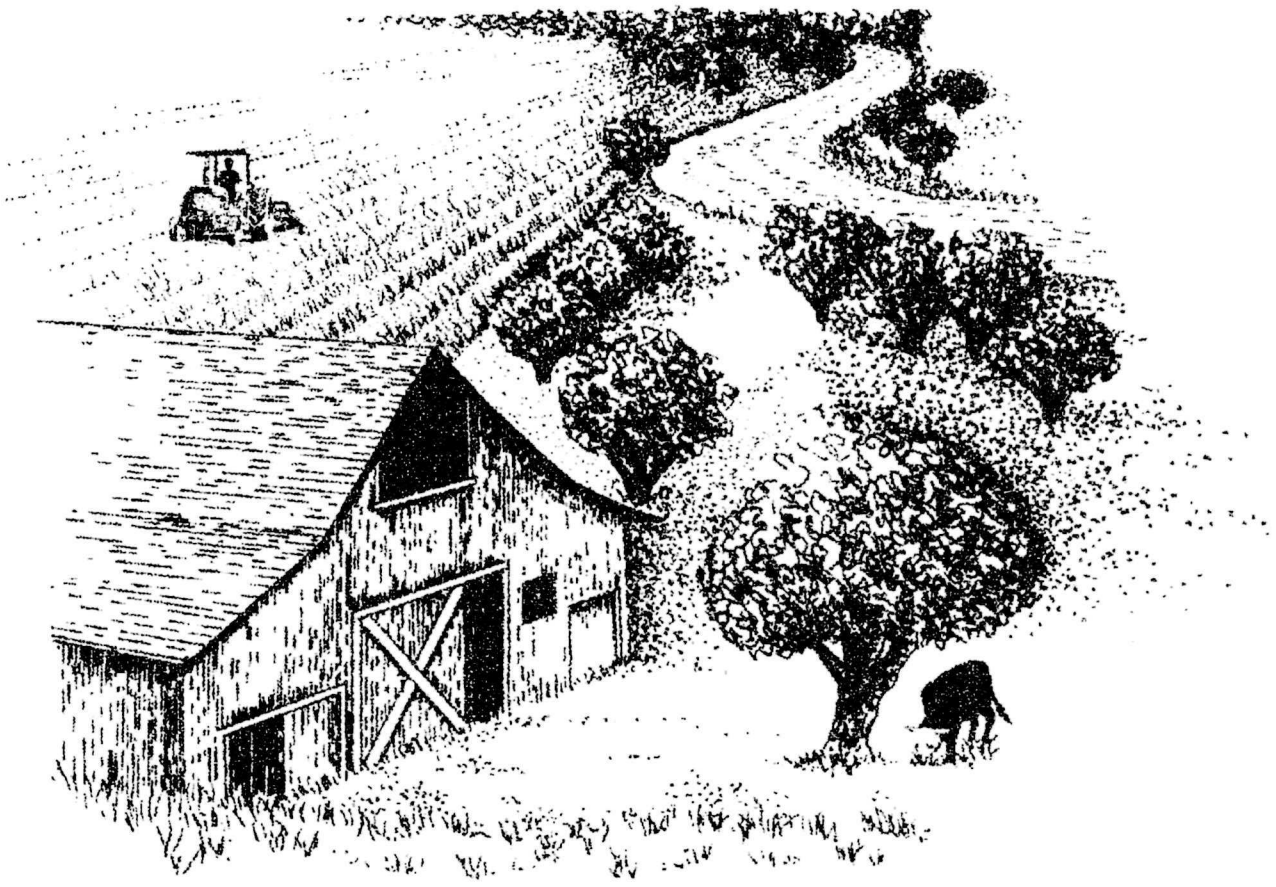
Final
General Management Plan
Environmental Impact Statement



Missouri

National Recreational River

Nebraska • South Dakota

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ERRATA

The headers on the odd pages from 189 though 229 should read *Individuals* instead of *Federal Agencies and Elected Officials.*

FINAL
GENERAL MANAGEMENT PLAN
ENVIRONMENTAL IMPACT STATEMENT

MISSOURI NATIONAL RECREATIONAL RIVER

Cedar and Dixon Counties, Nebraska
Yankton, Clay, and Union Counties, South Dakota

This *Final General Management Plan / Environmental Impact Statement* presents three alternatives for the future of the Missouri National Recreational River: a continuation of existing conditions (no-action) alternative, a resource protection/recreation (preferred) alternative emphasizing protection and enhancement of biologic values and the history and culture of the area, and a recreational emphasis alternative. In both action alternatives, the Corps of Engineers (COE) and the National Park Service (NPS) would manage the area through a cooperative agreement. The Corps of Engineers would function as the day-to-day manager of the water-related resources, while the National Park Service would administer the land-related resources. The agencies would work together where their responsibilities overlapped.

The environmental consequences of implementing the alternatives were analyzed. The no-action alternative (alternative 1) would continue the current cooperative agreement and would provide a baseline for comparison of the other alternatives. Alternative 2 (the preferred alternative) would provide for maintenance and protection and enhancement of biological values. It also would provide for management activities that would emphasize the history and culture of the river and its surroundings. Alternative 3 would provide increased recreational emphasis on the river. Partnerships with local entities would be sought to provide services in all alternatives.

The boundary in alternatives 2 and 3 is the same. It differs slightly from the existing boundary in alternative 1 for the recreational river. Some areas were deleted because they were not river related. Some historic sites and some new lands were added where the river has eroded a wider channel. All boundaries include important examples of the river's outstandingly remarkable resources.

The *Draft General Management Plan / Environmental Impact Statement* was on public review from October 15, 1998, to December 16, 1998. The *Final Environmental Impact Statement* has been revised to reflect substantive comments and concerns received during the comment period, and the text has been refined and clarified as necessary. A record of decision on the final plan will be issued 30 days after this final document has been made available for public review, as announced in the *Federal Register*. For additional information about this plan, contact the superintendent, Missouri National Recreational River, P. O. Box 591, O'Neill, Nebraska 68763-0591, telephone: 402-336-3970; or the chief, Environmental Analysis Branch, Planning Division, U. S. Army Corps of Engineers, 215 North 17th St., Omaha, Nebraska 68102-4978, telephone: 402-221-4598.

United States Department of the Interior • National Park Service
U.S. Army Corps of Engineers

SUMMARY

This *Final Environmental Impact Statement* presents and analyzes three alternatives for management of the Missouri National Recreational River. The three alternatives are a continuation of existing conditions (no action), a preferred alternative that emphasizes protection, restoration, and enhancement of biologic values and the history and culture of the area, and a recreational emphasis alternative.

ALTERNATIVE 1: CONTINUATION OF EXISTING CONDITIONS (NO ACTION)

Description

Under the no-action alternative current management practices would continue. The National Park Service would continue to manage the recreational river, the Corps of Engineers would continue its current management presence, and the 1980 *General Design Memorandum* would remain in effect. The cooperative agreement would continue to be followed for bank stabilization, land acquisition, and recreational facility development. The National Park Service and the Corps would continue to be responsible for developing management plans and submitting budget requirements. Ranching and farming would continue under the management of individual property owners, and existing residential and other private development areas would remain. New residential development could be built within the boundary from time to time. Land acquisition along the river by counties and both states for recreational sites and access might continue.

Administrative staff for the recreational river would continue to be in the Omaha District Office. Maintenance would remain the same, law enforcement would continue to be provided by state and local authorities, and the staffing needs would be minimal. Resource management would be carried out by the Corps of Engineers and the National Park Service. Natural resources would mostly be managed and protected by private property owners and state wildlife agencies. Preservation/protection of cultural resources would be guided by the Corps' *General Design Memorandum.*

The visitor experience would be limited generally to current activities and interpretation available on the river. Current visitor activities would not be expected to change and recreational use within the recreational river would remain primarily local, with the possible exception of Ponca State Park. Existing roads and public river access would be maintained, and development of new public river access would likely occur slowly. Users would continue to be primarily local people. Controls over private and commercial development would be limited to federal floodplain restrictions and state and county restrictions.

The boundary would remain the same as that described in the 1978 legislation.

Impacts

Geologic features, mineral resources, fish and wildlife species (including threatened and endangered species), and air/water quality would not be affected. Land use without controls could affect streambanks and floodplains, and soil erosion could continue. Impacts on prime and unique farmland would gradually continue from riverbank erosion and from landowners. Natural vegetation surface area and species composition would continue to decline. Fish and wildlife habitat loss could occur, but

future modification of water release levels and seasonal timing might improve conditions for some species. There would be adverse impacts on streambanks even with some mitigation efforts. Most historic resources would continue to be protected, but impacts on cultural resources cannot be accurately predicted.

Visitors would have limited knowledge of what the recreational river offers, and management of visitor use would continue. Continued trends could result in a loss of agricultural land to erosion and a loss of natural resources if mitigating measures were not effective. Increased use and continued conversion of agricultural land to residential and other private development might have a net adverse impact on the county government through the demand for county services.

ALTERNATIVE 2 (PREFERRED ALTERNATIVE)

Description

Under the preferred alternative the Corps of Engineers and the National Park Service could develop a revised cooperative agreement, with each having specific responsibilities (the NPS role would be somewhat larger than now). The primary emphasis would be maintenance or enhancement of natural and cultural resources, streambank protection, maintenance of scenic qualities as seen from the river, low levels of visitor use, and public understanding of the area through interest group involvement. The rural scene would be maintained, intrusive development would be restricted, and maintenance of the landscape through local government and private means would be encouraged. Easements, zoning, and tax incentives would be used.

COE and NPS managers could combine existing facilities if deemed efficient to do so. Maintenance would increase slightly from present levels because there would be few new visitor facilities. Two new boat ramps would be provided on the South Dakota side, and a bike trail would be provided on the Nebraska side. Local, state, and federal governments would have existing law enforcement responsibilities, and cooperative relations would be sought. The Corps would have minimal support staff.

Essential streambank erosion control could be allowed on a case-by-case basis, and purchase of rapidly eroding banks from willing seller might be considered. Natural resource management would act to restore wildlife, instream habitat, and the natural function of the river. Under joint leadership of the Corps of Engineers and National Park Service, other agencies, local entities, and private owners would work together for the protection and enhancement of biologic values. A primary emphasis would be on protection of species of special concern. Management activities would emphasize the history and culture of the river and its surroundings.

