provided staffing and funding levels remain adequate.

*Conclusion:* Implementing Alternative C would result in long-term, moderate, beneficial impact, due mainly to implementing wildlife management programs. Adequate staff and funding would allow the National Park Service to effectively implement programs and best management practices. More wildlife resources would receive protection as more land and easements were added to the unit. Collectively, these factors could result in long-term, moderate, beneficial impacts to wildlife habitat and populations.

### **Threatened or Endangered Species**

Under Alternative C, protection of state-listed sensitive species, and state- and federally protected threatened and endangered species and their habitats would be considered in all management actions. The National Park Service would be involved in annual spring/early summer inventory and monitoring of least tern and piping plover nesting sites, which could result in improved long-term habitat protection and better information about migratory bird populations and their habitat.

River management plans would be designed to discourage recreational use of tern and plover nesting habitat during critical nesting periods. Inventory and monitoring of terrestrial, aquatic, and plant species would most likely result in habitat protection and restoration.

*Cumulative Impacts:* Threatened and endangered species would be expected to benefit from implementation of Alternative C because of the increased inventorying and monitoring activities of the Service, and implementation of protective actions in the resource stewardship plan.

*Conclusion:* Resource stewardship and other management plans would afford protection to threatened and endangered species and their designated critical habitats. This would afford more opportunities to carry out inventories, monitor, and protect threatened and endangered species, and restore and enhance any other associated habitats. As the unit acquired more lands and easements, more threatened and endangered species would receive protection. These factors could result in moderate-to-major beneficial impacts to these species.

Alternative C would have a long-term, moderate, beneficial impact on threatened and endangered species. Accordingly, there would be no impairment of resources or values associated with those species. There would be no irreversible adverse impacts on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the Niobrara National Scenic River.

### **Scenic Resources**

Building construction and proliferating signage are adversely impacting the scenic resources of the Niobrara National Scenic River. Under Alternative C, technical design assistance could be offered to private developers to mitigate the negative effects of construction and signage. Cooperation among various management entities could provide additional landscape preservation through land acquisition, scenic and conservation easements, landowner agreements, and land trusts.

*Cumulative Impacts:* Landscape preservation efforts and construction that is sensitive to the scenic resources of the Niobrara River would help to offset negative effects of continued construction and development along the river.

*Conclusion:* The National Park Service could provide private landowners and developers in and adjacent to the unit with technical assistance to limit development and reduce signage impacts. As the Scenic River acquired more land and easements, it would have more capability to ensure that development did not negatively impact scenic resources. These actions would have long-term, major beneficial impacts that would leave scenic resources unimpaired.

---

### **Visitor Information, Education, and Experience**

Because the Scenic River would soon resemble a traditional unit of the national park system under Alternative C, federal funding (subject to congressional appropriation) would provide for needed public facilities and services. The result would be quality visitor facilities, crowd management, comprehensive education and information, coordinated management of commercial services, and minimized visitor use conflicts.

Under Alternative C, the park would have an interpretive staff that would develop a long-range interpretive vision and an active interpretation and education program. The interpretive program would educate the public about the types of resources found in the park, their value and significance, and current threats to these resources. Such information potentially could directly and indirectly benefit cultural and paleontological resources, threatened and endangered species, and other park values.

Rather than rely on private outfitters and local chambers of commerce to be the main source of park information, the Service's interpretive program would promote resource protection, the appreciation of park values, and visitor safety through:

- interpretive and educational outreach programs;
- brochures and maps depicting natural features and other park values,
- exhibits and interpretive/informational signs;
- public contacts (interpretive and law enforcement patrols);
- a park Web site; and
- the joint agency research and education center.

Outfitters and local chambers of commerce would continue to play an important role in providing logistical



information. However, under this alternative, the Service would coordinate this information and ensure its accuracy by working closely with internal concessionaires and external outfitters and local chambers. By producing a wide range of informational materials in a variety of media, a large spectrum of local and regional visitors could receive comprehensive information about the park. These actions could indirectly benefit park resources by promoting resource awareness, which potentially could reduce the threat of minor to major, irreversible, adverse impacts on resources.

Fishing and hunting would continue on National Park Service lands unless the agency determined that it should develop management prescriptions to designate zones or establish times when hunting is not allowed. Trapping would be prohibited on Service-owned lands. These actions could limit the range of recreational activities, but overall would not directly negatively impact the visitor's experience.

The construction of the visitor education center proposed under this alternative would provide a central location for visitors to receive an orientation to the park, learn more about the park and its resources and values through exhibits and park brochures, and attend interpretive programs. The facility would also provide office space for park interpreters, which would equip them to continue or expand ongoing educational outreach programs and to develop and manage a parkwide interpretive program.

Under Alternative C, the addition of new public river access sites with maintained toilet facilities, which meet Americans with Disabilities Act requirements, would improve visitor satisfaction and reduce trespass on private land. Limited new public access between Berry and Norden bridges would encourage distributing use over more of the canoeable river, and could reduce Saturday float congestion originating at the Fort Niobrara launch site.

Building other facilities such as parking areas and hiking/biking trails would benefit and enhance the overall visitor experience, potentially reduce negative impacts on resources, provide variety of and access to recreational activities, and help disperse visitors evenly throughout the park.

Collectively, these actions would directly and indirectly benefit the park's visitor experience. The magnitude of

these beneficial impacts (e.g., moderate to major) would depend on the level of park funding and park management priorities.

*Cumulative Impacts:* Through time, this alternative would result in quality visitor facilities, visitor management, comprehensive education and information, coordinated management of commercial services, and minimize visitor conflicts. In addition, this alternative would provide increased opportunities to learn about park resources and values and their significance. This would increase the likelihood of visitors and park neighbors becoming good resource stewards. In turn, this potentially would lead to fewer negative impacts on park resources and values.

*Conclusion:* Alternative C would provide a greater variety of activities and visitor experiences than currently exists. Funding and staffing levels under this alternative would permit the park to develop active interpretive and public outreach programs; draft a visitor use plan that would manage use and minimize conflicts; and provide and maintain facilities needed for high quality recreation. These actions would help maintain visitor satisfaction and ensure that the visitor experience at the park remained unimpaired.

---

## Local Economy

Future visitor use would be influenced by the same factors as in Alternatives A and B — visitor numbers and spending. The park could develop its own river use management plan that would coordinate river use within the park's boundaries and distribute visitors over a larger portion of the river. The plan could limit river use on weekends to reduce overcrowding. The park, through law enforcement and its interpretive program, could promote increased weekday river use. These actions could expand overall visitation and encourage longer visits or more frequent revisits, which would provide additional revenue to local economies. However, the park's more limited partnership building capabilities under this alternative could make implementing river use changes more challenging and potentially contentious.

New river access sites would benefit many outfitters by providing additional launch and retrieval sites, and increased trip flexibility. However, the addition of pub-

lic access sites could negatively impact some riverfront landowners and outfitters who charge for use of their access sites.

Increased park staff and cooperative agreements with other federal and local agencies would allow the park to better enforce sanitation, disability access, and health and safety codes among permittees operating within the park. This could have an adverse financial impact on small, locally owned outfitters because of the expense of improving facilities for a revenue-producing season of only ten to twelve weeks. Some of these costs could be offset through cost share assistance for resource protection and/or visitor use improvements. Additionally, the park could provide no-cost technical advice to outfitters with regard to facility design, location, and operation. However, the park's ability to enforce codes, cost-share, and provide technical assistance would depend on staffing and funding.

*Cumulative Impacts:* The park could implement management policies that would expand and shift the times of river use to reduce overcrowding and increase visitor numbers and spending. This could encourage longer and more frequent visits, and increase revenues for local economies through time. However, with the more limited partnership capabilities under the alternative, it might be politically more difficult and take longer to realize the beneficial impacts to local economies.

*Conclusion:* Under Alternative C, the park would rely on management policies and policy enforcement to implement river use changes that could result in managed increased visitation. Overall there would be long-term, moderate, beneficial impacts on local businesses. There would be no irreversible adverse impacts on local economies.

### Landownership

Under Alternative C, there would be direct National Park Service purchase of land in fee simple or easement, through appropriated funding, to the fullest extent of authority in the Wild and Scenic Rivers Act.

Public land boundaries could be marked, and efforts would be made to educate visitors about private landowner rights in order to reduce impacts on landowners from trespass by river users, who often do

not understand that much of the land is still privately owned and not open to recreational use.

*Cumulative Impacts:* Alternative C would produce a central entity that provides consistent management or oversight on an increasing federal land base along the river and across various jurisdictions. Impacts on significant river resources due to private land development would be reduced by federal ownership and county zoning regulations. Landowners could be affected by new restrictions in county zoning regulations, but they would also be protected from impacts from neighboring developments.

*Conclusion:* Implementing Alternative C would have a moderate, long-term, beneficial impact on landownership. Coordinating with local zoning officials and purchasing land in fee title and easements with federal funds would help protect scenic landscapes and resources from development, which would be a long-term benefit. There would be no irreversible adverse impacts.

### Local Governments

The cost of county road maintenance would probably increase due to recreational traffic generated by increased visitation. The counties would continue to maintain roads and bear the added maintenance expenses. However, as more lands were acquired, the National Park Service would increasingly take on these expenses. This would minimize negative impacts to local governments' infrastructure expenses.

The amount of private property to be purchased in fee title would increase through time. These purchases would remove property from local government tax bases. However, the federal government would annually reimburse counties for the loss of these revenues to the extent of annual appropriations. Lands protected through easements would continue to be taxed at an agricultural use rate. The land purchases and easements would slow development and cap increases in property tax that local governments would have gained under other scenarios. This could lead to minor to moderate impacts on local government revenue streams.

The increased staffing and funding under this alternative could improve the visitor experience, which in turn

could lead to longer visitor stays or increased visits to the Scenic River. Extended or increased stays would give visitors more opportunities to spend money in local communities. This could have moderate to major beneficial impacts on local governments' sales tax revenues. However, if the proposed staffing and funding proved insufficient, the visitor experience might suffer and gains in sales tax revenues could be limited.

The increased staffing also would allow park staff more latitude to interact and strengthen working relationships with local governments. This could foster a sense of citizen based resource stewardship both within and around the Scenic River. Strengthened working relationships among land managing agencies and local governments could also encourage local government buy in and support of management decisions and policies.

*Cumulative Impacts:* Visitation would probably increase in counties bordering the unit. Federal reimbursement

of lost property taxes stemming from land acquisitions would offset this somewhat. Land and easement purchases would limit unmanaged development. It would also limit increases in property and sales taxes relating to development, which could result in minor to moderate negative impacts on local government revenues.

*Conclusion:* Increased staffing and funding could lead to a better visitor experience, which in turn, could translate into longer or more frequent visits and increases in sales taxes. Federal property tax reimbursements and continued taxing of easements would offset losses in local government property tax revenues. Decreases in property taxes by acquisition of land in fee title or in easements would limit development and revenues derived from property and sales taxes. Collectively, these factors would result in minor-to-moderate, reversible impacts on local government economies.

---





## Other Required Impact Topics

### Unavoidable Adverse Impacts

Unavoidable adverse impacts are moderate and major intensity adverse impacts resulting from implementing an alternative that cannot be fully mitigated or avoided. Under all of the alternatives, there would be potential for some unavoidable adverse impacts to natural and cultural resources as a result of construction and increases in use levels. These impacts could include, in localized areas, losses of soil and vegetation, loss of archeological or paleontological resources, and loss of habitat. The potential for unavoidable adverse impacts would be highest in Alternative A as a result of the decrease in management from its current level, and lowest in Alternative C because, as sole manager, the National Park Service would be able to implement both short- and long-range resource protection programs on its own increasing landholdings.

As a result of construction in alternatives B or C, the visitor experience would be affected by noise from construction activities, visual intrusions from ground and vegetation disturbance, the presence of large construction vehicles, and general disruption of circulation and activities. These effects, although short term, could be moderate to major, depending on the number of visitors affected. These impacts would be particularly severe for visitors who might have only one opportunity to visit the Scenic River and whose experiences were degraded by construction activities.

### Irreversible and Irretrievable Commitments of Resources

This section identifies any resources that would be lost either temporarily or permanently as a result of implementing any of the alternatives.

#### **Cultural Resources**

Any removal of historic structures and contributing elements of the cultural landscape, and/or disturbance of archeological sites that might occur in management alternatives B or C, would have an irreversible impact. However, prior to the removal or disturbance of these resources on federal land, documentation and data

recovery would be completed, thereby maintaining the historical record and limiting the impact to the loss of the physical structure and historic associations.

#### **Paleontological Resources**

Any removal or disturbance of paleontological sites that might occur in management alternatives B or C would have an irreversible impact. Prior to removal or disturbance of these resources on federal land, however, documentation and data recovery would be completed, thus maintaining the paleontological record.

#### **Air Quality**

No actions would be taken as a result of any of the management alternatives that would result in irreversible or irretrievable impacts to air quality.

#### **Water Quality and Aquatic Species**

Construction activities could cause a loss of sensitive vegetation and loss of in-stream habitat types (e.g., pools, riffles, and runs), which, in turn, could affect the number and types of aquatic invertebrates and fish species at the construction site. However, it would be possible to rehabilitate impacted vegetation and habitat types and restore them to their preconstruction state at some point in the future. There would also be the potential for leakage of oil, gasoline, antifreeze, and other chemicals from construction equipment. If chemicals leached into the river or groundwater supply, water quality would suffer. All of these impacts, however, would most likely be confined to the construction area, in which case the fish and invertebrate communities would be expected to fully recover.

#### **Floodplains and Wetlands**

No actions would be taken in any of the management alternatives that would result in irreversible or irretrievable impacts to floodplains and wetlands.

#### **Soil**

With the development of new facilities within the river corridor as a result of implementing management alternatives B or C, there would be an irreversible commit-

ment of materials, such as concrete, asphalt, wood, and metal used in construction. There also would be an irretrievable commitment of soils for the duration of the alternative. Construction activities would result in soil disturbance, which could include loss of sensitive vegetation, soil compaction resulting in decreased soil porosity, alteration of the streambank slope, and bank reshaping from the use of heavy equipment. It would, however, be possible to rehabilitate the impacted soil types and return them to their preconstruction state at some future point.

### **Vegetation**

Some vegetation would be adversely affected under management alternatives B and C as a result of construction of new facilities. This would be an irretrievable commitment of vegetation for the duration of the alternative. However, it would be possible to rehabilitate impacted vegetation types and restore them to their preconstruction state at some point in the future.

### **Wildlife**

It is likely that some wildlife habitat would be adversely affected as a result of construction envisioned under management alternatives B and C. Removal and degradation of habitat could affect the availability of food, cover, and reproductive sites for wildlife, and result in associated indirect human impacts from the use of the development. This represents an irretrievable commitment of these resources for at least the duration of the alternatives. It would, however, be possible to restore impacted habitats to some semblance of their preconstruction state in the future.

### **Threatened or Endangered Species**

If construction and development under management alternatives B or C were to occupy habitat and cause local human disturbance, there could be irreversible impacts on threatened or endangered species. It would be possible to reverse those impacts in the future if some semblance of the natural habitat were restored. However, none of the construction or development activities contemplated in either management alternative would affect the overall sustainability of any of these species.

### **Scenic Resources**

No actions would be taken in any of the management alternatives that would result in irreversible or irretrievable impacts to scenic resources.

### **Visitor Information, Education, and Experience**

No actions would be taken in any of the management alternatives that would result in irreversible or irretrievable impacts to visitor information, education, and experience.

### **Local Economy**

No actions would be taken in any of the management alternatives that would result in irreversible or irretrievable impacts to the local economy.

### **Landownership**

No actions would be taken in any of the management alternatives that would result in irreversible or irretrievable impacts to landownership.

### **Local Governments**

No actions would be taken in any of the management alternatives that would result in irreversible or irretrievable impacts to local governments.

## **Relationship of Short-Term Uses of the Environment and Long-Term Productivity**

Under any of the alternatives, the park, to a greater or lesser extent, depending on the alternative, would be managed to maintain ecological processes and native and biological communities, and to provide for outdoor recreational activities consistent with the preservation of natural and cultural resources. Any actions the National Park Service takes in the park would be intended to ensure that uses do not adversely affect the productivity of biotic communities. Alternative C would afford the greatest flexibility of resource management, while resource management options under Alternative A would be limited.

Under all alternatives, there would be the potential for a reduction in long-term biological productivity in localized areas because human activities associated with

development and ongoing visitor use could prevent wildlife populations from reaching their full potential in size and population density. However, by minimizing future development and through aggressive protection of natural and cultural resource values, National Park Service management (alternatives B or C) would likely lead to long-term productivity of the environment.

The long-term adverse effect on the natural environment would be minor in terms of habitat or resource loss, but there would be a major beneficial effect on the visitor experience for years into the future.

---

#### Impairment

The park's resources and values would not be impaired because there would be no major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation for the Niobrara National Scenic River, (2) key to the natural or cultural integrity of the park or to opportunities for visitor enjoyment, or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

---

# Environmental Consequences of the Boundary Alternative

## Exclusions

Regardless of the boundary alternative selected, impacts to the following resources will be determined by the management alternative selected: air quality, visitor information, education or experience, local economy, and local governments. Potential impacts to other topics that would be affected by the boundary alternatives are discussed below.

## Cultural Resources

Cultural resources pose certain protection and management challenges. Many of these resources are on privately owned land within the boundaries of the Niobrara National Scenic River. Archeological sites and artifacts on private land have no federal legal protection, and only limited protection under Nebraska state law. In addition, sites can be unknowingly impacted by construction; developers can choose to conduct inventories of sites prior to construction, but they rarely do so. Any development on private lands funded by the National Park Service or other federal agency would, however, be considered a federal undertaking under Section 106 of the National Historic Preservation Act of 1966, and would require compliance activities such as inventory or mitigation. Archeological materials removed from a site by amateur collectors lose much of their scientific value. The future of historic bridges depends in part on the natural forces of the river, such as erosion around abutments, or structural damage from ice jams, as well as on the availability of maintenance funding. Historic building preservation depends on the interest and resources of private owners. The ranching landscape changes as agricultural technology evolves and aging structures are replaced or removed. Property conversion from agricultural use to recreational or residential use occurs where land is not protected from development. Archeological sites, materials, or historic structures located within the Scenic River boundary would receive protection to the extent that the National Park Service has authority, jurisdiction, and landowner permission.

Boundary Alternative 1 is the quarter-mile interim boundary prescribed in Section 4(d) of the Wild and Scenic Rivers Act. From establishment of the Scenic

River in 1991 until initial management planning was completed in 1996, this interim boundary has served to protect the Niobrara's resources. (This boundary became effective again when the boundary selected in 1996 was voided by the appellate court decision in 2000.) During the resource analysis associated with the current boundary study, attention was focused primarily on documented National Register-listed historic properties in the Niobrara Valley, including the Fort Niobrara site and several extant truss-design bridges. The quarter-mile boundary captures more of the Fort Niobrara historic site than either Alternatives 2 or 3. The Fort Niobrara historic site lies entirely within the Fort Niobrara National Wildlife Refuge boundary where federal protection is provided by the U. S. Fish and Wildlife Service. Conversely, Boundary Alternative 1 affords significantly less protection to the historic Meadville community. Boundary Alternative 2 is drawn to expressly protect outstandingly remarkable scenic and paleontological values and Boundary 3 is drawn to protect each identified outstandingly remarkable value as equitably as possible. Boundaries 2 and 3 protect less of the Fort Niobrara site than Alternative 1, but significantly more of the Meadville community. Each alternative protects the valley's historic bridges from Borman in the west to Carns in the east.

## Paleontological Resources

Protection of fossils on private lands within the Scenic River boundary depends upon cooperation between landowners, paleontologists from educational and other institutions, and the National Park Service. Private developers are not required by law to conduct paleontological inventories of sites prior to construction, and rarely do so. Fossils are periodically uncovered by erosion and can be destroyed by exposure to the elements. Fossils lose much of their scientific value if removed from surrounding geologic strata by amateur collectors. Locations of fossil sites and materials within the Scenic River boundary would receive protection to the extent that the National Park Service has authority, jurisdiction, and landowner permission.

Boundary Alternative 1 is the quarter-mile interim boundary prescribed in Section 4(d) of the Wild and



Scenic Rivers Act. Although the boundary protects some paleontological resources, it does not necessarily protect the most significant of those resources, nor does it protect by inclusion any paleontological site other than arbitrarily. Of the 164 documented sites of regional, national, and global significance in the study area, sixteen lay inside of the Alternative 1 Boundary. Boundary Alternative 3 is drawn to protect each of the Niobrara's identified outstandingly remarkable values, including paleontology, as equitably as possible. Of the documented sites in the study area, forty-one lay inside of Boundary 3. Boundary Alternative 2 was drawn expressly to protect the Niobrara's outstandingly remarkable scenic and paleontological values, and it protects more fossil sites than either of the other alternatives. Fifty-eight documented sites lay within Alternative 2. Each alternative affords protection to the one site in the seventy-six mile Niobrara Valley segment that has been rated as globally or internationally significant.

---

## Natural Resources

### **Water quality and aquatic species**

Boundary alternatives 1, 2, and 3 include the same river-front resources along the main stem of the Niobrara River. Alternative 3 contains the largest amount of tributary area while Alternative 1 includes the least amount of tributary area. Water quality protection and erosion prevention can be done by incorporating best management practices in the riparian zone regardless of boundary location. A boundary containing more water resources, however, could facilitate increased resource protection opportunities. Acquisition of conservation easements inside the boundary would provide an additional level of protection from development impacts.

### **Floodplains and wetlands**

Floodplain and wetland protection by zoning, best management practices, or technical assistance to future developers could occur regardless of boundary location. Resources included within the boundary would be protected by federal law and National Park Service policy. Additional protection from development impacts could be achieved through conservation easements. Alternative 3 includes the greatest amount of floodplain and wetlands.

### **Soil and vegetation**

Protection of valley land resources by means other than purchase (e.g., county zoning, best management practices, technical assistance) could function independent of any Scenic River boundary. Conservation easements could provide additional protection from construction impacts if other resource protection methods were ineffective. Federal acquisition of property must be within, or substantially within, an approved boundary. Areas within the boundary would receive greater protection from adverse use or development due to increased management attention, technical assistance, application of best management practices, and the acquisition of conservation easements.

Boundary Alternative 1, the quarter-mile default boundary, confers no special consideration of vegetation, geology, or other natural resources, and includes 24,320 acres. Boundary Alternative 2 was drawn to favor vegetative cover and paleontological resources and captures 22,474 acres, most inherently natural. Boundary Alternative 3 encompasses 23,074 acres. The intent of Boundary Alternative 3 is the protection of distinct vegetation types and biotic intersections equitably with the Niobrara's other inherent outstandingly remarkable values.

### **Wildlife**

Alternatives 1 and 3 include more acreage, thereby providing an indirect benefit of protecting habitat. Alternative 3 affords more protection to the diverse ecosystems and their "edge" habitats than either alternative 1 or 2.

### **Threatened or Endangered Species**

No direct effects on federal or state-protected species would result from different boundary configurations. Alternatives 1 and 3 include more acreage, thereby providing an indirect benefit of protecting bald eagle foraging habitat. Alternative 3 affords more deliberate protection to the diverse continental ecosystems and their "edge" habitats than alternatives 1 and 2, a factor of merit for threatened and endangered species.

Additionally, all boundary alternatives include U. S. Fish and Wildlife Service designated critical habitat for piping plovers to the fullest extent determined by that agency.

## Scenic Resources

County zoning and the zoning oversight authority of the Niobrara Council afford substantially greater protection to the landscape within the boundary than outside. Additional protection from development within the boundary could be enhanced through acquisition of conservation easements from willing sellers.

Boundary Alternative 1 protects scenic resources falling within its arbitrary measure but does not encompass the majority or most significant of those resources.

Boundary Alternative 2 was drawn, in part, to favor the Niobrara's outstandingly remarkable scenic value.

Boundary Alternative 3, aiming to protect the river's scenic qualities, geology, and riverine landscapes visible from the streambed and several overlooks, offers the greatest protection of the river's scenic and related resources.

## Landownership

Landownership was a consideration in two instances as Boundary alternatives 2 and 3 were configured. In both cases, the existence of Congressionally designated wilderness inside the Fort Niobrara National Wildlife Refuge, and state land, particularly the largely leased Smith Falls State Park, was acknowledged, though with different consequences. Owing to the exacting nature of federal wilderness protection, Boundary alternatives 2 and 3 followed the ordinary high water mark through the wilderness. This was the only instance where a so-called bank-to-bank boundary was employed on the Scenic River, and only because there already existed an extremely high degree of federal land protection. At the state-owned Borman Bridge and Fred Thomas Wildlife Management areas, a two-hundred-foot boundary was configured acknowledging the existing public land status of the sites. In the case of Smith Falls State Park, since the waterfall is widely regarded as one of the signature landmarks of the Scenic River, the park encompasses significant bioregimes, and the land is largely leased, Boundary alternatives 2 and 3 intentionally enveloped the entire park to maximize protection and partnering responsibilities and opportunities. In no other instance was landownership considered in determining boundary alternatives.

## Cumulative Impacts

There could be moderate, long-term adverse impacts to the historic, cultural, and paleontological resources of the Niobrara National Scenic River under all boundary alternatives. The National Park Service's ability to protect cultural and natural resources is substantially limited by authority, jurisdiction, and landowner permission. The study and monitoring of resources increases the park's and public's understanding of them, and enhances the ability to respond in a timely manner to resources that require restoration, stabilization, or other treatment resulting from vandalism, erosion, or other impacts. The extent to which the Niobrara's diverse outstandingly remarkable values are identified and equitably captured by the boundary increases the opportunity for, and likelihood of, preservation.

Some natural resources, such as sensitive vegetation, threatened and endangered species, and wetlands may be adversely impacted in alternatives that afford less protection of habitat and resources in general than other alternatives. Because Boundary Alternative 3 is drawn to protect each identified outstandingly remarkable value as equitably as possible, it affords more protection to natural resources in general than either Boundary alternatives 1 or 2.

## Conclusion

Boundary Alternative 1 offers protection to those outstandingly remarkable values that fall within its quarter-mile interim measure. It does not necessarily protect the most important or significant cultural, historic, or paleontological sites, nor does it attempt to protect integrated ecosystems and natural resources. As a result, many of the features that contribute to the multi-dimensional resource base existing on the river are outside of the influence of the National Park Service and its partners.

Boundary Alternative 2 protects outstandingly remarkable scenic and fossil values while incorporating, but not necessarily favoring, recreational, geological, and fish and wildlife values. Several landscapes visible from the river and key roads do not fall within this boundary alternative. As a result, some of the features that contribute to the outstanding recreational experiences possible on the river are outside of the influence of the National Park Service and its partners.

Boundary Alternative 3 was designed to provide equitable protection to each of the Niobrara's identified scenic, recreational, geologic, fish and wildlife, and paleontological outstandingly remarkable values. It protects nationally significant cultural resources including portions of the Fort Niobrara historic site and all of the river's bridges. The alternative also protects the principal remains of the historic Meadville townsite. It does not protect as many fossil sites as Alternative 2, but it provides greater protection to scenic and recreational resources than the other alternatives.

---

#### Environmentally Preferable Boundary Alternative

The environmentally preferable alternative is defined as "the alternative or alternatives that will promote the national environmental policy as expressed in Section 101 of the National Environmental Policy Act. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources."

The last clause within this guidance is particularly relevant in identifying the environmentally preferable boundary alternative for the Niobrara National Scenic River. Public Law 90-542 establishing the Wild and

Scenic Rivers System, and Public Law 102-50 amending the first Act by adding a seventy-six-mile reach of the Niobrara to the system, applied a national policy of preserving selected rivers and their immediate environments for the benefit of present and future generations to a section of the Niobrara. The Wild and Scenic Rivers Act particularly identified seven resource types labeled "outstandingly remarkable values" that Congress prescribed as worthy of protection on those landscapes. The present boundary analysis found that five of those seven resource types exist to an "outstandingly remarkable" degree on the Niobrara, some present from rim-top to rim-top throughout the designated reach.

In consideration of the purposes of the Wild and Scenic Rivers Act and the Niobrara National Scenic River designation, the National Park Service has identified the Preferred Alternative, Boundary 3, as the environmentally preferable alternative. Boundary Alternative 3 provides for holistic protection of the river's outstandingly remarkable scenic, recreational, geologic, fish and wildlife, and paleontological resources, affords protection to nationally significant cultural resources, and stays within the acreage limits set by the Wild and Scenic Rivers Act.