The visitor experience would emphasize the continuation of high-quality wildlife observation, hunting, fishing, and boating experiences. The interpretive theme emphasis would be on the Missouri River's natural systems. Development of new visitor or staff support facilities, including river access, would not be extensive. State and local government actions to maintain the landscape outside the boundaries or to provide tour routes and overlooks would be encouraged through partnerships, technical assistance, and financial assistance.

The boundary would be similar, with alterations, to that in the 1980 *Management Plan* and the 1980 *General Design Memorandum*. The boundary would be the downstream end of the Gavins Point Dam excavated discharge channel (downstream boundary of the Lewis and Clark Project), 59 miles

downstream to Ponca State Park, Nebraska. The National Park Service might identify and include historic and archeological sites that are not contiguous to the river. State and local government actions outside the boundaries would be encouraged through partnerships, technical assistance, and financial assistance.

Impacts

Geologic features, mineral resources, soils, air, noise, and water quality would not be adversely affected. Prime and unique farmland would be retained. Fish and wildlife species would benefit, and there would be long-term beneficial impacts on vegetation as well. Threatened and endangered species would not be adversely affected. Floodplains and wetlands would not be affected except the construction of proposed boat ramps might cause insignificant impacts. Proposed programs and efforts would help prevent adverse cumulative impacts on cultural resources; however ,if additional funding and personnel were unavailable to carry out proposals, resources might be adversely affected. Prehistoric resources would be protected, and ethnographic resources would benefit.

Types and levels of recreational use would not change significantly. A small localized increase in land-based visitor use would occur in the vicinity of the proposed bike trail. Boat ramp development would have location and construction constraints that should preclude impacting the least tern and piping plover. Localized increases in land-based recreational use could occur within the recreational river. Socioeconomic resources would generally benefit from the proposals.

ALTERNATIVE 3 (RECREATIONAL EMPHASIS)

Description

Actions proposed under alternative 3 would essentially be the same as alternative 2, except that enhanced recreational opportunities would be provided for visitors under alternative 3. A revised cooperative agreement would be implemented as described under alternative 2. Visitor use would be encouraged without destroying the special qualities of the river. There would be increased, but dispersed, access points. Private and public recreation development would remain and future opportunities for expansion would be sought. In addition to construction proposed under alternative 2, this alternative would also provide for construction of two to four primitive campgrounds. Interpretation of cultural resources would be important for resource protection as well as for visitor education and enjoyment. Some compatible private development such as campgrounds to accommodate expanded visitor opportunities would be encouraged without adversely affecting significant natural or cultural resources. Maintenance and other administrative activities would increase because of additional facilities and increased visitation.

The boundary under alternative 3 would be the same as described for alternative 2. Assistance on adjacent land outside the boundary would be the same as alternative 2, except that local entities would be encouraged to foster the development of tour routes and scenic overlooks along the river. The National Park Service would work cooperatively with local governments to provide more sites for visitors to learn about the history of the river and the region and might assist with planning of scenic roads outside the boundary.

Impacts

There would be no expected impacts on geologic processes or features, physiography, paleontological resources, mineral extraction activity, or prime and unique farmland. Trends of declining native vegetation would probably be stabilized but active improvement of native vegetation from restoration projects would be less likely than from alternative 2. Wildlife and habitats would be protected, threatened and endangered species would not be adversely affected, and wetland and floodplain protection would generally be improved. Air and water quality would not be affected. No impact is expected on noise. Cultural resources would benefit from greater interpretation and preservation information if staffing and funding were available.

Visitor use would increase because more recreational activities and interpretive programming would be offered. The proposed campgrounds, boat ramps, and bike trails would create an increase in land-based visitor use in the vicinity of such construction. Socioeconomic resources would generally benefit from proposed actions.

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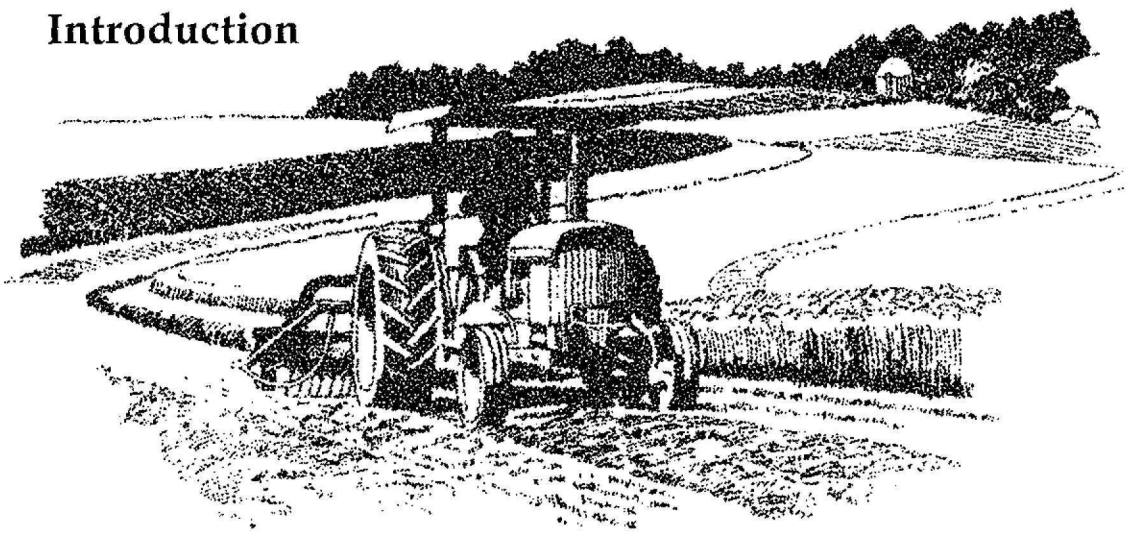
Introduction



PURPOSE OF AND NEED FOR THE PLAN

The Missouri National Recreational River (MNRR) was added to the National Wild and Scenic Rivers System in 1978 (PL 95-625) by an amendment to the Wild and Scenic Rivers Act (Act). Section 3 of the Act states that the federal agency charged with administration of a component of the national wild and scenic rivers system shall prepare a management plan to provide for the protection of river values. The legislation adding the MNRR to the national wild and scenic rivers system gave administrative responsibility to the secretary of the interior, acting through the National Park Service. The legislation directed the secretary of the interior to enter into a cooperative agreement with the secretary of the army, acting through the U.S. Army Corps of Engineers (COE), to provide recreational river features, appropriate recreational development, and construction and maintenance of streambank protection work as deemed necessary by the secretary of the army. In 1980 the U. S. Department of the Interior prepared a management plan for the MNRR (Heritage Conservation and Recreation Services 1980), and the COE prepared a general design memorandum (COE 1980) to expand on the conceptual program identified in the management plan.

The 1980 *Management Plan* was only partially implemented for several reasons. Subsequent to the completion of the 1980 plan, three species that are found in the MNRR were added to the federal list of threatened and endangerd species. If fully implemented, the plan could be incompatible with protection of these species; therefore, analysis of the potential impact is needed. In addition, some present-day federal policies act as constraints that have impacted the COE's ability to fully implement the management plan. For instance, the COE' policy requires that the development of recreational facilities be cost-shared, and there have been few cost-share partners on the MNRR. Federal law places restrictions on using federal funding for streambank protection on private lands. Also, federal construction of new bank protection structures, even for public land, has low budgetary priority. The 1980 plan needs to be updated to address concerns related to threatened and endangered species and, given the existing constraints, identify strategies to meet management objectives.

This *Environmental Impact Statement* addresses issues that have resulted in only partial implementation of the 1980 *Management Plan.* It presents overall approaches to land protection, resource management, interpretation, recreational development, and visitor use. The document also contains an analysis of the environmental consequences of each alternative. A final *General Management Plan* will set forth the general direction for managing the MNRR over the next 10–15 years.

CONTEXT FOR THE PLAN

OVERVIEW OF THE RIVER

The Missouri River begins at the juncture of three tributaries at Three Forks, Montana, and flows southeast for 2,300 miles before joining the Mississippi River a few miles north of St. Louis, Missouri. It is the longest river in the United States, if the tributary mileage above Three Forks is included in its total length. The river shared with the Oregon and Santa Fe trails the distinction of being one of the three main thoroughfares to the Far West and was the great waterway of prehistoric Indians, Lewis and Clark, fur trappers, and settlers.

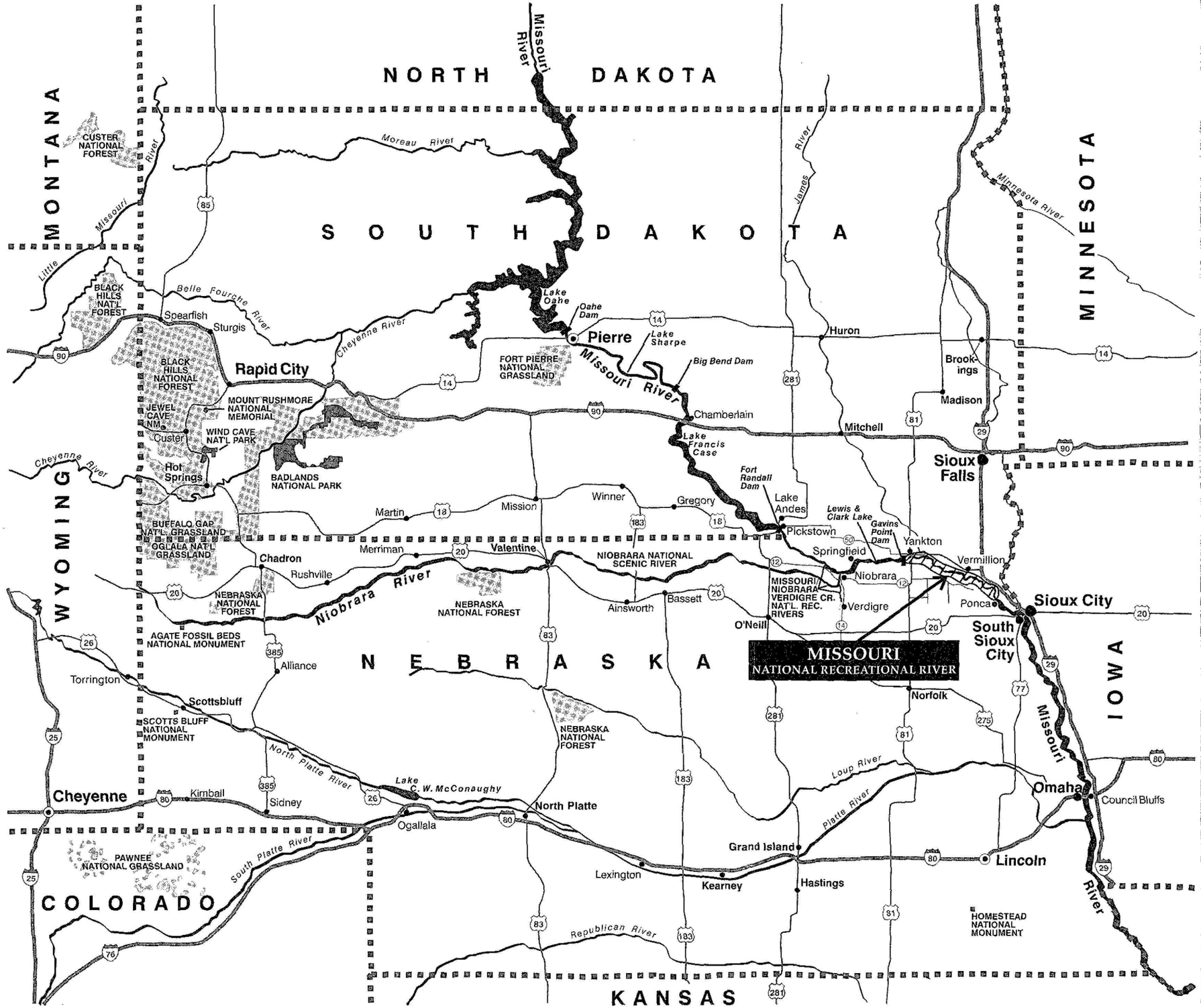
The river is harnessed in its upper and middle reaches by a series of six multipurpose dams and reservoirs, and in its lower reaches, it has been channelized. The 59-mile segment of the Missouri River, from Gavins Point Dam to Ponca State Park, Nebraska, is one of the few remaining reaches that remains in a relatively natural condition.

The river forms the boundary between Nebraska and South Dakota. On the Nebraska side, the land along the river ranges from a relatively level floodplain to steep, tree-covered bluffs. There is a relatively level floodplain on the South Dakota side. Riverbanks vary from relatively flat, sandy beach areas to vertical faces 10 to 15 feet high where active erosion is taking place. The river varies from a meandering stream to a braided stream, depending on the location and river stage. The floodplain width between banks averages over 2,000 feet and varies from 600 feet to over 1 mile. Primary channel depths usually average between 10 and 20 feet with occasional 40- to 50-feet-deep scour holes.

Severe erosion is common. High bank erosion continues, with accretion limited to lower elevation bars, which are considerably less fertile than the higher bank areas formed prior to completion of the dams. This river segment was designated as a national recreational river because of the significant natural, recreational, and cultural qualities that are worthy of preservation. These include the backwater marsh areas, open sandbars, and cottonwood forests that provide wildlife habitat. Endangered and threatened species, such as the interior least tern, piping plover, pallid sturgeon, and bald eagle, all use the river.

Cultural resources include historic and prehistoric archeological sites, historic architectural and engineering features and structures, and resources of significance to American Indians. Important cultural resources include the Indian Hill, Schulte, and Wiseman archeological sites, ethnic settlements and farms, sunken steamboats, and landscape features noted by Lewis and Clark along what is now the Lewis and Clark National Historic Trail.

This section of the Missouri River has the potential to be a major recreational resource because it is near several large population centers. Developed sites have become increasingly popular, but public access points and facilities for recreational use are limited. These facilities have been developed by federal, state, county, and city governments and by private interests.



REGION
MISSOURI
NATIONAL RECREATIONAL RIVER

United States Department of the Interior • National Park Service
DSC/July 1998/651/20,000

Lake Oahe
Oahe Dam
Pierre
Lake Sharpe
Big Bend Dam
FORT PIERRE NATIONAL GRASSLAND
Missouri River
Huron
Brookings
Madison
MINNESOTA
Chamberlain
Mitchell
Lake Francis Case
SOUTH DAKOTA
Sioux Falls
Winner
Mission
Gregory
Fort Randall Dam
Lake Andes
Lewis & Clark Lake
Gavins Point Dam
Pickstown
Yankton
Springfield
Vermillion
IOWA
Valentine
NIOBRARA NATIONAL SCENIC RIVER
Niobrara
MISSOURI/ NIOBRARA VERDIGRE CREEK NATIONAL RECREATIONAL RIVERS
Sioux City
NEBRASKA NATIONAL FOREST
Ainsworth
Bassett
Verdigre
Ponca
O'Neill
South Sioux City
NEBRASKA
Norfolk
Missouri River
Omaha
Council Bluffs
Lincoln

SOUTH DAKOTA
Location of Study
NEBRASKA

GAVINS POINT DAM
Yankton
Gayville
SOUTH DAKOTA
Meckling
St. Helena
Vermillion
MISSOURI RIVER
Burbank
Wynot
Bow Valley
Obert
Maskell
Elk Point
NEBRASKA
Newcastle
PONCA STATE PARK
to Ponca
N
No Scale

MISSOURI RIVER
NATIONAL RECREATIONAL RIVERWAY

N
No Scale

VICINITY
MISSOURI
NATIONAL RECREATIONAL RIVER

United States Department of the Interior • National Park Service
DSC/July 1998/651/20,001

LEGISLATIVE BACKGROUND

The purpose of the Wild and Scenic Rivers Act (1968) is to protect certain select rivers and their immediate environments for the benefit and enjoyment of present and future generations. To qualify for this protection, these rivers must be free-flowing, relatively undeveloped, and possess one or more "outstandingly remarkable" scenic, recreational, geologic, fish and wildlife, cultural, or similar values. Preservation of selected rivers in a free-flowing condition was intended to complement the dams, diversions, and other construction on key streams. There are over 10,000 miles of protected riverways in the national wild and scenic rivers system.

In 1977 the U.S. Army Corps of Engineers recommended recreational river designation of the 59-mile segment of the Missouri River between Gavins Point Dam and Ponca State Park in the Review Report for Water Resources Development, Missouri River, South Dakota, Nebraska, North Dakota, and Montana (U.S. Army Corps of Engineers 1977). This review report is informally known as the umbrella study. The purpose of the umbrella study was to study the Missouri River System and make recommendations regarding water resource development. The Department of Interior cooperated in the umbrella study and urged the Corps to recommend designation of this segment under the Act.

On November 10, 1978, Congress amended the Wild and Scenic Rivers Act by adding the 59-mile segment of the Missouri River to the system (Public Law 95-625). Several diverse parties worked together to develop and support the legislation designating the Missouri National Recreational River. These parties represented a variety of interests and included the South Dakota and Nebraska congressional delegations, the U.S. Fish and Wildlife Service, game, fish, and parks departments from both states, and the Missouri River Bank Stabilization Association, which represents landowners along this river segment seeking protection of their property from river erosion (166 *Congressional Record,* S18526-9, daily ed. October 12, 1978).

Statements in the *Congressional Record* clarify the impetus for designating the Missouri River National Recreational River. It states that:

> This Corps' recommendation was acted upon by all parties involved as a solution to the very knotty problem of how to implement needed bank stabilization while at the same time protecting wildlife values. It also presented a unique opportunity for recreation along the last vestige of the natural Missouri much as it was before it underwent massive development (letter from Senator George McGovern, Senator Carl Curtis, and Senator Edward Zorinsky).

To address the interests of the various groups supporting designation, the establishing legislation includes the following statement:

> The secretary of the army shall condition the construction or maintenance of any streambank stabilization or any recreational river feature . . . upon the availability to the United States of such land and interests in land in such ownership as he deems necessary to carry out such construction or maintenance and to protect and enhance the river in accordance with the purpose of this Act.

This language provides that in order for there to be new construction of any bank protection structures, the landowner who is to benefit from it must also make available land for the protection of biologic values. This was to ensure that there would be no bank stabilization without protection of wildlife and recreational values, and was agreed to by all parties involved with the designation (166 *Congressional Record,* S18526-9, daily ed. October 12, 1978).

Public Law 95-625 and an analysis of this law are included as appendix A in this document.

The Wild and Scenic Rivers Act provides that boundaries must be set and that a comprehensive management plan must be prepared by the managing agency. Section 10 of the Act requires the managing agency to emphasize the protection of "esthetics, scenic, historic, archaeologic, and scientific features. Management plans . . . may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."

Rivers in the system are classified as wild, scenic, or recreational on the basis of the amount of access and development existing at the time of designation. "*Wild* rivers are rivers, or sections of rivers, that are free from impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Wild rivers represent vestiges of primitive America. *Scenic* rivers are those that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. *Recreational* rivers are those that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past."

Although the classification criteria allow for varying levels of development at the time of designation, this does not imply that additional inconsistent development is allowable in the future. The Wild and Scenic Rivers Act prescribes a nondegradation and enhancement policy for all designated rivers regardless of classification. Each component must be managed to protect and enhance the values for which the river was designated while providing for public recreation and resource uses that do not adversely impact or degrade those values.

Outstandingly Remarkable Values

By virtue of its inclusion in the system, the MNRR was designated to preserve its free-flowing condition and its outstandingly remarkable values [section 1(b) of the Act]. The legislation adding the recreational river to the system specifically references the Corps' umbrella study, which describes in detail the outstandingly remarkable values that made this segment eligible for inclusion within the system. These outstandingly remarkable values are cited as recreational, fish and wildlife, historical, and cultural.

The umbrella study also pointed out specific riverine areas that were recognized as having outstandingly remarkable natural values. These areas include the river setting at Goat Island, chutes paralleling Goat Island, the entrance of the James River, high bank shoreline forests, and sandbar clusters. The Nebraska wooded bluff, particularly at river miles 763, 776, and 787 (U.S. Army Corps of Engineers 1977), is also included.

PURPOSE OF THE RIVER

Purpose statements were developed to focus direction and set priorities for the *General Management Plan.* The following purpose statements provide the reason(s) for which the river area was set aside.

preserve the river in a free-flowing condition and protect it for the enjoyment of present and future generations

provide streambank protection compatible with the river's significant natural and cultural resources

preserve the significant recreational, fish and wildlife, and historic and cultural resources of the Missouri River corridor

provide for a level of recreation and recreational access that does not adversely impact the river's significant natural and cultural resources

SIGNIFICANCE OF THE RECREATIONAL RIVER

Significance statements for the river were also developed. These statements describe the river's importance to our natural and cultural heritage and also what makes it special in the national system of protected rivers.