---

## Table 2: Comparison of Impacts

Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
<b>Cultural Resources</b>					
<ul style="list-style-type: none"> <li>Significant cultural resources (sites, structures and bridges) could be damaged through construction.</li> <li>The park would have limited staff and funds to adequately inventory and monitor cultural resources.</li> <li>Under Alternative A, some cultural resources could potentially sustain moderate to major, adverse impacts in the long-term.</li> </ul>	<ul style="list-style-type: none"> <li>The park would have jurisdictional authority to enforce resource protection mandates within the park and use its strong leadership role to work with residents and local governments to protect resources outside park boundaries.</li> <li>Through partnerships and collaboration there would be opportunities to leverage human and fiscal resources to protect cultural resources through inventories, monitoring, maintenance, avoidance, mitigation, and long-term management plans.</li> <li>These actions would result in long-term beneficial impacts.</li> </ul>	<ul style="list-style-type: none"> <li>The park would be able to protect resources in the park through inventories, monitoring, maintenance, avoidance, mitigation, and long-term management plans, provided staffing and funding is adequate.</li> <li>Protection would increase as more land was acquired in fee title or managed through easements. NPS technical experts would be able to assist landowners to protect resources beyond park boundaries through education and outreach.</li> <li>These actions would result in beneficial impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Affords significantly less protection to the historic Meadville community.</li> <li>Protects the river's bridges from Borman in the west to Carns in the east.</li> </ul>	<ul style="list-style-type: none"> <li>Protects less of the Fort Niobrara site than Alternative 1, but significantly more of the Meadville community.</li> <li>Drawn to expressly protect outstandingly remarkable scenic and paleontological values.</li> </ul>	<ul style="list-style-type: none"> <li>Protects less of the Fort Niobrara site than Alternative 1, but significantly more of the Meadville community.</li> <li>Drawn to protect each identified outstandingly remarkable value as equitably as possible.</li> </ul>
<b>Paleontological Resources</b>					
<ul style="list-style-type: none"> <li>Significant paleontological resources (e.g., fossils, geologic strata) could be damaged through construction.</li> <li>The park would have limited staff and funds to adequately inventory and monitor paleontological resources.</li> </ul>	<ul style="list-style-type: none"> <li>The park would have authority to enforce resource protection mandates within the unit and use its strong leadership role to work with residents and local governments to protect resources outside park boundaries.</li> </ul>	<ul style="list-style-type: none"> <li>The park would be able to protect resources in the unit through inventories, monitoring, avoidance, mitigation, and long-term management plans, provided staffing and funding is adequate.</li> </ul>	<ul style="list-style-type: none"> <li>Contains sixteen documented sites of regional, national, and global significance.</li> <li>Protects the one site rated globally or internationally.</li> </ul>	<ul style="list-style-type: none"> <li>Contains fifty-eight documented sites of regional, national, and global significance.</li> <li>Protects the one site rated globally or internationally.</li> </ul>	<ul style="list-style-type: none"> <li>Contains forty-one documented sites of regional, national, and global significance.</li> <li>Protects the one site rated globally or internationally.</li> </ul>

Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
<b>Paleontological Resources continued</b>					
<p>ited staff and funds to adequately inventory and monitor paleontological resources.</p> <ul style="list-style-type: none"> <li>Under Alternative A, some paleontological resources could potentially sustain moderate to major, adverse impacts in the long-term.</li> </ul>	<p>dents and local governments to protect resources outside park boundaries.</p> <ul style="list-style-type: none"> <li>Through partnerships and collaboration there would be opportunities to leverage human and fiscal resources to protect paleontological resources through inventories, monitoring, avoidance, mitigation, and long-term management plans.</li> <li>These actions would result in beneficial impacts in the long-term.</li> </ul>	<p>plans, provided staffing and funding is adequate.</p> <ul style="list-style-type: none"> <li>Protection would increase as land was acquired in fee title or managed through easements. NPS technical experts would be able to provide education and outreach to landowners.</li> <li>These actions would result in long-term beneficial impacts.</li> </ul>	<p>tionally significant in reasonable proximity to the project area.</p>	<p>tionally significant in reasonable proximity to the project area.</p>	<p>tionally significant in reasonable proximity to the project area.</p>
<b>Air Quality</b>					
<ul style="list-style-type: none"> <li>Air quality and visibility would be locally impacted by prescribed burns, construction projects, and increased traffic on unimproved roads.</li> <li>There would be short-term, minor adverse impacts on air quality.</li> </ul>	<ul style="list-style-type: none"> <li>Air quality and visibility would be locally impacted by prescribed burns, construction projects, and increased traffic on unimproved roads.</li> <li>There would be short-term, minor adverse impacts on air quality.</li> </ul>	<ul style="list-style-type: none"> <li>Air quality and visibility would be locally impacted by prescribed burns, construction projects, and increased traffic on unimproved roads.</li> <li>There would be short-term, minor adverse impacts on air quality.</li> </ul>	N/A	N/A	N/A



Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
Water Quality					
<ul style="list-style-type: none"> <li>• Water quality and aquatic habitats could deteriorate as a result of unmanaged grazing practices and river over-use.</li> <li>• Limited annual water-quality monitoring practices could place river users at risk of exposure to long-term elevated levels of fecal coliform bacteria.</li> <li>• Failure of Cornell Dam could increase sediment loading and elevate coliform bacteria levels in the short-term.</li> <li>• Failure of the dam could return the river to a more natural regime, which would benefit aquatic resources and resource values.</li> <li>• There could be long-term moderate adverse impacts under this alternative.</li> </ul>	<ul style="list-style-type: none"> <li>• Development and implementation of a resource stewardship plan and best management practices would provide long-term benefits to aquatic resources.</li> <li>• Construction of new bathroom and river access sites could increase siltation and turbidity in the short-term. However, these impacts could be minimized through good design and streambank restoration projects.</li> <li>• Research would be conducted to determine whether/how Cornell Dam should be removed to maximize benefits to aquatic resources.</li> <li>• Under this alternative, there could be moderate, long-term adverse impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Development and implementation of a resource stewardship plan and best management practices would provide long-term benefits to aquatic resources.</li> <li>• Construction of new bathroom and river access sites could increase siltation and turbidity in the short-term. These impacts could be minimized through good design and streambank restoration projects.</li> <li>• Properly managed removal of Cornell Dam could restore natural river sediment transport and reestablish natural fish migrations.</li> <li>• Under this alternative, there could be long-term, moderate adverse impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• The tributary area would be longer than Alternative 2, but smaller than Alternative 3.</li> </ul>	<ul style="list-style-type: none"> <li>• Contains the smallest amount of tributary area.</li> </ul>	<ul style="list-style-type: none"> <li>• Contains the largest amount of tributary area.</li> </ul>

Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
<b>Floodplains / Wetlands</b>					
<ul style="list-style-type: none"> <li>• Floodplain areas would be compromised by heavy use.</li> <li>• Rip-rap used to protect riverbanks would continue to constrict and channelize the river, which could have long-term impacts on floodplain habitats.</li> <li>• Infrequent, periodic flooding could have short-term impacts on aquatic and wetland resources.</li> <li>• Floodplain and wetland restoration projects would mitigate some of these impacts.</li> <li>• The potential for major, long-term impacts on wetlands and floodplains would remain.</li> </ul>	<ul style="list-style-type: none"> <li>• A resource stewardship plan and best management practices would benefit floodplain and wetland resources.</li> <li>• Cost-sharing and leveraging resources among partners would permit coordinated restoration projects.</li> <li>• Environmentally sound methods for alleviating ice build-up would reduce stream channelization.</li> <li>• Collectively, these factors would result in major, long-term beneficial impacts on wetlands and floodplains.</li> </ul>	<ul style="list-style-type: none"> <li>• A resource stewardship plan and best management practices would benefit floodplain and wetland resources.</li> <li>• Increased funding and staff would permit NPS to carry out more restoration projects.</li> <li>• Environmentally sound methods for alleviating ice build-up would reduce stream channelization.</li> <li>• Collectively, these factors would result in moderate-to-major, long-term beneficial impacts on wetlands and floodplains.</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative 1 includes a larger amount of floodplain and wetland areas than Alternatives 2 or 3.</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative 2 includes a smaller amount of floodplain and wetland areas than Alternative 3.</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative 3 includes the greatest amount of floodplain and wetland areas.</li> </ul>
<b>Soil and Vegetation</b>					
<ul style="list-style-type: none"> <li>• Impacts on soil and vegetation would continue, and erosion would increase.</li> <li>• Consultation with experts would remain voluntary.</li> <li>• Eastern red cedar would</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of a research and education center, and public access sites would result in soil compaction, erosion, and the proliferation of some invasive vegetative species.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of a research and education center, and public access sites would result in soil compaction, erosion, and the proliferation of some invasive vegetative species.</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative captures 24,320 acres.</li> </ul>	<ul style="list-style-type: none"> <li>• Favors vegetative cover; captures 22,474 acres.</li> </ul>	<ul style="list-style-type: none"> <li>• Protects distinct vegetation types and biotic intersections; encompasses 23,074 acres.</li> </ul>

Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
<b>Soil and Vegetation continued</b>					
<p>proliferate in the absence of a prescribed burn program.</p> <ul style="list-style-type: none"> <li>• Unmanaged development and agricultural practices could result in minor, long-term adverse impacts on soils and vegetation.</li> </ul>	<ul style="list-style-type: none"> <li>• Partnering managers would provide technical support for best management practices, and would offer incentives to private landowners.</li> <li>• Overall, there would be minor, long-term adverse impacts to soils.</li> </ul>	<ul style="list-style-type: none"> <li>• NPS would implement best management practices to minimize erosion and soil compaction.</li> <li>• Overall, there would be minor, long-term adverse impacts to soils.</li> </ul>			
<b>Wildlife</b>					
<ul style="list-style-type: none"> <li>• Private development within and next to the river could fragment wildlife habitat.</li> <li>• Heavy recreational river use could displace birds and animals.</li> <li>• Current uses and management of the river would result in long-term, minor adverse impacts to wildlife.</li> </ul>	<ul style="list-style-type: none"> <li>• Partnerships would allow the park and partners to implement management actions effectively through shared resources and leveraged funds.</li> <li>• Implementing wildlife management programs and best management practices would result in long-term, moderate, beneficial impacts to wildlife habitats and populations.</li> </ul>	<ul style="list-style-type: none"> <li>• Implementing wildlife management programs would result in long-term moderate, beneficial impacts.</li> <li>• Adequate staff and funding would allow NPS to effectively implement programs and practices.</li> <li>• Wildlife resources would receive protection as land and easements were added to the Scenic River.</li> <li>• These factors could result in long-term moderate, beneficial impacts.</li> </ul>	N/A	N/A	N/A

Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
<b>Threatened or Endangered Species</b>					
<ul style="list-style-type: none"> <li>• Due to limited staff the park could not effectively inventory, monitor, protect, or restore threatened and endangered species habitat.</li> <li>• Some species' ranges could be further reduced, and extirpated species would remain extirpated.</li> <li>• There could be potential long-term, moderate-to-major adverse impacts to threatened and endangered species.</li> </ul>	<ul style="list-style-type: none"> <li>• Resource stewardship plans would afford protection to threatened and endangered species.</li> <li>• There would be sufficient staff and funds to conduct inventories, monitoring, protection of threatened and endangered species, and restoration and enhancement of habitats.</li> <li>• This would result in moderate-to-major beneficial impacts to these species.</li> </ul>	<ul style="list-style-type: none"> <li>• Resource stewardship plans would afford protection to threatened and endangered species.</li> <li>• There would be sufficient staff and funds to conduct inventories, monitoring, protection of threatened and endangered species, and restoration and enhancement of habitats.</li> <li>• With acquisition of lands and easements, more threatened and endangered species would receive protection.</li> <li>• These factors could result in moderate-to-major beneficial impacts to these species.</li> </ul>	<ul style="list-style-type: none"> <li>• Includes more acreage, thereby providing an indirect benefit of protecting bald eagle and whooping crane foraging habitat.</li> <li>• Includes designated critical habitat for piping plovers to the fullest extent sought by the U. S. Fish and Wildlife Service.</li> </ul>	<ul style="list-style-type: none"> <li>• Protects more diverse continental ecosystems and their "edge" habitats than Alternatives 1 and 3.</li> <li>• Includes designated critical habitat for piping plovers to the fullest extent sought by the U. S. Fish and Wildlife Service.</li> </ul>	<ul style="list-style-type: none"> <li>• Includes more acreage than Alternative 2, thereby providing an indirect benefit of protecting bald eagle foraging habitat.</li> <li>• Includes designated critical habitat for piping plovers to the fullest extent sought by the U. S. Fish and Wildlife Service.</li> </ul>
<b>Scenic Resources</b>					
<ul style="list-style-type: none"> <li>• Unmanaged development and signage in and adjacent to the Scenic River could result in minor-to-moderate, long-term adverse impact to scenic resources.</li> <li>• These factors could cause adverse impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• NPS could provide its partners with technical assistance to reduce impacts of development and signage.</li> <li>• Partners could protect scenic resources through easements, cooperative agreements, and land trusts.</li> </ul>	<ul style="list-style-type: none"> <li>• NPS could provide technical assistance to reduce development and signage impacts.</li> <li>• These actions would have long-term, minor-to-moderate beneficial impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Does not encompass the majority or most significant scenic resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Drawn to favor the outstandingly remarkable scenic value.</li> </ul>	<ul style="list-style-type: none"> <li>• Aiming to protect the river's scenic qualities, geology, and riverine landscapes visible from the streambed and several overlooks, offers the greatest systemic protection of the river's scenic and related resources.</li> </ul>

Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
Scenic Resources continued					
	<ul style="list-style-type: none"> <li>• These actions would have long-term, minor-to-moderate beneficial impacts.</li> </ul>				
Visitor Information, Education, and Experience					
<ul style="list-style-type: none"> <li>• The park would be limited in effectively interpreting park resources and visitation.</li> <li>• Launch sites and some segments of the river would be overcrowded, and toilet facilities would remain inadequate.</li> <li>• The park would have minimal responses to vandalism, hunting and fishing violations, and other incidents.</li> <li>• The park would rely on external law enforcement agencies for visitor safety.</li> <li>• There would be no central facility for visitor orientation.</li> <li>• Collectively these trends would result in major adverse impacts on the park's visitor experience, ultimately leaving it impaired.</li> </ul>	<ul style="list-style-type: none"> <li>• Funding and staffing levels under this alternative would permit the park to pro-actively develop interpretive and public outreach programs; draft a visitor use plan that would manage visitor use and minimize visitor use conflicts; and provide and maintain facilities needed for a high-quality recreation experience.</li> <li>• The park and its partners would have opportunities to leverage funds and resources.</li> <li>• These actions would have moderate to major beneficial impacts on visitor experience.</li> </ul>	<ul style="list-style-type: none"> <li>• Funding and staffing levels under this alternative would permit the park to develop active interpretive and public outreach programs; draft a visitor use plan that would manage visitor use and minimize visitor use conflicts; and provide and maintain facilities needed for a high-quality recreation experience.</li> <li>• These actions would have moderate to major beneficial impacts.</li> </ul>	N/A	N/A	N/A



Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
<b>Local Economy</b>					
<ul style="list-style-type: none"> <li>• The park's impact on the local economy would remain the same.</li> <li>• Increased visitation could provide increased revenues, but unmanaged overcrowding could reverse this trend.</li> <li>• Through time, this could lead to moderate adverse impacts to local economy.</li> </ul>	<ul style="list-style-type: none"> <li>• The park could work with stakeholders to manage river use to reduce overcrowding and increase visitation and spending.</li> <li>• Enforcement of disability, safety, and health codes, could negatively impact outfitters' incomes in the short term.</li> <li>• Overall, there would be long term, moderate, beneficial impacts on the local economy.</li> </ul>	<ul style="list-style-type: none"> <li>• Enforcement of park management policies related to river use could result in an increase in managed visitation.</li> <li>• Overall, there would be long term, moderate, beneficial impacts on the local economy.</li> </ul>	N/A	N/A	N/A
<b>Landownership</b>					
<ul style="list-style-type: none"> <li>• Alternative A would have a negligible long-term impact on landownership.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinating with local zoning officials and purchasing land in fee title and easements would help protect scenic landscapes and resources.</li> <li>• Alternative B would have a moderate, long-term, beneficial impact on landownership.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinating with local zoning officials and purchasing land in fee title and easements with federal funds would help protect scenic landscapes.</li> <li>• Alternative C would have a moderate, long-term, beneficial impact on landownership.</li> </ul>	N/A	N/A	N/A

Management Alternative A	Management Alternative B	Management Alternative C	Boundary Alternative 1	Boundary Alternative 2	Boundary Alternative 3
Local Governments					
<ul style="list-style-type: none"> <li>• Unmanaged development under Alternative A could increase infrastructure costs for local county and municipal governments.</li> <li>• Increased recreational use could result in revenues that would offset these increased expenses.</li> <li>• If increased expenses exceeded revenue gains, local governments would experience a minor to moderate, reversible adverse impact.</li> </ul>	<ul style="list-style-type: none"> <li>• Costs related to increased visitation would be spread among several partnering entities.</li> <li>• Longer and more frequent visits would increase sales taxes.</li> <li>• A close working relationship among land managers and local governments would foster resource stewardship and increased cooperation.</li> <li>• Overall, implementation of Alternative B would have a moderate to major beneficial impact on local governments.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased staffing and funding could lead to a better visitor experience, longer/more frequent visits, and increases in sales taxes.</li> <li>• Federal property tax reimbursements and taxing of easements would offset losses in local government property tax revenues.</li> <li>• Decreases in property taxes by acquisition of land in fee title or in easements would limit development and revenues derived from property and sales taxes.</li> <li>• Overall, implementation of Alternative B would have a moderate to major beneficial impact on local governments.</li> </ul>	N/A	N/A	N/A

# Consultation and Coordination

During the course of planning in 2000-2005, the following agencies, organizations, and individuals were engaged. Each received copies of the draft plan.

## **Niobrara Scenic River Advisory Commission**

Ann Appelt, Ainsworth, Nebraska.  
Brad Arrowsmith, Bassett, Nebraska.  
Lou Christiansen, Norfolk, Nebraska. (deceased)  
Richard Egelhoff, Valentine, Nebraska.  
Robert Hilske, Chairman, formerly of Valentine, Nebraska.  
Doug Kuhre, Johnstown, Nebraska.  
Winifred Parker, Springview, Nebraska.  
Tom Pesek, Lincoln, Nebraska.  
Wesley Sandall, Bassett, Nebraska.  
Vince Shay, Omaha, Nebraska.  
Carl Simmons, Valentine, Nebraska.  
Dayle Williamson, Lincoln, Nebraska.

## **Niobrara Council**

Jason Appelt, Ainsworth, Nebraska.  
Monte Frauen, Valentine, Nebraska.  
Twyla Graham, Valentine, Nebraska.  
Betty Hall, Bassett, Nebraska.  
Paul Hedren, O'Neill, Nebraska.  
Tom Higgins, Newport, Nebraska.  
Royce Huber, Valentine, Nebraska.  
Lance Kuck, Bassett, Nebraska.  
Bill Mulligan, Valentine, Nebraska.  
Roland Paddock, Ainsworth, Nebraska.  
John Ravenscroft, Chairman, Nenzel, Nebraska.  
Dave Sands, Lincoln, Nebraska.  
Pete Sawle, Springview, Nebraska.  
Jim Schoenberg, Bassett, Nebraska.  
Carl Simmons, Valentine, Nebraska.  
Larry Voecks, Crawford, Nebraska.

Warren Arganbright, Counsel, Valentine, Nebraska.  
Kalli Kieborz, Executive Director, Valentine, Nebraska.

Lloyd Alderman, former member, Bassett, Nebraska.  
Brad Arrowsmith, former chairman, Bassett, Nebraska.  
Gene Gregg, former member, Ainsworth, Nebraska. (deceased)  
Jim Harlan, former member, Bassett, Nebraska.  
Betty Hermismeyer, former member, Ainsworth, Nebraska.  
Nola Moosman, former member, Valentine, Nebraska.  
Dwight Sawle, former member, Springview, Nebraska.

Betty Palmer, former member, Springview, Nebraska.  
Rodney Verhoeff, former executive director, Lincoln, Nebraska.  
Harlin Welch, former member, Ainsworth, Nebraska.  
Jim Van Winkle, former chairman, Wood Lake, Nebraska.

## **Agencies and Organizations**

Brown County Commission  
Cherry County Commission  
Friends of the Niobrara  
Keya Paha County Commission  
Lower Niobrara Natural Resources District  
Middle Niobrara Natural Resources District  
National Parks Conservation Association  
The Nature Conservancy  
Nebraska Audubon Society  
Nebraska Game and Parks Commission  
Nebraska State Historical Society  
Nebraska State Museum  
Nebraska Wildlife Federation  
Niobrara River Outfitters, Inc.  
Ponca Tribe of Nebraska  
Rock County Commission  
Rosebud Sioux Tribe  
Santee Sioux Tribe  
Sierra Club Nebraska Chapter  
U. S. Fish and Wildlife Service  
Yankton Sioux Tribe

Public Law 102-50  
102d Congress

## An Act

May 24, 1991  
[S. 248]Niobrara Scenic  
River  
Designation  
Act of 1991.  
Natural  
resources.  
16 USC 1271  
note.

To amend the Wild and Scenic Rivers Act to designate certain segments of the Niobrara River in Nebraska and a segment of the Missouri River in Nebraska and South Dakota as components of the wild and scenic rivers system, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

## SECTION 1. SHORT TITLE.

This Act may be cited as the "Niobrara Scenic River Designation Act of 1991".

## SEC. 2. DESIGNATION OF THE RIVER.

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

"( ) **NIOBARRA, NEBRASKA.**—(A) The 40-mile segment from Borman Bridge southeast of Valentine downstream to its confluence with Chimney Creek and the 30-mile segment from the river's confluence with Rock Creek downstream to the State Highway 137 bridge, both segments to be classified as scenic and administered by the Secretary of the Interior. That portion of the 40-mile segment designated by this subparagraph located within the Fort Niobrara National Wildlife Refuge shall continue to be managed by the Secretary through the Director of the United States Fish and Wildlife Service.

"(B) The 25-mile segment from the western boundary of Knox County to its confluence with the Missouri River, including that segment of the Verdigre Creek from the north municipal boundary of Verdigre, Nebraska, to its confluence with the Niobrara, to be administered by the Secretary of the Interior as a recreational river.

"After consultation with State and local governments and the interested public, the Secretary shall take such action as is required under subsection (b) of this section.

"( ) **MISSOURI RIVER, NEBRASKA AND SOUTH DAKOTA.**—The 39-mile segment from the headwaters of Lewis and Clark Lake to the Ft. Randall Dam, to be administered by the Secretary of the Interior as a recreational river."

## SEC. 3. STUDY OF 6-MILE SEGMENT.

(a) **STUDY.**—Section 5(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1276(a)) is amended by adding the following at the end:

"( ) **NIOBARRA, NEBRASKA.**—The 6-mile segment of the river from its confluence with Chimney Creek to its confluence with Rock Creek."

(b) **WATER RESOURCES PROJECT.**—If, within 5 years after the date of enactment of this Act, funds are not authorized and appropriated for the construction of a water resources project on the 6-mile segment of the Niobrara River from its confluence with Chimney Creek to its confluence with Rock Creek, at the expiration of such 6-

16 USC 1274  
note.

year period the 6-mile segment shall be designated as a component of the National Wild and Scenic Rivers System by operation of law, to be administered by the Secretary of the Interior in accordance with sections 4 and 5 of this Act and the applicable provisions of the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287). The Secretary of the Interior shall publish notification to that effect in the Federal Register.

Federal  
Register,  
publication.

## SEC. 4. LIMITATIONS ON CERTAIN ACQUISITION.

(a) **LIMITATIONS.**—In the case of the 40-mile and 30-mile segments of the Niobrara River described in the amendment to the Wild and Scenic Rivers Act made by section 2 of this Act, the Secretary of the Interior shall not, without the consent of the owner, acquire for purposes of such segment land or interests in land in more than 5 percent of the area within the boundaries of such segments, and the Secretary shall not acquire, without the consent of the owner, fee ownership of more than 2 percent of such area. The limitations on land acquisition contained in this subsection shall be in addition to, and not in lieu of, the limitations on acquisition contained in section 6 of the Wild and Scenic Rivers Act.

(b) **FINDING; EXCEPTION.**—The 5 percent limitation and the 2 percent limitation contained in subsection (a) of this section shall not apply if the Secretary of the Interior finds, after notice and opportunity for public comment, that State or local governments are not, through statute, regulation, ordinance, or otherwise, adequately protecting the values for which the segment concerned is designated as a component of the national wild and scenic rivers system.

16 USC 1274  
note.

## SEC. 5. NIOBRARA SCENIC RIVER ADVISORY COMMISSION.

(a) **ESTABLISHMENT.**—There is hereby established the Niobrara Scenic River Advisory Commission (hereinafter in this Act referred to as the "Commission"). The Commission shall advise the Secretary of the Interior (hereinafter referred to as the "Secretary") on matters pertaining to the development of a management plan, and the management and operation of the 40-mile and 30-mile segments of the Niobrara River designated by section 2 of this Act which lie outside the boundary of the Fort Niobrara National Wildlife Refuge and that segment of the Niobrara River from its confluence with Chimney Creek to its confluence with Rock Creek.

(b) **MEMBERSHIP.**—The Commission shall consist of 11 members appointed by the Secretary—

16 USC 1274  
note.

(1) 3 of whom shall be owners of farm or ranch property within the upper portion of the designated river corridor between the Borman Bridge and the Meadville;

(2) 3 of whom shall be owners of farm or ranch property within the lower portion of the designated river corridor between the Meadville Bridge and the bridge on Highway 137;

(3) 1 of whom shall be a canoe outfitter who operates within the river corridors;

(4) 1 of whom shall be chosen from a list submitted by the Governor of Nebraska;

(5) 2 of whom shall be representatives of the affected county governments or natural resources districts; and

(6) 1 of whom shall be a representative of a conservation organization who shall have knowledge and experience in river conservation.



(c) **TERMS.**—Members shall be appointed to the Commission for a term of 3 years. A member may serve after the expiration of his term until his successor has taken office.

(d) **CHAIRPERSON; VACANCIES.**—The Secretary shall designate 1 of the members of the Commission, who is a permanent resident of Brown, Cherry, Keya Paha, or Rock Counties, to serve as Chairperson. Vacancies on the Commission shall be filled in the same manner in which the original appointment was made. Members of the Commission shall serve without compensation, but the Secretary is authorized to pay expenses reasonably incurred by the Commission in carrying out its responsibilities under this Act on vouchers signed by the Chairperson.

(e) **TERMINATION.**—The Commission shall cease to exist 10 years from the date of enactment of this Act.

16 USC 1274  
note.

#### SEC. 6. MISSOURI RIVER PROVISIONS.

(a) **ADMINISTRATION.**—The administration of the Missouri River segment designated in section 2 of this Act shall be in consultation with a recreational river advisory group to be established by the Secretary. Such group shall include in its membership representatives of the affected States and political subdivisions thereof, affected Federal agencies, organized private groups, and such individuals as the Secretary deems desirable.

(b) **BRIDGES.**—The designation of the Missouri River segment by the amendment made by section 2 of this Act shall not place any additional requirements on the placement of bridges other than those contained in section 303 of title 49, United States Code.

(c) **EROSION CONTROL.**—Within the Missouri River segment designated by the amendment made by section 2 of this Act, the Secretary shall permit the use of erosion control techniques, including the use of rocks from the area for streambank stabilization purposes, subject to such conditions as the Secretary may prescribe, in consultation with the advisory group described in subsection (a) of this section, to protect the resource values for which such river segment was designated.

16 USC 1274  
note.

#### SEC. 7. NATIONAL RECREATION AREA STUDY.

(a) **IN GENERAL.**—The Secretary of the Interior, acting through the Director of the National Park Service, shall undertake and complete a study, within 18 months after the date of enactment of this section, regarding the feasibility and suitability of the designation of lands in Knox County and Boyd County, Nebraska, generally adjacent to the recreational river segments designated by the amendments made by section 2 of this Act and adjacent to the Lewis and Clark Reservoir, as a national recreation area. The Secretary may provide grants and technical assistance to the State of Nebraska, the Santee Sioux Indian Tribal Council, and the political subdivisions having jurisdiction over lands in these 2 counties to assist the Secretary in carrying out such study. The study under this section shall be prepared in consultation with the Santee Sioux Tribe, affected political subdivisions, and relevant State agencies. The study shall include as a minimum each of the following:

(1) A comprehensive evaluation of the public recreational opportunities and the flood plain management options which are available with respect to the river and creek corridors involved.