Natural

The habitat within the 59-mile segment of the recreational river corridor supports at least 44 federal- and state-listed sensitive species, including the endangered pallid sturgeon and interior least tern and the threatened bald eagle and piping plover. These species make up more than half of the threatened and endangered species found in Nebraska and South Dakota.

The riverine and riparian habitats within the river corridor provide important wildlife habitat.

The 59-mile segment is one of the last representative parts of the undammed, unchanneled middle Missouri River. It features a section of the river meandering in an older, wider river valley not found on the other undammed, unchanneled Missouri River sections. The large river environment found on the 59-mile Missouri River segment is rare on the Great Plains.

Cultural

The Missouri River was the principal highway to the northern plains used throughout prehistoric and early historic times. The 59-mile segment retains a historic landscape similar to that experienced by travelers over the centuries and captured in the writings and illustrations of early explorers.

The number and variety of prehistoric and historic resources along the river attest to the long history of human use. Prehistoric villages, the route of Lewis and Clark, steamboat wrecks, the territorial capital of Yankton, and ethnic settlements have the potential for enriching visitors' understandings of past and present cultures.

Recreational

The 59-mile river corridor provides high-quality outdoor recreation, including high-quality fishing, hunting, trapping, and boating. Opportunities for birdwatching and other wildlife observation abound.

The 59-mile Missouri River segment supports recreation on a large, relatively natural river.

The river valley provides scenic vistas of a variety of natural landscapes such as bottomlands, cottonwood forests, wooded draws, forested hills, sand dunes, high-bank islands, wetlands, and chalkrock bluffs.

DESIRED FUTURE CONDITIONS

Desired future conditions statements describe a broad conceptual idea of what the river could be like, based on the resource conditions and visitor experiences desired. The desired objectives and the future condition of the river are described in the present tense. They describe a vision for the area and describe how the designated river might appear.

Landscape Preservation

Development along the river is managed so that the views along the river have a character similar to that which has existed from 1978 to the date of this plan. Construction of a Vermillion-Newcastle bridge would not be precluded but would require a determination under section 7 of the Wild and Scenic Rivers Act.

The natural visual quality of the river corridor is restored where possible and man-made intrusions are subdued.

Extensive areas along the river provide wildlife habitat and scenic views under natural conditions.

Bank stabilization protects critical areas and reduces the rate of river widening; the majority of banks retain their natural appearance without stabilization.

Visitor Use

Visitors know about river-related recreational activities and know that the recreational river is part of the wild and scenic river system.

Visitors enjoy the character of the rural agricultural scene, complete with the braided, wide Missouri.

Visitors have a sense of discovery on the river reminiscent of Lewis and Clark and early travelers.

People continue to enjoy high-quality wildlife observation, hunting, fishing, and boating in a relatively natural setting.

People of all ages and abilities enjoy a variety of recreational activities that do not interfere with other people and that do not adversely impact river resources.

Water safety information is provided and visitors have a sense of security on the river. Health and safety considerations are appropriate and allow for recreational activities on the Missouri River.

There are a variety of opportunities available for visitors to learn about the Missouri River's natural and cultural heritage.

Scenic vistas are incorporated into the road and trail systems.

Public access points along the river are adequate in number and distribution and contain facilities for a variety of river-oriented outdoor recreational opportunities.

Visitor facilities are developed with sensitivity to private ownership, resource protection, and public health concerns.

Natural Resources

Plants, animals, and their habitats are protected, maintained, enhanced, and whenever possible restored.

The designated river segment is allowed to function naturally to the greatest degree possible.

Water and air quality support native species and visitor use.

Threatened and endangered species habitat is protected and enhanced.

Natural resource use does not adversely impact the other resource values of the designated river segment.

Cultural Resources

Significant archeological, historical, and ethnographic resources within the river corridor are identified, protected, and interpreted for the public.

Administration

Local, state, and federal agencies, community groups, advocate organizations, and individuals act in cooperation to protect and enhance the resources.

The Corps of Engineers was specifically authorized to provide construction of such recreational river features and streambank stabilization structures as the secretary of army deemed necessary and advisable, and to operate and maintain the streambank stabilization structures.

HISTORY OF THE PLANNING PROJECT

The river management planning process for this project was influenced by internal federal (Corps of Engineers and National Park Service) planning guidance as well as adherence to the National Environmental Policy Act (NEPA). The National Environmental Policy Act requires that a full range of alternatives be considered, that public opinion be considered during the process, and that alternatives be analyzed for their impacts on the environment. A no-action alternative must be included to serve as a baseline for existing conditions.

The National Park Service established an office in O'Neill, Nebraska, in October 1991. One of its roles was to establish local relationships with the people, organizations, and governments in the five-county, two-state area. Within the National Park Service, planning responsibilities were shared by the office in O'Neill, the NPS Denver Service Center, and the Midwest Regional Office in Omaha.

The National Environmental Policy Act encourages cooperation throughout the planning process. The presence of local county planning team representatives was important because of their knowledge of and sensitivity to local concerns and because counties are able to adopt comprehensive plans and zoning ordinances to manage land use within their boundaries. The planning team also included representatives of federal and state agencies that had either jurisdiction or special expertise on this portion of the Missouri River. The legislation designating the river assigned overall administrative authority to the National Park Service, but responsibility for construction of bank stabilization, recreational facilities, and other recreational river features was assigned to the Corps of Engineers. In addition, an existing cooperative agreement between the National Park Service and the Corps of Engineers delegated many of the day-to-day management responsibilities for the river to the Corps. Because of these co-management responsibilities, the National Park Service and the Corps are co-lead agencies in preparation of this *Environmental Impact Statement.* As the Missouri National Recreational River is downstream of the Missouri River mainstem reservoir system, the management of the MNRR segment cannot supersede the existing water control operations for authorized purposes of flood control, navigation, power generation, recreation, water supply, and fish and wildlife.

Other people and agencies have also been consulted, including officers and members of the Missouri River Bank Stabilization Association (MRBSA), a local organization of property owners, conservationists, hunters, fishermen, and boaters. The Association was the driving force behind the movement that culminated in the inclusion of this segment of the Missouri in the national wild and scenic river system. This effective organization earned the Outdoor Recreation Achievement Award from the secretary of the interior in 1978 for its work on designation of the recreational river.

A management plan was prepared by the Heritage Conservation and Recreation Service in 1980. (This agency was later incorporated into the National Park Service.) The recreational river boundary included about 16,951 acres. In July 1980 the Corps of Engineers prepared the *Missouri National Recreational River General Design Memorandum MRR-1* to implement the plan. That plan has been only partially implemented due to federal policies that require cost-share sponsors for recreational development and that limits the use of federal money for streambank protection on private land. The National Park Service, in the 1991 appropriation act, was given $150,000 to prepare a updated revision of the 1980 *Management Plan.*

Scoping meetings for the new general management plan were held in Lincoln, Newcastle, and Omaha, Nebraska and Vermillion and Yankton, South Dakota in 1992. Concerns expressed by the public included streambank protection, environmental protection, lack of public access and facilities, and retention of private landownership.

RELATIONSHIP WITH OTHER PROJECTS

National Park Service

Reconnaissance Survey Report. A related report was prepared for a proposed national recreation area in Knox and Boyd Counties, Nebraska, including the area adjacent to Lewis and Clark Lake and the Missouri, Niobrara, and Verdigre Creek National Recreational Rivers. This report was mandated by the

Niobrara Scenic River Designation Act of 1991. While resources are of state and local significance, the National Park Service concluded that most of the resources of the study area are not of sufficient national significance to justify a national recreation area. The report was completed in June 1998 and forwarded to Congress. Congress must act to implement any recommendations of that report.

Missouri/Niobrara/Verdigre Creek National Recreational Rivers General Management Plan. The 39 miles of the Missouri River between the headwaters of Lewis and Clark Lake and Fort Randall Dam were designated as a recreational river in 1991. At the same time, the lower 20 miles (the law incorrectly said 25 miles) of the Niobrara River and the lower 8 miles of Verdigre Creek were also included. A separate *General Management Plan / Environmental Impact Statement* was released for those river segments. These plans address nearby areas and are not directly related to this plan.

Lewis and Clark National Historic Trail. The Lewis and Clark National Historic Trail, commemorating the Lewis and Clark expedition's route from the Mississippi River to the Pacific Ocean and return, includes this section of the Missouri River. The National Park Service administers the Lewis and Clark National Historic Trail through an office in Madison, Wisconsin. A comprehensive plan for management and use of the trail was completed in 1982. The plan had a number of recommendations for the trail along the sections of the recreational rivers covered by this plan. The trail study provides excellent information on the area and recommends treatment of historic resources and public education, but its recommendations are not binding on planning for the recreational rivers. The trail plan is general in nature. Future planning for the Lewis and Clark Trail would conform to goals and actions proposed in this *General Management Plan.*

U.S. Army Corps of Engineers

The Corps of Engineers has responsibility for management of Missouri River water control operations, including flood control, navigation, and power generation, water supply, irrigation, recreation, and fish and wildlife. Its policy is not to budget for stabilizing streambanks (unless specifically appropriated by Congress) or constructing recreational facilities, as these are not a high priority budget item. A policy change would require a directive from Congress or the secretary of the army and/or policy exceptions. When it appears to be in the best interest of the government, the Corps of Engineers can request policy exceptions. This *Environmental Impact Statement* recognizes the constraints the current Corps policy places on the Corps' capability to stabilize streambanks and develop recreational facilities and recommends alternative strategies to address these issues.

Guidance for operating the Missouri River mainstem system is provided by the COE *Master Water Control Manual.* This manual is under review by the COE Missouri River Region office to determine if the current plan or another alternative best meets the current needs of the basin. As part of the revision process, the effects of alternative water flows in the system are being evaluated for economic (flood control, navigation, hydropower, water supply, recreation) and fish and wildlife needs.

This *Environmental Impact Statement* is consistent with the existing COE *Master Manual* and recognizes that the *Master Manual* is being updated. While flow releases from the dam are outside the scope of this plan, as administrator of the MNRR, the National Park Service favors an alternative that would protect and enhance the values for which the MNRR was included in the national wild and scenic rivers system. In reaching a decision on the *Master Manual* update, the Corps would need to balance the needs of the MNRR with the other needs of the Missouri River basin.

The COE Gavins Point Project has both fee and easement land that is included in the recreational river designation. Fee and easement land acquired by the Corps of Engineers would continue to be managed by them directly in cooperation with other federal and state agencies. These lands are managed for recreational uses which are consistent with this *General Management Plan.*

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service has responsibility for administering the Endangered Species Act. The Service has listed the interior least tern as an endangered species and the piping plover as a threatened species. In 1990 the U. S. Fish and Wildlife Service issued a jeopardy opinion on the continued existence of these two birds, which nest along sandbars on this and other portions of the Missouri River. They required the Corps of Engineers to prepare a recovery plan implementing alternatives, conservation recommendations, and measures to remove or reduce jeopardy to the birds. Each year the Corps of Engineers prepares an annual work plan to manage habitat in the Missouri River to achieve these objectives.

Informal consultation with the U.S. Fish and Wildlife Service was initiated by the National Park Service in a memorandum dated December 23, 1994. In addition, coordination with the U.S. Fish and Wildlife Service on the management of the recreational river has occurred by their participation on the planning team.

The pallid sturgeon was federally listed as an endangered species in 1990. A recovery plan for the pallid sturgeon has been prepared. The Corps of Engineers is on the recovery team for the pallid sturgeon.

Recovery plans exist for all eight threatened and endangered species: the peregrine falcon, whooping crane, interior least tern, pallid sturgeon, American burying beetle, piping plover, bald eagle, and western prairie fringed orchid.

If other species are listed, actions would be required to provide for their continued existence. This plan should provide the flexibility to define and accommodate such future needs.

South Dakota and Nebraska Departments of Transportation

The Nebraska Department of Roads and the South Dakota Department of Transportation, in cooperation with the Federal Highway Administration, have proposed building two new bridges over the Missouri River, the Vermillion-Newcastle Bridge and the Meridian (Yankton) Bridge. The first would connect Vermillion, South Dakota, to Newcastle, Nebraska, linking South Dakota Highways 19 and 50 to Nebraska Highway 12. In South Dakota the road shoulders would be extended to provide bike paths. The bridge would allow a more direct agricultural and commercial trade between the two states, and access to medical, educational, and recreational facilities would be improved. The presence of the bridge would likely increase recreational use along this portion of the Missouri River. Two alternative crossing areas were considered – near Myron Grove Crossing and along Deer Creek at Mulberry Point. The crossing at Mulberry Point was selected. A *Final Environmental Assessment* and section 4(f) evaluation was approved by the Federal Highway Administration, the South Dakota Department of Transportation, and the Nebraska Department of Roads on October 12, 1995.

The Meridian (Yankton) Bridge is still in planning, but the idea is to replace an existing bridge that is structurally unsound with a modern one in the same corridor.

Primary bridge design has been completed. Bid letting for construction of the bridge is scheduled for fall 1999. Section 7(a) of the Wild and Scenic Rivers Act states that "no department or agency of the United States shall assist by loan, grant, license or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration." A water resources project is defined as a project that impacts the bed or bank of a designated river.

The National Park Service has prepared a section 7 evaluation for the proposed Vermillion-Newcastle bridge (NPS 1997). The section 7 evaluation was prepared to indicate whether the proposed bridge is consistent with protecting the outstandingly remarkable values of the MNRR. The section 7 evaluation concludes that as long as certain mitigating measures are included in the project plans for the proposed bridge, it would be consistent with protecting the outstandingly remarkable values of the MNRR. An interpretive pullout is planned to help mitigate impacts of bridge construction on the river.

The secretary of the interior is charged with administration of this river as a component of the national wild and scenic rivers system. The National Park Service is obligated to make the section 7 determination on behalf of the secretary of the interior. In making the section 7 determination for this proposed bridge and all future water resources projects, the National Park Service will evaluate the impact of the project on the free-flowing character and outstandingly remarkable values for which this segment of river was designated as a component of the national wild and scenic rivers system. The Meridian Bridge will require a section 7 evaluation by the National Park Service before construction.

The studies preceding and recommending designation of the MNRR describe the outstandingly remarkable values as recreation, fish and wildlife, historic, archeological, and cultural. In addition, specific river features were identified as having outstandingly remarkable natural values. These features include the river setting at James River Island, the entrance of the James River and the Missouri River chutes paralleling James River Island, the general shoreline forest dominated by cottonwood trees, clusters of sandbars, and the Nebraska wooded bluffs (BOR 1971, HCRS 1978, and U.S. Army Corps of Engineers 1977).

State of Nebraska

Nebraska's *State Comprehensive Outdoor Recreation Plan* (SCORP), prepared by the Nebraska Game and Parks Commission (NGPC), details recreational facilities, demands, and needs on a statewide basis. The plan points out that there has been an increasing demand for water-based recreation in the past in response to the creation of lakes. The plan argues that some of this demand would shift to nonwater-based activity if water is not accessible. The Nebraska SCORP generally recognizes a need for increased recreational facilities in the Missouri National Recreational River area and encourages the development of those facilities. This *Environmental Impact Statement* is consistent with the Nebraska SCORP.

A Comprehensive Trails Plan for the State of Nebraska (1994) includes this segment of the Missouri River in its Lewis and Clark Resource Corridor. The corridor extends from the Omaha Indian Reservation at Macy to Niobrara State Park. The corridor includes both the 59- and 39-mile segments of the Missouri River, plus Lewis and Clark Lake State Recreation Area and Niobrara and Ponca State

Parks. The trail connects Nebraska's three Indian reservations and opens important economic development opportunities for the state's Indian communities. A secondary shoulder trail is recommended along scenic Highway 12 from Ponca to Crofton, with a multiuse trail proposed to connect Ponca to Ponca State Park. North of Bow Valley, a route through St. Helena would provide access back to the Missouri River. A multiuse trail would connect Crofton to both the Nebraska and South Dakota shores of Lewis and Clark Lake.

State of South Dakota

The South Dakota Department of Game Fish and Parks (SDGFP) has prepared the *State Comprehensive Outdoor Recreation Plan* (SCORP 1991–1995). This plan details statewide recreational facilities, demands, and needs. Fishing, powerboating, and waterskiing needs were identified in the southeastern part of the state. These needs could be fulfilled through additional marina development on Lewis and Clark Lake. The SDGFP also manages wildlife areas adjacent to the river. The South Dakota SCORP generally recognizes a need for increased recreational opportunities in the MNRR area and encourages the development of those facilities. This *General Management Plan* is consistent with the South Dakota SCORP.

Lewis and Clark Natural Resources District

The Lewis and Clark Natural Resources District, headquartered in Hartington, Nebraska, includes portions of Knox, Cedar, and Dixon Counties. Nebraska natural resource districts provide a number of cost-share programs and services to local property owners. Their role and programs are defined elsewhere in this document. The roles and program of the Lewis and Clark Natural Resources District are consistent with and could help further the objectives of this *General Management Plan.*

County Plans

Clay County, South Dakota, has prepared both a zoning ordinance and a subdivision ordinance. Land subject to flooding or deemed to be topographically unsuitable for residential development would not be subdivided. Natural features and cultural sites are to be held in "due regard" when evaluating a site for subdivision potential. With the exception of the city of Vermillion, land along the Missouri River is located in the F-1 Floodplain Conservation District. Agriculture, forestry, fish hatcheries, and public parks and recreation areas are permitted uses in the F-1 District. Special-exception uses in this district include single-family dwellings, public utilities, golf courses, and private outdoor recreation areas. The minimum lot size for this district is 2 acres. This district has a 75-foot setback from the "median water line." The county auditor currently serves as the zoning administrator.

County zoning is a land use management tool that could be used to protect land adjacent to the Missouri National Recreational River. The National Park Service would work with local officials to develop standards consistent with the objectives of this *General Management Plan.*

Yankton, Clay, and Union Counties in South Dakota participate in the National Flood Insurance Program (NFIP), administered by the Federal Emergency Management Agency (FEMA). Because of this participation, flood insurance is available within this corridor. Each of these counties have Flood Insurance Rate maps available. These maps contain the 100-year flood boundary (zone A), determined by approximate methods, but do not contain 100-year flood elevations and floodway boundaries. The

Corps, Omaha District, completed a detailed floodplain information study that includes the 100-year flood boundaries and elevations for the Missouri River. The counties that participate in the insurance program have the responsibility to control development within the 100-year floodplain under the FEMA program. Failure to control development within the 100-year floodplain may result in losing their participation in the insurance program.

Cedar and Dixon Counties in Nebraska do not currently participate in the insurance program. Flood insurance is therefore not available. There are no Flood Insurance Rate maps available for these counties. There is, however, the Corps' Missouri River Special Flood Hazard information that can be used to determine 100-year flood elevations.

This *Final General Management Plan / Environmental Impact Statement* recommends new development be either outside the 100-year floodplain or floodproofed to 1 foot above the 100-year floodplain. Therefore, this plan is consistent with the National Flood Insurance Program.

Union County, South Dakota, has adopted a subdivision and zoning ordinance. A Floodplain Conservation District adjacent to the Missouri River consists of the land identified on zone A of the Flood Insurance Rate map for the county. Permitted uses in this district include agriculture (and one associated dwelling unit if the tract is greater than 5 acres), wildlife refuges, and public recreation areas. Signs shall not be greater than 10 square feet. Permitted conditional uses include private recreation areas, hunting and fishing resorts, and boat docks and marinas. The county employs a land use administrator to review proposals for compliance with the county zoning and subdivision ordinance.

Planning district III prepared a zoning ordinance for Yankton County, South Dakota; however, it was voted down by county residents.

Neither Cedar nor Dixon Counties in Nebraska have zoning ordinances.

The Alternatives

ALTERNATIVE 1: CONTINUATION OF EXISTING CONDITIONS (NO ACTION)

GENERAL CONCEPT AND PHILOSOPHY

The Wild and Scenic Rivers Act directed the secretary of the interior, acting through the National Park Service, to prepare a comprehensive management plan for the Missouri National Recreational River (MNRR) to provide for the protection of its values. In 1979 a recreational river management plan was prepared by the Heritage Conservation and Recreation Service (now part of the National Park Service). Boundaries included about 16,951 acres. A *General Design Memorandum* (GDM) was developed by the Corps of Engineers in 1980 to implement proposals in the *Missouri National Recreational River Management Plan* (HCRS 1979). Many laws and regulations have gone into effect since the GDM was published, and certain actions proposed would now require extensive environmental analysis before implementation or could be precluded altogether. The *General Design Memorandum* was supplemented twice for the construction of site-specific recreational development. Supplement no. 1, dated March 1986, provided for the construction of the Myron Grove access, as cost-shared by Clay County, South Dakota. Supplement no. 2, dated December 1988, provided for the construction of Riverside Park, as cost-shared by the city of Yankton.