(2) An evaluation of the natural, historical, paleontological, and recreational resources and values of such corridors.

(3) Recommendations for possible land acquisition within the corridor which are deemed necessary for the purpose of resource protection, scenic protection and integrity, recreational activities, or management and administration of the corridor areas.

(4) Alternative cooperative management proposals for the administration and development of the corridor areas.

(5) An analysis of the number of visitors and types of public use within the corridor areas that can be accommodated in accordance with the full protection of its resources.

(6) An analysis of the facilities deemed necessary to accommodate and provide access for such recreational uses by visitors, including the location and estimated costs of such facilities.

(b) **SUBMISSION OF REPORT.**—The results of such study shall be transmitted to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate.

#### SEC. 8. STUDY OF FEASIBILITY AND SUITABILITY OF ESTABLISHING NIOBRARA-BUFFALO PRAIRIE NATIONAL PARK.

16 USC 1a-5  
note.

(a) **IN GENERAL.**—The Secretary of the Interior shall undertake and complete a study of the feasibility and suitability of establishing a national park in the State of Nebraska to be known as the Niobrara-Buffalo Prairie National Park within 18 months after the date of enactment of this Act.

(b) **AREA TO BE STUDIED.**—The areas studied under this section shall include the area generally depicted on the map entitled "Boundary Map, Proposed Niobrara-Buffalo Prairie National Park", numbered NBP-80,000, and dated March 1990. The study area shall not include any lands within the boundaries of the Fort Niobrara National Wildlife Refuge.

(c) **RESOURCES.**—In conducting the study under this section, the Secretary shall conduct an assessment of the natural, cultural, historic, scenic, and recreational resources of such areas studied to determine whether they are of such significance as to merit inclusion in the National Park System.

(d) **STUDY REGARDING MANAGEMENT.**—In conducting the study under this section, the Secretary shall study the feasibility of managing the area by various methods, in consultation with appropriate Federal agencies, the Nature Conservancy, and the Nebraska Game and Parks Commission.

(e) **SUBMISSION OF REPORT.**—The results of the study shall be submitted to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate.

#### SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

16 USC 1274  
note.

Approved May 24, 1991.

#### LEGISLATIVE HISTORY—S. 248:

HOUSE REPORTS: No. 102-51, Pt. 1 (Comm. on Interior and Insular Affairs).  
SENATE REPORTS: No. 102-19 (Comm. on Energy and Natural Resources).  
CONGRESSIONAL RECORD, Vol. 137 (1991):

Apr. 17, considered and passed Senate.

May 14, considered and passed House.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 27 (1991):  
May 24, Presidential statement.



## Appendix B: Selected Legislation

### **National Park Service Organic Act (16 U.S.C. 1-4).**

The National Park Service Organic Act of 1916 remains after nearly nine decades the core of National Park Service authority and the definitive statement of the purposes of parks and the Service's mission: "to promote and regulate the use of the federal areas known as national parks, monuments, and reservations...by such means and measures as conform to the[ir] fundamental purpose...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations."

### **Archeological and Historic Preservation Act (16 U.S.C. 469-469c-2).**

This 1960 Act requires survey, recovery, and preservation of significant scientific, prehistoric, historic, archeological, or paleontological data when such data may be destroyed due to a federal project. The Act directs federal agencies to notify the secretary of the interior whenever they find that such a project may cause loss or damage.

### **National Historic Preservation Act (16 U.S.C. 470-470x-6).**

The purpose of this 1966 Act is to protect and preserve districts, sites and structures, and architectural, archeological, and cultural resources. Section 106 requires consultation with the State Historic Preservation Office. Section 110 requires that the National Park Service identify and nominate all eligible resources under its jurisdiction to the National Register of Historic Places.

### **Wild and Scenic Rivers Act (16 U.S.C. 1131-1136).**

This 1968 Act established a system to protect selected rivers with outstandingly remarkable scenic, recreational, geologic, wildlife, historic, cultural, or similar values in a free-flowing condition. The Wild and Scenic Rivers System includes three river classifications—wild, scenic, and recreational—based on the level of disturbances to the given river and its surrounding habitat at the time of designation. Of the nearly 3.6 million miles of rivers in the United States, 160 rivers or river segments, totaling 11,292 miles, are protected in the system.

### **National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370d).**

The purposes of this Act include encouraging "harmony between [humans] and [their] environment; to promote efforts which will prevent or eliminate damage to the environment...and stimulate the health and welfare of [humanity]." These purposes are accomplished by evaluating the effects of federal actions. The results of these evaluations are presented to the public, federal agencies, and public officials in document format (i.e., environmental assessments and environmental impact statements) for consideration prior to taking official action or making official decisions.

### **Council on Environmental Quality Regulations (40 CFR Parts 1500-1517).**

These regulations implement the National Environmental Policy Act and provide guidance to federal agencies in the preparation of environmental documents identified under the Act.

### **National Park System General Authorities Act (16 U.S.C. 1a-1 et seq.).**

This 1970 Act affirmed that all national park areas are "united through their interrelated purposes and resources into one national park system, as cumulative expressions of a single national heritage."

### **Clean Air Act (42 U.S.C. 7401-7671q).**

The main purpose of this 1970 Act and its 1990 amendment is the protection and enhancement of the nation's air quality to promote public health and welfare. The Act establishes specific programs that provide special protection for air resources and air quality-related values associated with National Park System units. The U.S. Environmental Protection Agency has been charged with implementing the Act.

### **Federal Water Pollution Control Act of 1972 (33 U.S.C. 1251 et seq.).**

As amended in 1977, this law came to be known as the Clean Water Act. The Act established the basic structure for regulating discharges of pollutants into the waters of the United States. It gave the U. S. Environmental Protection Agency the authority to implement pollution control programs such as setting wastewater standards for industry. The Clean Water

Act also continued requirements to set water quality standards for all contaminants in surface waters. The Act made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions.

**Endangered Species Act of 1973  
(16 U.S.C. 1531-1544).**

The purposes of the Endangered Species Act include providing "a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." According to the Endangered Species Act, "all federal departments and agencies shall seek to conserve endangered species and threatened species" and "[e]ach federal agency shall...insure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species." The U. S. Fish and Wildlife Service (non-marine species) and the National Marine Fisheries Service (marine species, including anadromous fish and marine mammals) administer the Endangered Species Act. Any potential action by a federal agency that may affect endangered, threatened, or proposed species must be evaluated in consultation with either the Fish and Wildlife Service or the Marine Fisheries Service, as appropriate.

**The Redwood Act of 1978 (16 U.S.C. 1a-1).**

Congress supplemented and clarified the provisions of the National Park Service Organic Act through enactment of the General Authorities Act in 1970, and again through enactment of a 1978 amendment to that law (the "Redwood Amendment") contained in a bill expanding Redwood National Park. This Act stated that the provisions of the Organic Act apply to all units of the National Park System. A key phrase is that activities "shall not be exercised in derogation of the values and purposes for which these areas have been established." It is applicable unless Congress has "directly and specifically provided" otherwise.

**Archeological Resources Protection Act of 1979  
(16 U.S.C. 470aa-mm).**

This Act defines archeological resources as any material remains of past human life or activities that are of archeological interest and at least one hundred years old; requires federal permits for their excavation or removal, and sets penalties for violators; provides for preservation and custody of excavated materials, records, and data; provides for confidentiality of

archeological site locations; and encourages cooperation with other parties to improve protection of archeological resources. The Act was amended in 1988 to require development of plans for surveying public lands for archeological resources, and systems for reporting incidents of suspected violations.

**Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-3013).**

This 1990 Act assigns ownership or control of American Indian human remains, funerary objects, sacred objects, and objects of cultural patrimony that are excavated or discovered on federal lands to lineal descendants or culturally-affiliated American Indian groups; establishes criminal penalties for trafficking in remains or objects obtained in violation of the Act; and provides that federal agencies and museums that receive federal funding shall inventory American Indian human remains and associated funerary objects in their possession or control, identify their cultural and geographic affiliations within five years, and prepare summaries of information about American Indian unassociated funerary objects, sacred objects, or objects of cultural patrimony. This is to provide for repatriation of such items when lineal descendants or American Indian groups request it.

**Niobrara Scenic River Designation Act of 1991  
(16 U.S.C. 1274a).**

Public Law 102-50 amended section 3(a) of the Wild and Scenic Rivers Act of 1968 to designate portions of the Niobrara River in north central Nebraska as a unit of the national Wild and Scenic Rivers System.

**Executive Order 13007, "Indian Sacred Sites," 1996.**

This Executive Order instructed each executive branch agency with statutory or administrative responsibility for the management of federal lands to 1) accommodate to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, access to and ceremonial use of Indian sacred sites by Indian religious practitioners; 2) avoid adversely affecting the physical integrity of such sacred sites; and 3) where appropriate, maintain the confidentiality of such sites.

## Appendix C: Nebraska Natural Heritage Program Niobrara Region Sensitive Species\*

Plants			
Scientific Name	Common Name	Status	
		State	Federal
<i>Alopecurus geniculatus</i>	Water foxtail		
<i>Amorpha nana</i>	Fragrant indigobush		
<i>Aralia nudicaulis</i>	Wild sarsaparilla		
<i>Aralia racemosa</i>	American skikenard		
<i>Arenaria lateriflora</i>	Grove sandwort		
<i>Aster brachyactis</i>	Rayless aster		
<i>Aster junciformis</i>	Rush aster		
<i>Astragalus agrestis</i>	Field milkvetch		
<i>Athyrium filix-femina</i>	Subarctic lady-fern		
<i>Atriplex nuttallii</i>	Nuttall saltbush		
<i>Betula papyrifera</i>	Paper birch		
<i>Botrychium campestre</i>	Prairie moonwort		
<i>Callitriche hermaphrodita</i>	Autumnal water-starwort		
<i>Callitriche verna</i>	Water starwort		
<i>Caltha palustris</i>	Marsh marigold		
<i>Carex buxbaumii</i>	Brown bog sedge		
<i>Carex diandra</i>	Lesser panicled sedge		
<i>Carex granularis</i>	Meadow sedge		
<i>Carex limosa</i>	Mud sedge		
<i>Carex peckii</i>	Peck's sedge		
<i>Carex saximontana</i>	Rocky Mountain sedge		
<i>Copanthia missouriensis</i>	Missouri corycactus		
<i>Corydalis aurea</i>	Golden corydalis		
<i>Cypripedium candidum</i>	Small white lady's slipper		
<i>Dracocephalum parviflorum</i>	American dragonhead		
<i>Dryopteris carthusiana</i>	Spinulose woodfern		
<i>Eleocharis pauciflora</i>	Fewflower spikerush		
<i>Erigeron divergens</i>	Spreading fleabane		
<i>Eriophorum gracile</i>	Slender cotton-grass		
<i>Eriophorum polystachyon</i>	Narrowleaf cottonsedge		
<i>Fritillaria atropurpurea</i>	Leopart lily		
<i>Glyceria borealis</i>	Small floating manna-grass		
<i>Gratiola neglecta</i>	Hedge hyssop		
<i>Habenaria hyperborea</i>	Northern green orchid		
<i>Habenaria viridis</i>	Frog orchid		
<i>Helianthemum bicknellii</i>	Hoary frostweed		
<i>Hieracium canadense</i>	Canada hawkweed		
<i>Juncus canadensis</i>	Canada rush		
<i>Juncus scirpoides</i>	Scirpus-like rush		
<i>Juniperus horizontalis</i>	Creeping juniper		
<i>Lechea stricta</i>	Upright pinweed		
<i>Lemna minuscula</i>	Least duckweed		
<i>Liparis loeselii</i>	Loesel's twayblade		
<i>Lonicera dioica var glaucescens</i>	Limber honeysuckle		
<i>Ludwigia polycarpa</i>	Many-seed seedbox		
<i>Lysimachia hybrida</i>	Lance lea-leaf loosestrife		
<i>Menyanthes trifoliata</i>	Buckbean		

Plants continued

Scientific Name	Common Name	Status	
		State	Federal
<i>Microsteris gracilis</i>	Slender phlox		
<i>Mimulus alatus</i>	Sharpwing monkey-flower		
<i>Muhlenbergia filiformis</i>	Pullup muhly		
<i>Muhlenbergia flomerata</i>	Bristly muhly		
<i>Muhlenbergia richarsonis</i>	Mat muhly		
<i>Nuphar luteum</i>	American lotus		
<i>Nymphaea odorata</i>	Fragrant white water lily		
<i>Nymphaea tuberosa</i>	White water lily		
<i>Ophioglossum vulgatum</i>	Adder's-tongue		
<i>Pedicularis lanceolata</i>	Swamp lousewort		
<i>Penstemon haydenii</i>	Blowout penstemon	E <sup>2</sup>	E
<i>Petalostemon compactum</i>	Compact prairie-clover		
<i>Physocarpus opulifolius</i>	Ninebark		
<i>Physostegia pariflora</i>	Purple dragonhead		
<i>Pilularia americana</i>	American pillwort		
<i>Platanthera praeclara</i>	Western prairie-fringed orchid	T <sup>1</sup>	T
<i>Poa nevadensis</i>	Nevada bluegrass		
<i>Potamogeton alpinus</i>	Northern pondweed		
<i>Potamogeton friesii</i>	Flat-stalked pondweed		
<i>Potamogeton praelongus</i>	Whitestem pondweed		
<i>Potamogeton strictifolius</i>	Narrow-leaved pondweed		
<i>Psoralea hypogaea</i>	Little breadroot scurf-pea		
<i>Pterospora andromedea</i>	Giant pinedrops		
<i>Pyrola elliptica</i>	Elliptical-leaf wintergreen		
<i>Pyrola virens</i>	Green pyrola		
<i>Ribes ozyacanthoides</i>	Currant spp.		
<i>Robus pubescens</i>	Catherinette's berry		
<i>Sagittaria longiloba</i>	Long-barb arrowhead		
<i>Sagittaria rigida</i>	Sessile-fruited arrowhead		
<i>Scholochloa festucadea</i>	Whitetop		
<i>Scirpus hallii</i>	Hall bulrush		
<i>Silene menziesii</i>	Menzie's silene		
<i>Sparganium chlorocarpum</i>	Greefruit bur-reed		
<i>Spiranthes romanzoffiana</i>	Hooded ladies'-tresses		
<i>Stellaria longifolia</i>	Long-leaved stitchwort		
<i>Talinum calycinum</i>	Large-flower fame-flower		
<i>Talinum rugospermum</i>	Prairie fame-flower		
<i>Triadenum fraseri</i>	Marsh St. John's-wort		
<i>Triglochin palustre</i>	March arrow-grass		
<i>Triodanis perfoliata</i> var <i>biflora</i>	Small venus' looking glass		
<i>Vallisneria americana</i>	Water-celery		
<i>Vicia cracca</i>	Tufted vetch		
<i>Viola nephrophylla</i>	Northern bog violet		
<i>Vitis aestivalis</i>	Summer grape		
<i>Zizania aquatica</i>	Indian wild rice		

Birds			
Scientific Name	Common Name	Status	
		State	Federal
<i>Accipiter cooperii</i>	Cooper's hawk		
<i>Accipiter striatus</i>	Sharp-shinned hawk		
<i>Asio flammeus</i>	Short-eared owl		
<i>Aythya valisineria</i>	Canvasback		
<i>Botaurus lentiginosus</i>	American bittern		
<i>Buteo swainsoni</i>	Swainson's hawk		
<i>Calcarius ornatus</i>	Chestnut-collared longspur		
<i>Caprimulgus vociferus</i>	Whip-poorwill		
<i>Certhia americana</i>	Brown creeper		
<i>Charadrius melodus</i>	Piping plover	T	T
<i>Chlidonias niger</i>	Black tern		
<i>Circus cyaneus</i>	Northern harrier		
<i>Cygnus buccinator</i>	Trumpeter swan		
<i>Falco peregrinus</i>	Peregrine falcon	E	
<i>Gallinago gallinago</i>	Common snipe		
<i>Grus americana</i>	Whooping crane	E	E
<i>Haliaeetus leucocephalus</i>	Bald eagle	E	E
<i>Ixobrychus exilis</i>	Least bittern		
<i>Melospiza georgiana</i>	Swamp sparrow		
<i>Numenius americanus</i>	Long-billed curlew	E	
<i>Nycticorax nycticorax</i>	Black-crowned night-heron		
<i>Passerculus sandwichensis</i>	Savannah sparrow		
<i>Phalaenoptilus nuttallii</i>	Common poorwill		
<i>Plegadis chihi</i>	White-faced ibis		
<i>Sterna antillarum athalassos</i>	Interior least tern	E	E
<i>Sterna forsteri</i>	Forster's tern		
<i>Vireo flavifrons</i>	Yellow-throated vireo		
Fish			
Scientific Name	Common Name	Status	
		State	Federal
<i>Couesius plumbeus</i>	Lake chub		
<i>Culaea inconstans</i>	Brook stickleback		
<i>Etheostoma nigrum</i>	Johnny darter		
<i>Fundulus sciadicus</i>	Plains topminnow		
<i>Luxilus cornutus</i>	Common shiner		
<i>Margariscus margarita</i>	Pearl dace	T	
<i>Notropis heterolepis</i>	Blacknose shiner	T	
<i>Phoxinus eos</i>	Northern redbelly dace	T	
<i>Phoxinus neogaeus</i>	Finescale dace	T	
<i>Rhinichthys atratulus</i>	Longnose dace		



Mammals			
Scientific Name	Common Name	Status	
		State	Federal
<i>Lutra canadensis</i>	River otter	E	
<i>Mustela nigripes</i>	Black-footed ferret	E	E
<i>Myotis septentrionalis</i>	Northern long-eared myotis		
<i>Neotoma floridana baileyi</i>	Bailey's eastern woodrat		
<i>Perognathus fasciatus</i>	Olive-backed pocket mouse		
<i>Spilogale putorius</i>	Eastern spotted skunk		
Reptiles			
Scientific Name	Common Name	Status	
		State	Federal
<i>Kinosternon flavescens</i>	Yellow mud turtle		
<i>Opheodrys vernalis</i>	Smooth green snake		
Invertebrates			
Scientific Name	Common Name	Status	
		State	Federal
<i>Bolaria bellona</i>	Meadow fritillary		
<i>Euphyes dion</i>	Dion skipper		
<i>Hesperia ottoe</i>	Ottoe skipper		
<i>Nicrophorus americanus</i>	American burying beetle	E	
<i>Poanes viator viator</i>	Broad-winged skipper		
<i>Satyrrium edwardsii</i>	Edward's hairstreak		
<i>Speyeria idalia</i>	Regal fritillary		

\* All species are considered sensitive unless otherwise indicated by the status column.

<sup>1</sup> Threatened status

<sup>2</sup> Endangered status

## Appendix D: Land Protection Cost Considerations

### Easement and Fee Acquisitions Costs

The land acquisition costs presented here, whether for easements or fee simple title, are derived from fieldwork in June 2002 and are based chiefly on comparable sales. The information was obtained from land brokers and is considered reliable. The existence of hazardous wastes, if any, has not been considered. Land values in the immediate Niobrara River valley range from \$750 to \$2,000 per acre, depending on tract size, extent of river frontage, vegetative cover type, location in the valley, and the immediate availability of amenities such as live water and electricity.

The purchase of conservation easements generally have a lower initial acquisition costs than for fee title ownership. Land encumbered by an easement remains in private ownership and has a reduced impact on local property taxes.

In Alternative B, the costs associated with the purchase of conservation easements and two river access sites, in

all instances from willing sellers, are estimated to be \$5.5 million initially, a sum potentially renewable as protection opportunities are met and the available fund is exhausted. In all, some 17,365 acres warrant a minimum of conservation easement protection.

In Alternative C, the National Park Service would consistently pursue conservation easement and fee simple land purchases to the extent authorized by the Wild and Scenic Rivers Act and the 1991 Niobrara Act, relying generally on acquisition from willing sellers. Of the 23,074 acres in the Preferred Boundary (Alternative 3), some 22,186 acres are in private ownership outside the existing public trust. In accordance with the Wild and Scenic Rivers Act, up to 6,711 of those acres could be purchased in fee simple, with the remaining being prospects for easement purchase. The costs associated with the National Park Service's land acquisition program in this alternative could reach \$20 million. To compensate for lost property tax revenue, affected counties would receive Payment in Lieu of Taxes to the extent prescribed and appropriated for that federal program.

---



# Appendix E: Recommended Development Standards

The purpose of development standards is to provide guidelines for development that would be compatible with protecting the outstandingly remarkable values of the Niobrara National Scenic River. These standards would not apply retroactively to existing developments, but voluntary adoption would be encouraged.

The minimum standards for new agricultural and recreational development within the Scenic River boundary include:

- all uses would meet building densities defined in county zoning ordinances, or where no zoning ordinances apply, an equivalent to a minimum subdivision lot size of one-quarter section (160 acres).
- structures would be set back a minimum of two hundred feet from rivers, streams, or wetlands; no structure would be taller than thirty-five feet (not applicable to agricultural structures such as barns and silos).
- no modern residential or commercial structure would be seen from an upstream, river-level vantage or prominent scenic vista, except where conditions of geography restrict lateral or downstream visibility.
- all uses would meet state and local regulations.
- county zoning ordinances would set standards for number, size, and location of signs. Off-premise business signs would not be permitted.
- existing feedlots could be expanded up to fifty percent of their animal unit capacity but only away from the river, and not closer to it. The expanded portion should be screened from public view.
- recycle material stockpiles (including vehicles, machinery, construction material) would be set

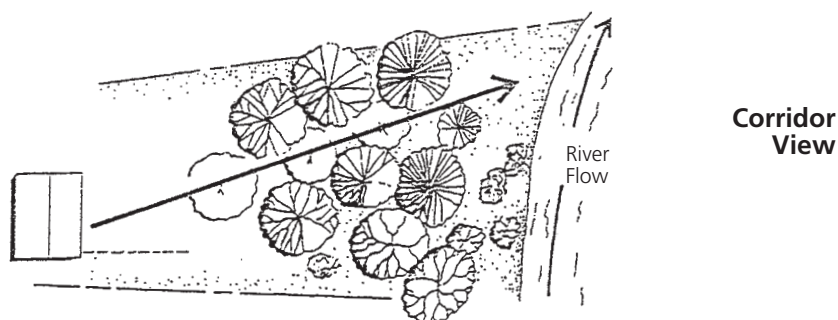
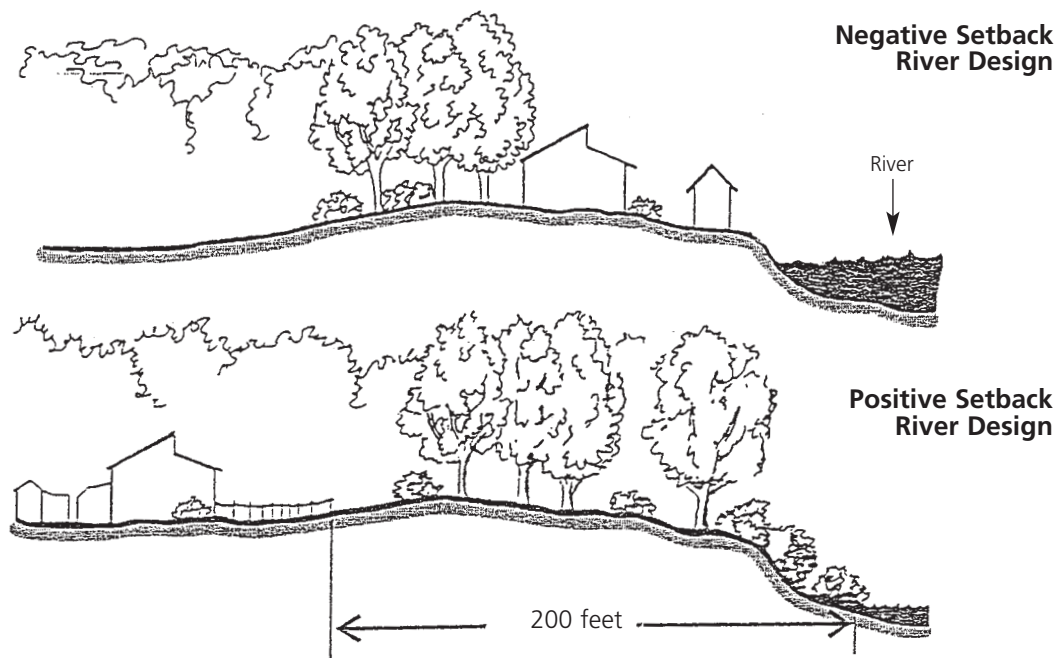
back a minimum of two hundred feet from rivers, streams, and wetlands. They should be screened from public view from roads or the river with natural material screening.

- quarries and borrow pits would be acceptable for county road and ranch sand, gravel, and clay sources. They, too, should be screened from public view from roads or the river with natural material screening.
- recreational facilities located near the river would be only those necessary for water use (such as river access). All others should be located one hundred or more feet from the riverbank.
- commercial recreational uses (campgrounds, rental cabins, outfitter businesses, camp stores) would be permitted as determined by county zoning.
- natural tones would be employed for building colors.
- buildings would be screened from the river by vegetation or topography consistent with examples provided in **Appendix F**.

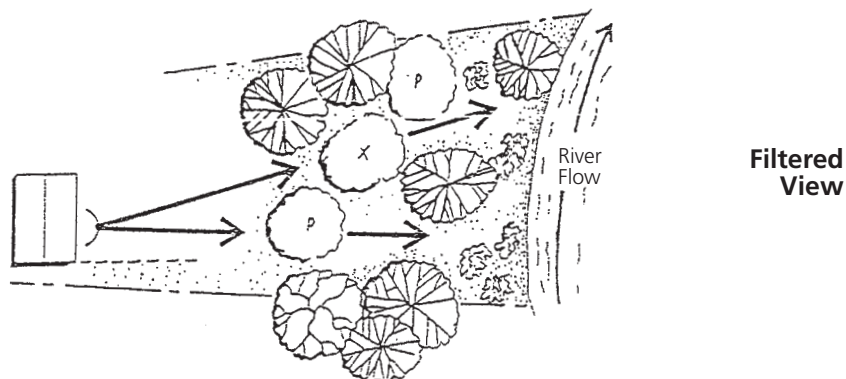
These new uses would not be allowed inside the boundary:

- landfills or dumps.
  - industrial sites.
  - commercial uses other than agricultural, home-based, or recreational support.
  - feedlots.
-

## Appendix F: Screening Examples



When selectively removing vegetation for a view of the river, it is best to cut for a downstream view. Maintaining the upstream vegetation will help to screen structures from the river and will protect the tranquility and enjoyment of your property. The corridor within which trees and shrubs are selectively removed (X) and should not be wider than 10 to 20 feet.



By using a natural opening, removing a tree (X) and selectively pruning of shoreland vegetation (P) as shown, several attractive views can be had while preserving privacy and the natural edge of the river.



# Appendix G: Niobrara Council Legislation

## NIOBRARA RIVER CORRIDOR

§ 72-2007

### ARTICLE 20

## NIOBRARA RIVER CORRIDOR

#### Section.

72-2001 to 72-2004. Repealed. Laws 2000, LB 1234, § 24.

72-2004.01. Act, how cited.

72-2005. Legislative findings.

72-2006. Niobrara scenic river corridor, defined.

72-2007. Niobrara Council; created; members; terms; meetings; expenses.

72-2008. Niobrara Council; powers and duties.

72-2009. Niobrara Council Fund; created; use; investment.

72-2010. Niobrara Council; zoning duties.

72-2011. Activities within corridor; limitations.

72-2012. Niobrara Council; zoning jurisdiction.

72-2001 to 72-2004. Repealed. Laws 2000, LB 1234, § 24.

72-2004.01. Act, how cited. Sections 72-2004.01 to 72-2012 shall be known and may be cited as the Niobrara Scenic River Act.

Source: Laws 2002, LB 1003, § 47.  
Effective date July 20, 2002.

72-2005. Legislative findings. As a result of the recent federal court ruling in National Parks and Conservation Association v. National Park Service and in order to maintain an aspect of local control over the Niobrara scenic river corridor, the Legislature finds that there is a need to reconstitute the existing Niobrara Council with the express authority and responsibility to manage the Niobrara scenic river corridor in conjunction with the National Park Service. The purpose of the Niobrara Scenic River Act is to effectuate changes in the council necessary to ensure the continuation of the cooperative management relationship between the Niobrara Council and the National Park Service so that local participation and control over this valuable natural resource can be maintained.

Source: Laws 2000, LB 1234, § 1; Laws 2002, LB 1003, § 42.  
Effective date July 20, 2002.