A cooperative agreement was entered into by the secretaries of the interior and army in February 1980. Due to constraints such as few cost-share sponsors for recreational development, insufficient federal interest for new construction of bank protection structures on private land, and the federal-listing of three species that occur on the MNRR, the *General Design Memorandum* has been only partially implemented.

The authorized appropriation ceiling is $21 million, and of that amount approximately $1.4 million (through FY97) has been appropriated for Yankton's Riverside Park, the Myron Grove area, habitat construction for terns and plovers, and other purposes. This funding has been used for cost-shared recreational development, threatened and endangered species activities (studies and habitat construction), and writing reports, coordination, etc. Yankton's Riverside Park and the Myron Grove areas have been the recipients of matching funds from this source. Endangered species development has been at 100% federal cost.

None of this money has been used for streambank protection. Bank stabilization structures that happen to be in the recreational river are section 32 (of the Water Resources Development Act 1974) experimental structures (which have been turned over to the project sponsors). However, the Missouri River Bank Stabilization Association has been successful at getting annual congressional add-ons, with funding appropriated through the Corps' operation and maintenance budget for maintenance of the structure. Current policy is that the Corps of Engineers will not undertake any new construction of streambank protection structures without a specific line-item congressional appropriation.

The National Park Service would continue as overall administrator of the recreational river; the Corps of Engineers would continue its current management presence; and the *General Design Memorandum* would remain in effect. The Corps of Engineers would undertake minimal new development for recreation or streambank protection, and this could generally be in partnership with others.

The no-action alternative describes what has been accomplished to date, the Corps of Engineers management role, and any specific new development(s) that are actually planned. If the *General Design Memorandum* does not address a subject, this alternative would not attempt to anticipate management actions. Development would be minimal.

National Environmental Policy Act regulations require that an alternative of "no action" be considered to supply a baseline for the environmental analysis of impacts of proposed actions. The no-action alternative documents current conditions and trends. It also provides a basis for comparing the impacts of the action alternatives. It describes the state and local laws and private actions needed for protecting significant natural, cultural, and recreational resources that are now present.

MANAGEMENT

Cooperating Agencies and Partnerships

The current conditions include a mix of private property and local, federal, and state jurisdiction. The Corps of Engineers' management has included some recreational development in partnership with local agencies and monitoring of private actions. Other existing conditions likely to continue include varied management under federal, state, and local law, and by existing property owners. Overall coordination has been included in the scoping associated with environmental compliance for construction projects, general riverflow coordination through scoping for the Annual Operating Plan for the Missouri River Main Stem System, semiannual public meetings sponsored by the Corps of Engineers, and annual meetings of the private Missouri River Bank Stabilization Association. Coordination by the Corps is a part of any private section 404 permit within this stretch of the river, including coordination with the National Park Service, U.S. Fish and Wildlife Service, state agencies, and the general public. The Corps also actively coordinates with the U. S. Fish and Wildlife Service on issues related to endangered species in the recreational river.

Agencies currently work together and consult with each other on specific programs and actions. The National Park Service and the Corps of Engineers have an cooperative agreement that details their respective roles. A copy of the existing agreement is included as appendix C. In general, the cooperative agreement assigns most day-to-day management responsibility to the Corps, including bank stabilization, land acquisition, and recreational facility development. The National Park Service and the Corps are jointly responsible for developing management plans and submitting budget requirements. The National Park Service is responsible for overall administration of the MNRR under the provisions of the Wild and Scenic Rivers Act, including preparation of section 7 determinations. The Corps of Engineers has assigned one person from its district planning group to oversee the river, and technical specialists and engineers are available on an as-needed basis for design and construction of proposed projects. Although Corps'employees at the Gavins Point office patrol and monitor the river for other activities (endangered species, section 404 compliance, etc.), they do not patrol the river for the purposes of the recreational river designation. The Gavins Point project manager is on the planning team, and has had input into the development of this GMP. Before 1991 the National Park Service provided environmental review for construction projects from its Omaha office, and since 1991 the National Park Service field office in O'Neill, Nebraska, has minimally fulfilled its oversight role under this agreement. The advisory commission established by the designation act ceased to exist in 1988, and there is no proposal to reestablish the commission.

Land Use Management

Ranching and farming would continue under the management of individual property owners. Agriculture dominates the landscape, with corn and soybeans being the major crops. Intensified farming methods such as feedlots and confinement facilities are not yet present along this stretch of the river. Each year some land along both shores is converted to recreational cabin development.

The 1980 *Missouri National Recreational River Management Plan* recognized that protection and enhancement of recreational river values was dependent on the willingness of landowners to agree to use the lands identified in the river corridor in a manner compatible with recreational river designation. It listed the kinds of agreements that could be used to achieve this goal. Landowners would be contacted to discourage building of incompatible development, and it was recognized that easement interests could be acquired to achieve this. By law, condemnation can only be used for easements and then only for a maximum of 5% of the land. To date, none of these methods have been used.

The *General Design Memorandum*, approved in 1980, suggested it may be desirable to obtain scenic easements on as much as 15,600 acres of the designated corridor made available by willing sellers. Willingness of landowners to participate in this program was based on their willingness to sign right-of-entry forms for streambank protection work. With this incentive, 58 of 66 owners contacted signed the forms. However, no land has since been acquired in fee or scenic easement by the Corps of Engineers or the National Park Service during the 16 years of the *General Design Memorandum* existence. The Corps has not acquired land because it has been directed by headquarters not to acquire any additional land that is not directly adjacent to existing Corps' project lands. However, the Corps of Engineers could obtain easements (which would probably be managed by some other entity) in conjunction with construction of new streambank protection projects, if there was a federal interest in the land to be protected.

Land has been acquired along the river by counties and by both states for several recreational sites and access on both sides of the river. This might continue under this alternative.

Existing residential and other private development areas would remain. New developments are proposed and would be built within the boundary from time to time. In Union and Clay Counties, South Dakota, zoning guides this development to a certain extent. No such zoning controls are in place in Yankton County, South Dakota, or in Cedar and Dixon Counties in Nebraska. The *Recreational River Management Plan* proposed that a designated agency work with local governments to consider zoning for lands within the corridor. Such work has not taken place. Development on these shores has generally occurred without federal review, except in cases where Corps of Engineers wetlands or streambank protection permits were required.

General Administration

Administration and Maintenance Facilities. Administrative staff for the MNRR would remain in the Omaha District office, although there could be opportunities for use of the Gavins Point visitor center and other Corps facilities and personnel for purposes consistent with the MNRR.

Maintenance. The maintenance workload under this alternative would remain at present levels because there would be no new visitor facilities. Maintenance of projects built with matching funds from the Corps of Engineers would be the responsibility of the cost-share sponsor, with the exception of endangered species construction.

Law Enforcement. Law enforcement would continue to be occasionally provided by state and local authorities to manage the visitor activities. The Corps of Engineers has the authority to enforce rules and regulations promulgated in the Code of Federal Regulations (CFR) 36 CFR 327, which are applicable to water resource development projects administered by the chief of engineers.

Staffing Needs. The Corps and NPS staffing needs would be minimal. NPS staffing needs would be handled as collateral duties by staff assigned to the O'Neill and Omaha offices.

Federal Costs. Cost categories include:

Category	COE Costs	NPS Costs
Labor	$13,000[a]	$23,000[b]
Equipment, supplies, materials and transportation	4,000	8,000[c]
Resource monitoring / studies	50,000	1,000[d]
Cost-shared construction	------[e]	
Total	**$67,000**	**$32,000**

[a] Project manager GS-11 one-third time. Engineering labor associated with construction and design is not included. Overhead charges associated with labor are not included.
[b] Park manager GS-13, one-third time (shared in thirds with the 39-mile Missouri and Niobrara Scenic Riverway
[c] One-third of respective costs typically budgeted for labor.
[d] One overflight or one boat trip annually.
[e] Costs associated with the design and construction of new facilities will be developed during the development of the *General Design Memorandum* and after nonfederal cost-share sponsor has shown interest.

Since this is a conceptual management plan, determination of costs involves considerable uncertainty, especially with regard to future construction, because none is specifically planned, and construction would require a cost-share sponsor. However, construction consistent with the goals of this alternative is still possible, and costs associated with such would be prepared during the development of a design memorandum, after a cost-share sponsor has shown interest. Cost-sharing for recreational projects is currently standard within the Corps nationwide, and the operation and maintenance of those projects is the responsibility of the sponsor.

TABLE 1: ALTERNATIVE 1 — LAND USE/LAND COVER

Land Use/Land Cover category	Public land (acres)	Private land (acres)	TOTAL (acres)
Cropland	337	7,135	7,472
Pasture/rangeland	186	2,323	2,509
Upland wooded forest	1,096	2,331	3,427
Floodplain forest	3	471	474
Palustrine wetlands	36	4,442	4,478
Riverine wetlands	193	15,359	15,552
Lacustrine wetlands	0	0	0
TOTAL	**1,851**	**32,061**	**33,912**

Numbers were rounded off to the nearest whole acre. The 33,912 acres include 16,951 acres above the ordinary high watermark.

RESOURCE MANAGEMENT

Some public and private land is not currently developed or used for agriculture and retains high value as a natural landscape and ecosystem. These lands are valuable for continued good-quality habitat, sustaining water quality, protecting natural and cultural resources, and preserving scenic qualities. Such areas include old-growth cottonwood forests, riparian areas, woody draws, relatively undisturbed wetlands, sparsely vegetated sandbar islands, native prairies, and cultural sites. The National Park Service would encourage property owners to conserve or restore these areas to their natural state.

Streambank Protection

The objectives of the bank preservation program as authorized and as identified in the *General Design Memorandum* are as follows:

- Protect the location of high banks and those features, such as wooded areas, islands, and vegetated low bars, that contain values which contribute to the designation as a recreational river
- Implement, subject to available funding, bank preservation measures at previously identified critical erosion problem sites
- Ensure the continued effectiveness of bank preservation features to preserve the characteristics of the river existing at the time of designation.