72-2006. Niobrara scenic river corridor, defined. For purposes of the Niobrara Scenic River Act, Niobrara scenic river corridor means the area designated as a national scenic river and a part of the national wild and scenic rivers system under 16 U.S.C. 1274(a)(117), as such section existed on May 24, 1991, and described in the 1996 Niobrara National Scenic River General Management Plan/Environmental Impact Statement.

Source: Laws 2000, LB 1234, § 2; Laws 2002, LB 1003, § 43.  
Effective date July 20, 2002.

72-2007. Niobrara Council; created; members; terms; meetings; expenses. (1) The Niobrara Council is created. The council membership shall include:

(a) A representative of each of the county boards of Brown, Cherry, Keya Paha, and Rock counties chosen by the county board of the respective county;

(b) A representative of the Middle Niobrara Natural Resources District and the Lower Niobrara Natural Resources District chosen by the board of the respective district;

(c) The secretary of the Game and Parks Commission or his or her designee;

(d) A representative of the United States Fish and Wildlife Service and a representative of the National Park Service chosen by the Governor from lists of at least three individuals, or fewer if there are not at least three qualified individuals, submitted by the federal services. The appointments under this subdivision shall be nonvoting members unless and until the agencies represented by these appointees formally authorize such appointees to vote on all matters before the council;

(e) An individual from each of Brown, Cherry, Keya Paha, and Rock counties who resides in the Niobrara River drainage area and owns land in the Niobrara scenic river corridor chosen by the Governor from a list of at least three individuals, or fewer if there are not at least three qualified individuals, from each county submitted by the county board representatives on the council;

(f) A representative from a recreational business operating within the Niobrara scenic river corridor chosen by the Governor from a list of at least three individuals, or fewer if there are not at least three qualified individuals, submitted by the county board representatives on the council;

(g) A timber industry representative operating within the Niobrara scenic river corridor chosen by the Governor from a list of at least three individuals, or fewer if there are not at least three qualified individuals, submitted by the county board representatives on the council; and

(h) A representative of a recognized, nonprofit environmental, conservation, or wildlife organization chosen by the Governor from a list of at least three individuals, or fewer if there are not at least three qualified individuals, submitted by the county board representatives on the council.

The council members shall be selected within ninety days after July 13, 2000. The council members shall hold office for three-year terms and until a successor is appointed and qualified. The council members shall serve at the pleasure of the appointing board or the Governor.

(2) The council shall elect a chairperson, a vice-chairperson, a secretary, and a treasurer who shall jointly serve as the executive committee for the council. The council shall meet on a regular basis, preferably once a month, with a minimum of six meetings per year. Special meetings may be called by any member of the executive committee or at the request of a simple majority of the members of the council.

(3) A quorum shall be present at a meeting before any action may be taken by the council. A quorum shall be a majority of the members who are selected and serving and who vote on issues before the council. All actions of the council require a majority vote of the quorum present at any meeting, except that any vote to reject or adopt any zoning regulation or variance under section 72-2010 requires a vote of two-thirds of all the council members who are selected and serving and who vote on issues before the council. A council

member may not participate or vote on any matter on which he or she participated or voted as a member of a county board, county planning commission, or natural resources district board, and in such a case such council member shall not be counted for purposes of determining whether quorum or vote requirements have been satisfied.

(4) Members shall be reimbursed for actual and necessary expenses incurred in carrying out their duties on the council as provided in sections 81-1174 to 81-1177.

Source: Laws 2000, LB 1234, § 3; Laws 2001, LB 182, § 1.

**72-2008. Niobrara Council; powers and duties.** The mission of the Niobrara Council is to assist in all aspects of the management of the Niobrara scenic river corridor since portions of the Niobrara River have been designated as a national scenic river under 16 U.S.C. 1274(a)(117), as such section existed on May 24, 1991, giving consideration and respect to local and governmental input and private landowner rights, and to maintain and protect the integrity of the resources associated with the Niobrara scenic river corridor. The council shall perform management functions related to the Niobrara scenic river corridor, including, but not limited to, those authorized and delegated to it by the National Park Service. The council may promulgate its own rules and internal policies to carry out the purposes of the Niobrara Scenic River Act. The Game and Parks Commission may provide administrative support when requested by the council to carry out its duties. This support shall not exceed fifty thousand dollars in any calendar year. In the Niobrara scenic river corridor, the council may hold title to real estate in the name of the council. The council may purchase, accept gifts of, or trade real estate and may obtain conservation easements as provided in the Conservation and Preservation Easements Act. Acquisition of conservation easements outside the boundaries of the Niobrara scenic river corridor shall require the approval of the appropriate governing body as provided in section 76-2,112.

Source: Laws 2000, LB 1234, § 4; Laws 2002, LB 1003, § 44.  
Effective date July 20, 2002.

**Cross Reference**

Conservation and Preservation Easements Act, see section 76-2,118.

**72-2009. Niobrara Council Fund; created; use; investment.** The Niobrara Council Fund is created. The fund shall be administered by the Niobrara Council. The council may accept any private or public funds to carry out its work and such funds shall be remitted to the State Treasurer for credit to the fund. The fund shall consist of such funds and legislative appropriations made to the council. Any money in the fund available for investment shall be invested by the state investment officer pursuant to the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act.

Source: Laws 2000, LB 1234, § 5.

**Cross References**

Nebraska Capital Expansion Act, see section 72-1269.  
Nebraska State Funds Investment Act, see section 72-1260.

**72-2010. Niobrara Council; zoning duties.** The Niobrara Council shall review and approve or reject all zoning regulations, including existing regu-

lations, new regulations, proposed regulations, and variances of any type including variances for use and location, which affect land in the Niobrara scenic river corridor that is not incorporated within the boundaries of a municipality. If the council rejects a zoning regulation or variance, the governing body enacting the regulation or variance has six months to present an alternative to the council. If no alternative is proposed or if the alternative is also rejected, the council may adopt zoning regulations for such area. In counties without zoning the council may develop and enforce zoning regulations within the Niobrara scenic river corridor under the guidance of the federal Wild and Scenic Rivers Act or under the guidance of the general management plan as written by the National Park Service. The council shall follow the requirements for zoning regulations in sections 23-114 to 23-114.05 and 23-164 to 23-174.10, except that no separate planning commission is required and the council shall fulfill the duties of both the county board and the planning commission in such sections.

Source: Laws 2000, LB 1234, § 6; Laws 2002, LB 1003, § 45.  
Effective date July 20, 2002.

72-2011. Activities within corridor; limitations. (1) Any state or state-assisted activity or undertaking proposed within the Niobrara scenic river corridor shall be consistent with the purpose of the scenic river designation, including the scenic river's free-flowing condition and scenic, geological, biological, agricultural, historic, and prehistoric resources.

(2) The head of any state or local agency having direct or indirect jurisdiction over a proposed state or state-assisted undertaking within the Niobrara scenic river corridor and the head of any agency having authority to license or permit any undertaking in such area shall prepare a detailed proposal and submit it to the Niobrara Council for its review.

(3) The council shall review the proposal and consult with the agency. The council has ninety days after the date that the proposal is received to make a determination of whether or not the proposed action is consistent with the purposes of this section. If the council determines that the proposal is not consistent with the purposes of this section, the council shall so notify the agency and the agency shall not proceed with the action until after a justification for the action has been submitted to the Governor and approved by the Governor in writing. The justification shall include the following elements: The anticipated current, future, and cumulative effects on the scenic and natural resources of the designated scenic river corridor; the social and economic necessity for the proposed action; all possible alternatives to the proposed action including a no-action alternative; the comparative benefits of proposed alternative actions; and the mitigation measures outlined in the proposed action.

Source: Laws 2000, LB 1234, § 7; Laws 2002, LB 1003, § 46.  
Effective date July 20, 2002.

72-2012. Niobrara Council; zoning jurisdiction. The Niobrara Council shall not have zoning jurisdiction outside the boundaries of the Niobrara scenic river corridor.

Source: Laws 2000, LB 1234, § 8.

# Appendix H: Cost Comparison of Alternatives

## Alternative A

### **Recurring**

Staffing/Funding  
Liaison

\$100,000

**Total**

**\$100,000**

## Alternative B

### **Recurring**

Staffing/Funding

Field Operations, Valentine

\$250,000

Headquarters, O'Neill

\$245,000

Interpretive Operations, Valentine

\$250,000

Partnerships

\$400,000

**Total**

**\$1,145,000**

### **Nonrecurring**

Land Protection

\$5.5 million +

Development

Access Sites (\$175,000 per)

\$350,000

Toilets (\$27,500 per)

\$137,500

Education Center

\$4.75 m - 6.75 m\*

**Total**

**\$10.8 m - \$12.8 m**

## Alternative C

### **Recurring**

Staffing/Funding

Field Operations, Valentine

\$1,186,000

Headquarters, O'Neill

\$245,000

**Total**

**\$1.5 million**

### **Nonrecurring**

Land Protection

\$20 million

Development

Access Sites (\$175,000 per)

\$350,000

Toilets (\$27,500 per)

\$137,500

Education Center

\$4.75 m - 6.75 m\*

**Total**

**\$25.3 m - \$27.3 m**

\*These variable figures reflect National Park Service costs only.

# Glossary

**Accessibility.** The provision of National Park Service programs, facilities, and services in ways that include individuals with disabilities, or makes available to those individuals the same benefits available to persons without disabilities.

**Canoeable reach.** The canoeable reach of the Niobrara River is generally defined as that thirty-mile segment starting at the Fort Niobrara launch at Cornell Bridge and ending a mile or two above the Norden Chute at the Norden Bridge. This distance coincides with the phenomenon of the river flowing over its bedrock substrate, where canoeing access is relatively common, and where river outfitting is well established.

**Conservation easement.** A conservation easement involves the purchase or donation of a property's development rights. Easement restrictions are typically permanent and run with the land, binding the original landowner and all future landowners. Easements are tailored to each particular property and the needs of each individual landowner.

**Easement.** An easement is a legal agreement between a landowner and an easement holder that grants a right of passage over land or a waterway, or permanently limits uses of the land in order to protect, for instance, scenic or wildlife resources or historic sites. Easements are often called by different names according to the resource they are designed to protect, such as historic preservation easements, agricultural preservation easements, scenic easements, and conservation easements.

**Fee simple title.** In fee simple, the landowner has title to both the land and any improvements on that land. The fee simple owner has full rights of ownership, including selling to others, leasing, giving it away, and passing it on to others after death.

**Finding of No Significant Impact.** This is a document that briefly presents the reasons that a federal action will not have a significant effect on the human environment. It includes the environmental assessment or a summary of the environmental assessment.

**Gateway community.** A town or city that borders on public lands or a public resource.

**Groundwater.** Water within the earth that supplies wells and springs. Specifically, water in the zone of saturation where all openings in soils and rocks are filled, the upper surface of which forms the water table.

**Impact.** The likely effects of an action or proposed action upon specific natural, cultural, or socioeconomic resources. Impacts may be direct, indirect, cumulative, beneficial, or adverse.

**Impairment.** Impairment is an impact that, in the professional judgment of the responsible manager, would harm the integrity of a park's resources and values, including the opportunities that would otherwise be present for the enjoyment of those resources or values.

**Major federal action.** Action with effects that may be major and which are potentially subject to federal control and responsibility. Actions include the circumstance where the responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under applicable laws.

**National Environmental Policy Act.** This law, which went into effect on January 1, 1970, requires all federal agencies to disclose the environmental effects of their actions. Its essential purpose is to insure that environmental factors are given the same consideration as other factors in decision making by federal agencies. The law also established the Council on Environmental Quality to implement the law and monitor compliance with the law.



**Notice of Intent.** A required notice, published in the Federal Register, that a proposed action or project is being considered by a federal agency (e.g., preparation of an Environmental Impact Statement, proposed or final listing of threatened or endangered species, proposed critical habitat designations, preparation of an Environmental Assessment). The notice typically describes the proposed action and possible alternatives, describes the proposed scoping process, identifies where and when scoping meetings will be held, and contains the name and contact information for a person within the agency responsible for the proposed action.

**Ordinary high water mark (on non-tidal rivers).** The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other applicable means.

**Outstandingly remarkable values.** A Wild and Scenic Rivers Act term for outstandingly remarkable occurrences of scenic, recreational, geologic, fish and wildlife, historic, cultural, or similar values located in the immediate environments of selected American rivers. Features may be evaluated both individually and cumulatively. The determination of whether a feature is outstandingly remarkable is a professional judgment based on available documentation and expert evaluation.

**Record of Decision.** This is a formal statement of the action an agency intends to take after having completed the National Environmental Policy Act process (e.g., environmental impact statement, listing of threatened or endangered species, critical habitat designations, environmental assessments). The record of decision sets forth the rationale behind the decision and discusses the environmental consequences of the action.

**Scoping.** Scoping is a public process to identify significant environmental issues requiring in-depth analysis in an environmental impact statement, along with alternative actions to be considered. Scoping is the first opportunity for public involvement in the preparation of a draft environmental impact statement, a proposed listing for threatened or endangered species, critical habitat designation, draft environmental assessment, and the like.

**Visitor.** Any person who uses a park's resources or services, regardless of where such use occurs (e.g., hiking a park trail, canoeing its waters, enjoying an overlook, via internet access).

# Bibliography

- "Baseline Water Quality Data Inventory and Analysis, Niobrara National Scenic Riverways." TMs. Fort Collins, Colo.: National Park Service, 1995.
- Bates, Jean N. "The Relationship Between Densitometry and Dominant Species Composition of Natural Plant Communities of the Niobrara Valley Preserve." TMs. Lincoln: University of Nebraska, Institute of Agriculture and Natural Resources, 1983.
- Bicak, Charles J. "A Systems Approach to Boundary Considerations Along the Middle Niobrara River Valley." TMs. Kearney: University of Nebraska at Kearney, Department of Biology, 2001.
- Bleed, Ann, and Charles Flowerday. *An Atlas of the Sandhills*. Lincoln: University of Nebraska, Institute of Agriculture and Natural Resources, 1989.
- Buecker, Thomas R. *Fort Niobrara, 1880-1906*. Valentine, Neb.: Fort Niobrara Natural History Association, 1992.
- Code of Federal Regulations, Title 36, Parks, Forests, and Public Property*. Washington: Government Printing Office, 2000.
- Crosby, Carol S. "Vegetation of the Coniferous-Deciduous Forest Overlap Region along the Niobrara River Valley of North-Central Nebraska." M.S. thesis, University of Nebraska, 1988.
- Dankert, Neil E., and Harold G. Nagel. "Butterflies of the Niobrara Valley Preserve, Nebraska." *Transactions of the Nebraska Academy of Sciences*. Vol. 16, 1988, 17-30.
- Davenport, Mae A., Katherine M. Flitsch, Jerrilyn L. Thompson, and Dorothy H. Anderson. *2001 Niobrara National Scenic River Visitor Study*. St. Paul: University of Minnesota, Department of Forest Resources, Cooperative Park Studies Program, 2002.
- "Description of the Demographic and Socioeconomic Characteristics of the Niobrara/Missouri National Scenic Riverways." TMs. Lincoln: University of Nebraska, Bureau of Business Research, 1993.
- Draft Study Report on a Portion of the Niobrara River, Nebraska*. Denver: Bureau of Outdoor Recreation, 1964.
- Draft Fort Niobrara National Wildlife Refuge River Recreation Management Plan and Environmental Assessment*. [Valentine, Neb.]: U.S. Fish and Wildlife Service, 2004.
- Ducey, James., "Birds of the Niobrara River Valley, Nebraska." *Transactions of the Nebraska Academy of Sciences*. Vol. 17, 1989, 37-60.
- Environmental Assessment, River Recreation Management, Fort Niobrara National Wildlife Refuge, Cherry County, Nebraska*. Denver: U. S. Fish and Wildlife Service, 1994.
- Falk, Carl R., Robert E. Pepperl, and Michael R. Voorhies. *Cultural and Paleontological Investigations within the Proposed Norden Unit, Nebraska: Final Report*. Lincoln: University of Nebraska, Division of Archeological Research, Department of Anthropology, 1985.

- Farrar, Jon. "The Niobrara National Scenic River: A Long and Tortuous Course." *Nebraskaland* 81 (May 2003): 10-19.
- , "The Niobrara National Scenic River: Looking Back, Looking Ahead." *Nebraskaland* 81 (June 2003): 20-27.
- Fort Niobrara National Wildlife Refuge Comprehensive Conservation Plan.*  
[Valentine, Neb.]: U. S. Fish and Wildlife Service, 1999.
- Fort Niobrara Valentine National Wildlife Refuges Comprehensive Facility and Public Use Master Plan.*  
[Valentine, Neb.]: U. S. Fish and Wildlife Service, 1999.
- Franklin, Rachel, Michael Grant, and Martha Hunt. *Historical Overview and Inventory of the Niobrara/Missouri National Scenic Riverways, Nebraska/South Dakota.*  
Omaha: National Park Service, 1994.
- Hanson, Cliff. "Small Business Institute Consultation Study for the Valentine Economic Development Committees." TMs. Chadron, Neb.: Chadron State College, Nebraska Business Development Center, 1987.
- Harrison, A.T. "The Niobrara Valley Preserve: Its Biogeographic Importance and Description of its Biotic Communities." TMs. Lincoln: University of Nebraska, School of Life Sciences, 1980.
- Johnsgard, Paul A. *This Fragile Land: A Natural History of the Sandhills.*  
Lincoln: University of Nebraska Press, 1995.
- Kantak, Gail E. "An Ordination of the Niobrara Valley Plant Communities." *Transactions of the Nebraska Academy of Sciences.* Vol. 21, 1994, 9-12.
- , "Terrestrial Plant Communities of the Middle Niobrara Valley, Nebraska." *The Southwestern Naturalist* 40 (1994): 129-138.
- , and Steven P. Churchill. "The Niobrara Valley Preserve: An Inventory of a Biogeographical Crossroads." *Transactions of the Nebraska Academy of Sciences.* Vol. 20, 1993.
- Kaul, Robert B., Gail E. Kantak, and Steven P. Churchill. "The Niobrara River Valley, A Postglacial Migration Corridor and Refugium of Forest Plants and Animals in the Grasslands of Central North America." *The Botanical Review* 54 (1988): 45-81.
- Lime, David W., Emily M. Wright, and Michael S. Lewis. *Management Guidance to Address Unacceptable Recreation Impacts on the Niobrara National Scenic River within the Fort Niobrara Wilderness, Nebraska.* St. Paul: University of Minnesota, Department of Forest Resources, Cooperative Park Studies Unit, 1997.
- Lime, David W., and Jerrilyn L. Thompson. *Niobrara National Scenic River 1993 Visitor Use Study.* St. Paul: University of Minnesota, Department of Forest Resources, Cooperative Park Studies Unit, 1994.

- Maier, Charles R. "Communities of the Biological Crossroads: An Extraordinary Outdoor Classroom." *Bioscience* 18 (1992): 11-19.
- Management Policies 2001*. Washington: National Park Service, 2000.
- Managing Land Along Protected Rivers*. Silver Springs, Maryland: National Association for State and Local River Conservation Programs, 1994.
- Nagel, Harold G., and Neil Dankert. "Boundary Alternatives for the Niobrara National Scenic River—Effect on Significant Butterfly Populations." TMs. Kearney: University of Nebraska at Kearney, Department of Biology, [2001].
- National Wild and Scenic Rivers System Final Revised Guidelines for Eligibility, Classification and Management of River Areas*. Washington: U. S. Department of the Interior, Office of the Secretary, and U. S. Department of Agriculture, Office of the Secretary, 1982.
- "Nebraska Game and Parks Heritage Database." TMs. Lincoln: Nebraska Game and Parks Commission, 2001.
- Nebraska Noxious Weed Control Act and Noxious Weed Regulations*. Lincoln: Nebraska Department of Agriculture, 1992.
- Nebraska Noxious Weeds*. Lincoln: Nebraska Department of Agriculture, 1994.
- Network of Discovery: A Comprehensive Trails Plan for the State of Nebraska*. Lincoln: Nebraska Energy Office and Nebraska Department of Economic Development, 1994.
- Niobrara National Park Special Resource Study*. Denver: National Park Service, 1995.
- The Niobrara River: A Proposal for Scenic River Designation*. Lincoln: Nebraska Natural Resources Commission, 1986.
- Niobrara National Scenic River General Management Plan/Final Environmental Impact Statement*. [O'Neill, Neb.]: National Park Service, 1996.
- Potter, James E., and L. Robert Puschendorf. *Spans in Time: A History of Nebraska Bridges*. [Lincoln]: Nebraska State Historical Society, 1999.
- Research Symposium: Environmental and Natural Resources of the Niobrara River Basin*. Lincoln: University of Nebraska, Water Center, Institute of Agriculture and Natural Resources, 1993.
- Ritter, Beth R., and others. "A Cultural Anthropological Overview of the Niobrara/Missouri National Scenic Riverways." TMs. Lincoln: National Park Service, 1995.
- Rothenberger, Steve. "The Niobrara: A National Treasure." TMs. Kearney: University of Nebraska at Kearney, Department of Biology, 2001.
- Smith Falls State Park Management Plan*. Lincoln: Nebraska Game and Parks Commission, 1993.

- Steuter, Allen A. "Woodland/Grassland Boundary Changes in the Middle Niobrara Valley of Nebraska Identified by 613C Values of Soil Organic Matter." *American Naturalist* 124 (1990): 301-08.
- , and Ernest M. Steinauer. "Paper Birch in the Niobrara Valley of Nebraska: Changing Landscape Position to Offset Climate Change." TMs. Johnstown, Neb.: The Nature Conservancy, 1990.
- Title 124 - Rules and Regulations for the Design, Operation and Maintenance of Septic Tanks.*  
Lincoln: Nebraska Department of Environmental Quality, 1987.
- Title 130 - Rules and Regulations Pertaining to Livestock Waste Control.*  
Lincoln: Nebraska Department of Environmental Quality, 1989.
- Title 117 - Nebraska Surface Water Quality Standards.*  
Lincoln: Nebraska Department of Environmental Quality, 1991.
- United States Court of Appeals for the Eighth Circuit. David L. Sokol, Appellant, v. Roger G. Kennedy, in his official capacity as Director of the National Park Service; Bruce Babbitt, in his official capacity as Secretary of the United States Department of the Interior; and the United States of America, Appellees. "On Appeal from the United States District Court for the District of Nebraska, No. 99-1804 (NE)," April 10, 2000.
- United States District Court for the District of Columbia. National Park and Conservation Ass'n, et. al, Plaintiffs, v. Robert Stanton, Director, Nat'l Park Serv., et. al., Defendants. Civil Action No. 98-615 (GK). "Memorandum Opinion," June 14, 1999.
- Vawser, Ann M. Wolley, and Alan J. Osborn. "Archeological Overview and Assessment, Niobrara/Missouri National Scenic Riverways, Nebraska and South Dakota." TMs. Lincoln: National Park Service, 1995.
- Voorhies, Michael R., and R. G. Corner. "An Inventory and Evaluation of Vertebrate Paleontological Sites along the Niobrara/Missouri Scenic River Corridors." TMs. Lincoln: University of Nebraska, 1993.
- "Water Quality of the Niobrara River in Cherry County to Brown and Keya Paha County Lines, Nebraska, May through September 2000." TMs. Lincoln: U. S. Geological Survey, 2001.
- Wild and Scenic Rivers Reference Guide.* [Washington]: Interagency Wild and Scenic Coordinating Council, 2000.



# Preparers and Contributors

## **Preparers**

- Paul Hedren, Superintendent, Niobrara National Scenic River and Missouri National Recreational River.  
B.A., Geography. Thirty-three years with the National Park Service. Responsible for general management of the planning process and contributions to all sections of the plan.
- Sharon Miles, Outdoor Recreation Planner, Midwest Regional Office. Master in Urban and Regional Planning.  
Seven years with the National Park Service. Responsible for the environmental impact statement in the plan and editing the document.
- Leslie Peterson, Program Analyst, Center for Parks and Partnerships Planning, Denver Service Center.  
M.A., Anthropology. Twenty-two years with federal land managing agencies, including seventeen with the National Park Service. Responsible for the matrices and contributions to the environmental impact statement.
- Linda Ray, Visual Information Specialist, Denver Service Center. B.F.A., Graphic Design.  
Twenty years with the National Park Service. Responsible for designing and publishing the plan.
- Stuart Schneider, Chief Ranger, Niobrara National Scenic River. B.S., Fish and Wildlife Management.  
Twenty-five years with the National Park Service. Responsible for contributions to all sections of the plan.
- Carmen Thomson, Resource Management Specialist, Niobrara National Scenic River. M.S., Wildlife and Fisheries Sciences. Three years with the National Park Service. Responsible for contributions to all sections of the plan, particularly the natural resources components, and editing the document.
- Anne Vawser, Archeologist, Midwest Archeological Center, Lincoln, Nebraska. M.A., Archeology.  
Seventeen years with the National Park Service. Responsible for the maps.
- Wayne Werkmeister, Resource Management Specialist, Missouri National Recreational River.  
B.A., Natural Resources Management. Sixteen years with federal land management agencies, including four with the National Park Service. Responsible for geographic information components of the plan.
- Stephen Wilson, Resource Management Specialist, Missouri National Recreational River.  
M.S., Wildlife and Fisheries Sciences. Two years with the National Park Service.  
Responsible for geographic information components of the plan.

## **Contributors**

- Marc Albrecht, Assistant Professor of Biology, University of Nebraska at Kearney,  
Kearney, Nebraska.
- Brad Arrowsmith, former Chairman, Niobrara Council,  
Bassett, Nebraska.
- Mike Behrens, former Woodland Manager, The Nature Conservancy,  
Niobrara Valley Preserve, Johnstown, Nebraska.
- Rachel Benton, Paleontologist, Badlands National Park,  
Interior, South Dakota.
- Charles Bicak, Professor of Biology, University of Nebraska at Kearney,  
Kearney, Nebraska.
- Phil Campbell, former Chief of Operations, Niobrara National Scenic River and  
Missouri National Recreational River, O'Neill, Nebraska.
- Michael Doherty, Park Ranger, Niobrara National Scenic River,  
Valentine, Nebraska.
- Jo Harkins, Administrative Assistant, Niobrara National Scenic River and Missouri  
National Recreational River, O'Neill, Nebraska.
- John Haubert, former Outdoor Recreation Planner, National Park Service Washington Office,  
Washington, District of Columbia.

Geoffrey Henebry, Geoscientist, Center for Advanced Land Management Information Technologies, University of Nebraska at Lincoln, Lincoln, Nebraska.

Royce Huber, Project Leader, Fort Niobrara - Valentine National Wildlife Refuge Complex, Valentine, Nebraska.

Al Hutchings, Associate Regional Director, Professional Services and Legislation, National Park Service Midwest Regional Office, Omaha, Nebraska.

Lauren Johnson, former Resource Management Specialist, Niobrara National Scenic River, O'Neill, Nebraska.

John Lemmon, Superintendent, Smith Falls State Park, Sparks, Nebraska.

Mike Madell, former Regional Environmental Coordinator, National Park Service Midwest Region, Madison, Wisconsin.

Harold Nagel, Professor of Biology, University of Nebraska at Kearney, Kearney, Nebraska.

Steve Rothenberger, Professor of Biology, University of Nebraska at Kearney, Kearney, Nebraska.

Vince Santucci, Chief Ranger/Paleontologist, Fossil Butte National Monument, Kemmerer, Wyoming.

Orval Stahr, President, Stahr & Associates, Inc., Consulting Planners, York, Nebraska.

Al Steuter, Director of Science and Stewardship for Nebraska, The Nature Conservancy, Ainsworth, Nebraska.

Rodney Verhoeff, former Executive Director, Niobrara Council, Valentine, Nebraska.

Larry Voecks, Northwest Regional Manager, Nebraska Game and Parks Commission, Crawford, Nebraska.

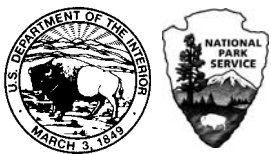
Mike Voorhies, Paleontologist, Nebraska State Museum, University of Nebraska at Lincoln, Lincoln, Nebraska.

Sandra Washington, Chief of Planning and Compliance, National Park Service Midwest Regional Office, Omaha, Nebraska.

Jon Wilson, District Forester, Nebraska Forest Service, North Platte, Nebraska.

Laurie Wise, Administrative Officer, Niobrara National Scenic River and Missouri National Recreational River, O'Neill, Nebraska.

Darryn Witt, former Park Ranger, Niobrara National Scenic River, Valentine, Nebraska



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