Although actual erosion rates are lower now (80 acres/year) than before the dam was built (200 acres/year), high accretion land does not form now as it did before the dam. Therefore, the net loss of high bank is greater now than before the dam. Water coming out of the dam is sediment-poor, and the soils in the area are highly erodible, so erosion is common. Some of these losses are offset by the control of flooding, so floodplain areas formerly prone to flooding can now be cleared and farmed.

Bank preservation (preservation of the high bankline, preservation of features between banks, and reduction of soil loss) was also included as an integral part of the Missouri National Recreational River designation. The final report for the section 32 program went to Congress in 1991.

Objectives of the streambank protection program in the *General Design Memorandum MMR-1* are to protect the location of high banks and features such as wooded areas, islands, and vegetated low bars that contain significant resources; implement bank preservation measures at severe erosion sites; and ensure continued effectiveness of bank preservation features. The *General Design Memorandum MMR-1* identified 31 potential erosion areas and critical areas (22 high bank areas and nine island vegetated bar areas) and set priorities for site needs. Nine projects were eventually constructed on this section of river under Section 32 of the Water Resources Development Act.

The recreational river act provided for federal operation and maintenance of natural features as part of the recreational river designation and provided for operation and maintenance of bank preservation features in place prior to implementation of the act. Streambank erosion was identified as an important issue along the Missouri River in the *General Design Memorandum MMR-1*, other related plans and projects, and during the scoping phase of this project. On private property, property owner donation of easements would be necessary for new stabilization. While the intent was to turn over maintenance of these projects to local sponsors, funding is expected to continue by the Missouri River Bank Stabilization Association for the Corps to do this work each year.

The provision of the *General Design Memorandum MMR-1* that allowed COE construction of new streambank protection structures was conditional upon the availability to the United States of such land and interest in land in such ownership as the Corps deemed necessary. The Corps of Engineers or partner agencies have been successful in obtaining permanent construction easements for this work from landowners.

Natural Resources

General. Natural resources would mostly be managed and protected by private property owners and state wildlife agencies, since much of the habitat protection work described in the *General Design Memorandum* has not been realized.

Monitoring of Resources. Current inventorying and monitoring by state and federal agencies would continue. Although new monitoring, if needed, is not precluded in this alternative, new coordination of inventory and monitoring would take place primarily in response to obligations under the Endangered Species Act.

Threatened and Endangered Species. Natural resource management would involve activities by the Corps of Engineers, in consultation with U.S. Fish and Wildlife Service, the National Park Service, and the states of Nebraska and South Dakota. Current ongoing programs carried out by the Corps under the MNRR authority include funding to support recovery efforts of the least tern and piping plover as well as studies to gain additional information on the pallid sturgeon.

Cultural Resources

The river, its floodplain, and the bluffs have provided for basic human needs in an otherwise harsh plains environment for thousands of years. A cultural chronology of the area is generally understood (from prehistoric periods to the present day). The *General Design Memorandum* listed cultural resource objectives for the recreational river, including inventorying, protecting, and interpreting historic and prehistoric resources. These objectives have not been met.

Cultural Resource Inventory, Evaluation, and Monitoring. The GDM objective is to establish and maintain an ongoing inventory of all lands within the river management corridor to identify, evaluate, and protect prehistoric and historic cultural resources. No active surveys are known to have occurred in the past few years. The Corps' responsibility would continue to be limited to protecting archeological resources on its own land.

Preserving and Protecting Cultural Resources. The GDM goal is to preserve and protect sites. Private property owners and government agencies would continue to manage resources on their land. Minimal law enforcement would be available to reduce levels of looting or vandalism that can occur.

Federal undertakings (such as new construction) that could affect national register or national register-eligible properties would be subject to section 106 of the National Historic Preservation Act.

Continuing Research. Future research would be limited to that initiated by the Corps of Engineers, state historical societies, and local historians.

VISITOR USE AND INTERPRETATION

The visitor experience would be limited generally to activities and interpretation that are currently available on the recreational river. The Corps of Engineers and local tourism offices have prepared a few maps and brochures, and some exhibits and signs exist to inform visitors of their recreation options, present safety messages, and provide interpretation of the recreational river's natural and cultural history. These are usually private or agency efforts to fulfill a specific need. Public access to the river and developed facilities for recreational uses are limited.

Interpretation

Interpretation and information would continue to be available through publications from several local tourism and economic development offices, including the Upper Missouri Chamber of Commerce, the Northeast Nebraska Travel Council, and the Northeast Nebraska Rural Conservation and Development District. The COE Lewis and Clark Regional Visitor Center located at Gavins Point Dam interprets the Missouri River Basin Plan, natural and cultural history of the river, and current management issues through exhibits, slide shows, overlooks, and personal contact.

While the *Missouri River Recreational River Management Plan* gave few details, the *General Design Memorandum* called for a decentralized and self-guiding approach to interpretive programs in the river corridor. Of the 11 areas slated for recreational development and 13 public use areas, efforts have been made on only two to four sites.

Visitor Activities

Present users of the river are principally local fishermen and recreational boaters. The many sandbars, changing currents, and underwater hazard snags make the river unsuitable for those not familiar with it. Current patterns of river use would likely continue. Boating, fishing, hunting, and trapping would not be expected to change from current levels. Though prohibited by NPS policy, the use of airboats and personal watercraft could likely occur, but to a limited extent, in the shallow backwater inlets and tributaries of the Missouri River.

Visitor Use Management

There have been a few visitor use studies conducted which included the MNRR and the Gavins Point Dam recreational areas. However, none of these studies were conducted in such a way that a firm trend for visitor use of the MNRR over the last 20 years could be developed (see the Visitor Use Management section in the "Affected Environment" chapter for visitor use study results).

Although visitor use data is also available from the Gavins Point Project Office, the South Dakota SCORP, and the Nebraska SCORP, these data include the increasing visitor use of the Gavins Point facilities, which most likely do not correlate with visitor use within the MNRR itself. As stated earlier, recreational use within the MNRR would remain primarily local, with the possible exception of Ponca State Park. There is no evidence to support that visitors from Gavins Point facilities would also use the MNRR.

There is a strong need for baseline visitor studies specifically for the MNRR, as well as ongoing monitoring of visitor use over time using the same methods, especially for riverine visitor uses. One of the

previous studies could potentially be used as a baseline if similar methodology is used for subsequent monitoring studies.

Some visitor use management occurs at existing state, county, and city parks along the MNRR. However, there would be no coordinated approach to visitor use management associated with the MNRR as a whole.

Visitor Development and Access

The *Recreational River Management Plan* listed 14 sites to be developed, and the fully implemented *General Design Memorandum* called for extensive recreational development and land acquisition, including campgrounds and boat ramps at 11 different sites. The *General Design Memorandum* was supplemented twice for the construction of site-specific recreational development. Supplement No. 1, dated March 1986, provided for the construction of the Myron Grove access, as cost-shared by Clay County, South Dakota. Supplement No. 2, dated December 1988, provided for the construction of Riverside Park, as cost-shared by the city of Yankton. Thirteen public use areas were planned and would require land acquisition. The *Recreational River Management Plan* recognized the continued operation and maintenance of private recreational sites, and in addition, proposed agreements with entities to develop more sites. The *General Design Memorandum* provided no guidance for private access development.

In this alternative, existing roads and public river access would be maintained, and development of new public river access would likely occur slowly in response to local needs. Most visitors must find the river on their own and use the river on its own terms. Therefore, river users would continue to be primarily local people. Though full implementation of the existing GDM is not anticipated, there is a possibility that the Corps of Engineers could provide cost-share funding for the development of scenic drives, trails, camping areas, and hunting access within the boundary, provided funding was available.

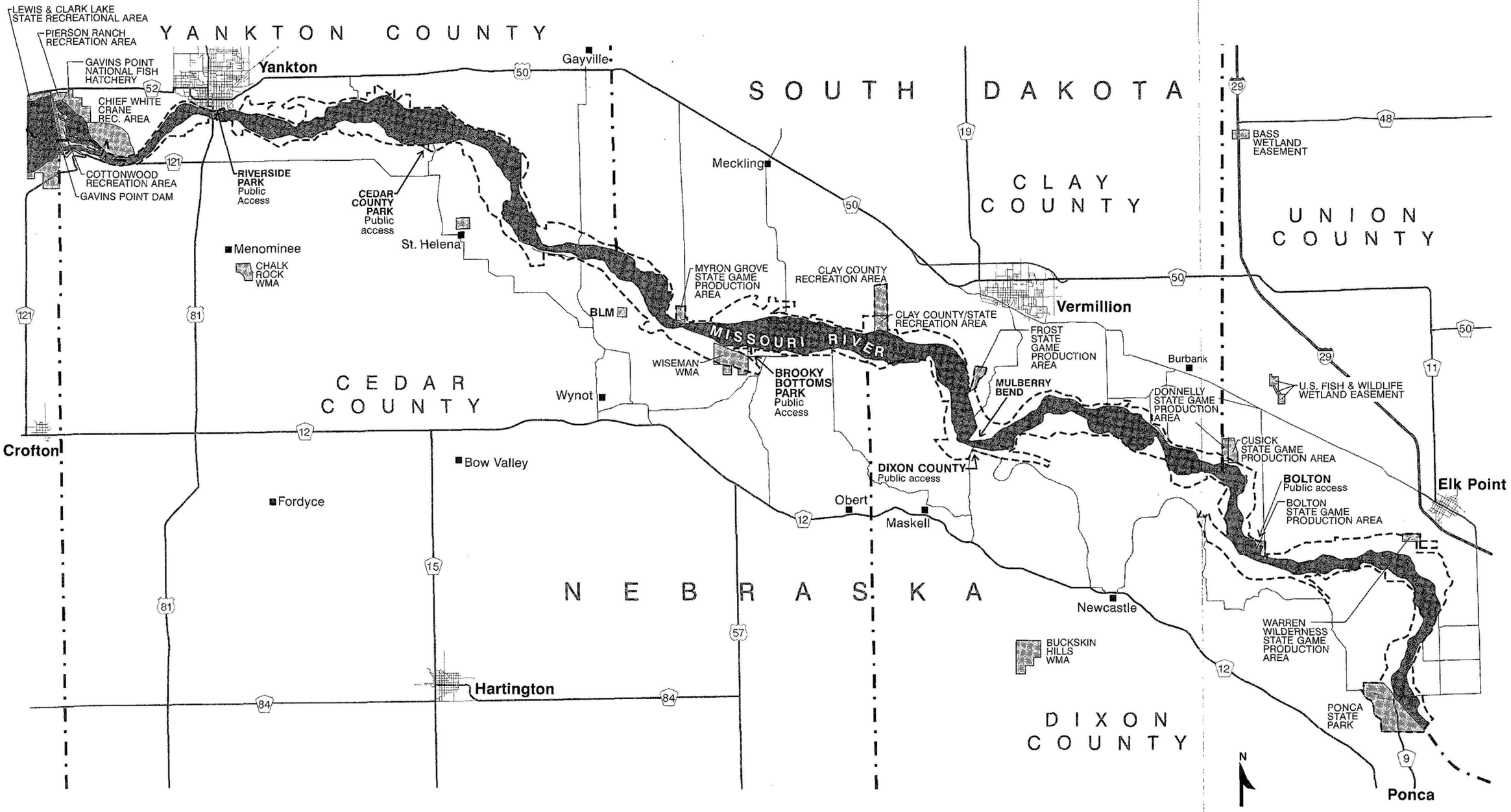
Controls over private and commercial development along the river would be limited to federal floodplain restrictions, plus state and county restrictions. Cabin and housing areas would be developed or enlarged based on market demand, and private property owners might provide additional campgrounds for public use.

BOUNDARY

The no-action boundary would be the downstream end of the Gavins Point Dam excavated discharge channel (downstream boundary of the Lewis and Clark Project), 59 miles downstream to Ponca State park, Nebraska, as generally depicted in the document entitled Review Report for Water Resources Development, South Dakota, Nebraska, North Dakota, Montana," prepared by the Corps of Engineers in August 1977 (the so-called "umbrella" report). The land within this boundary totals some 16,951 acres.

ASSISTANCE ON ADJACENT LAND OUTSIDE THE BOUNDARY

There has been no direct assistance to local entities by federal agencies under this authority.



Original 1978
Missouri National Recreational River Boundary

Ordinary high water mark

Public and fee land

Agricultural land

Private development

0 3 6 9 12 MILES

0 5 10 15 20 KILOMETERS

ORIGINAL 1978 BOUNDARY
NO ACTION ALTERNATIVE
MISSOURI
NATIONAL RECREATIONAL RIVER

United States Department of the Interior • National Park Service
DSC/Nov. 1997/651/20,002

ACTIONS COMMON TO ALTERNATIVES 2 AND 3

GENERAL CONCEPT AND PHILOSOPHY

The action alternatives provide for protection of natural and cultural resources and for management of visitor use. Recreational rivers usually contain a broader range of agricultural and forestry uses than scenic or wild rivers; therefore, all action alternatives would allow for continuation of traditional farming and ranching practices on private land, consistent with goals and objectives outlined in this *General Management Plan*. Landscape changes would be managed primarily through the use of voluntary conservation agreements, or through zoning ordinances. Agreements could be used for agricultural land, residential or other private developments areas, or to protect significant resources. As required by the establishing legislation, land or interests in land must be made available to the United States to protect and enhance the values of the MNRR before any new construction of bank protection structures could be initiated or maintained by the Corps under the authority of the act. Land acquisition would be rare and used only if absolutely necessary to protect resource values or to provide needed recreational access.

MANAGEMENT

Cooperating Agencies and Partnerships

Several government agencies would continue to have responsibilities along the 59-mile MNRR. However, management of the MNRR would be the responsibility of the National Park Service and the Corps of Engineers. The establishing legislation assigned to the secretary of the interior (acting through the National Park Service) responsibility for administering the river as a component of the national wild and scenic rivers system . The establishing legislation also directed the secretary of the interior to enter into a cooperative agreement with the secretary of the army (acting through the Corps) for construction and maintenance of bank stabilization work, recreational facilities, and other recreational river features. The existing cooperative agreement is included as appendix C.

If needed after the record of decision is issued, a revised agreement between the National Park Service (administrator or overseer) and the Corps of Engineers (day-to-day onsite manager) would outline the responsibilities of each agency. The agreement would reflect current policies and authorities and to be consistent with the alternative selected by this planning process. As the agency responsible for the Gavins Point Dam project, the Corps would remain responsible for operation, maintenance, and management of all existing facilities associated with the project. The National Park Service would retain overall authority to administer the MNRR as a component of the NWSRS. The Corps would continue to be responsible for most construction activities, such as recreational development, bank stabilization, and other recreational river features as deemed necessary with advice provided by the National Park Service. The Corps and the National Park Service would work jointly on habitat enhancement projects with the Corps taking the lead on construction that would protect and enhance biologic values. Subject to funding, the two agencies would also work together on resource surveys, monitoring, interpretation, and other activities, with the National Park Service taking the lead on developing interpretive materials.

The NPS role would be somewhat larger than at present. The National Park Service would work with local landowners and governments on appropriate land uses within the boundary and would provide public information and interpretation opportunities, as well as facilities for recreational use. They would promote wise and safe use of the river by recreationists. The National Park Service would call and lead

periodic (at least annual) meetings with the Corps of Engineers to discuss implementation of the cooperative agreement and this plan. The cooperative agreement may be updated, if needed, under any selected alternative, including the no-action alternative.

The two agencies would seek help from each other and from state and county agencies, organizations, and individuals. Both agencies would seek funding to support active management of the area. Federal staff would continue to confer with the public, local governments, and interest groups such as the Missouri River Bank Stabilization Association.

Land Use Management

Both alternatives ensure that present development could remain in place inside the boundaries. Compatible land uses include farming and ranching and those basic visitor facilities, such as comfort and convenience facilities, currently in place. (These facilities are described in the "Affected Environment" section of the document.) The alternatives have different visions of future development along the river, but both would adhere to the following approaches.

Those uses that were present in 1978 were found by the 1980 management plan to be consistent with the intent of the Wild and Scenic River Act and would be allowed to continue. For developments built between 1978 and the date of this plan, the managing agency would offer technical assistance and work with property owners to help ensure continued consistency with the goals of this *General Management Plan.*

Future (after the date of this plan) land uses would be evaluated for compatibility with the objectives and goals of this plan. Residential and other private development within the boundary would continue. The amount of new development recommended in the two alternatives differs. Details concerning in-kind replacement and new structures, as well as density, design, and location, are defined in each alternative. The managing agency would actively seek to avoid incompatible land uses and development. Incompatible activities include feedlots and confinement facilities and extensive new cabin and residential development.

Developed land in the vicinity of the river would be assessed based on current use. All other land uses would generally be assessed based on agricultural rates. Tax breaks for preserving natural environments are currently rare. The National Park Service would actively support tax breaks for such voluntary protection.

A mixture of all of the above land use management tools is assumed in all the action alternatives. Because of the voluntary nature of many of these methods, neither the relative nor actual amount of land to be acquired can be predicted.

Wildlife Conservation Areas. Working with the river managers, landowners could donate or sell riverfront land to the U.S. for wildlife, streambank protection, and other public purposes. The intent would be to

- create a green area along the river that is 200 feet deep or more, depending on the particular property
- enhance wildlife production and natural vegetation barriers that slow erosion

- create a long-term legal interest (by the National Park Service, the U.S. Fish and Wildlife Service, and public entities) in the land sufficient to permit bank stabilization by the Corps of Engineers

- allow day-use only access to the public for such activities as picnicking, rest, and emergency use

- future camping facilities could be provided as demands warranted

In the past, temporary construction easements have been obtained voluntarily from owners for access to the riverbank for streambank protection work by the Corps of Engineers. Such easements, now held by the Lewis and Clark Natural Resources District in Nebraska and the respective counties in South Dakota, generally run in perpetuity. This program is intended to be replaced by the above as new agreements are reached.

County Zoning and/or Comprehensive Plans. County zoning would be encouraged as a land use management tool that can protect land adjacent to the Missouri River. Zoning is a local power that can be used to prohibit or authorize a large variety of land uses. County zoning can also help control the density of development, provide development setbacks from the river, and help maintain the rural scene. At present, zoning exists only in Clay and Union Counties in South Dakota, and in the city of Yankton. The National Park Service would work with county commissioners, planning and zoning officials, states, and other agencies to encourage innovative design and adopt development standards within the boundary that are in keeping with riverway goals. The following guidelines illustrate what types of land uses and development standards would be appropriate. Technical assistance to property owners would be available to help achieve these goals.

Conservation Easements. Conservation easements could be acquired through donation or purchase by the managing agency or by a private organization. Generally, conservation easements run with the land, cannot be revoked, and the terms can be negotiated. Conservation easements can prohibit or authorize a variety of land uses. In general, this type of easement would inhibit new development while allowing agricultural activities to continue. Restrictions could be placed on logging, vegetation removal, quarrying, and disturbance of wetlands. Other types of easements could be developed to protect cultural resources, provide streambank protection, or allow for flooding. Property owners could negotiate limits on public or managing agency use of the land. Some land within the recreational river is expected to be protected through conservation easements offered by willing sellers. Such easements would primarily be used to protect outstandingly remarkable natural and cultural resources and scenic areas.

It is anticipated that four types of easement estates in addition to a fee estate would be used in acquiring land and interests in land. These include a scenic preservation easement, a scenic recreational and preservation easement, and two types of bank preservation.

> The scenic preservation easements would maintain in perpetuity the land use at the time of acquisition. The purpose of this easement would be to preserve the scenic beauty of bankside lands as they were viewed from the river.
>
> The scenic recreation and preservation easement would maintain the present scenic features and additionally would allow the public to enter the area for hiking, picnicking, fishing, and tent camping. Trails and sanitation facilities would be constructed as needed.
>
> The bank preservation easements would be used only where bank preservation features were constructed. One easement would allow public access and the other easement would not. The

first would be coupled to a recreation and scenic preservation easement and the second to a scenic preservation easement.

Fee acquisition would be contemplated in those areas where major recreational development would occur.

Fee Acquisition. The purchase of land by government agencies or land trusts could be used where other protection means were not suitable or where landowners preferred to sell outright rather than grant conservation easements. The Wild and Scenic Rivers Act does not require land acquisition, as is the case along this stretch of the river. The intent of this plan is to encourage river protection through local and cooperative methods and not to rely on land acquisition as a frequently used tool. Any land acquired would be used primarily for the development of river access, trailheads, trails, cultural sites, overlooks, visitor information sites, and similar facilities. Each alternative describes why, when, how much, or where land might be acquired if needed for such purposes as river access, visitor facilities, or preservation of resources.

The boundaries of the recreational river show the extent of important resources that should be protected and define the outer limit of the recreational river. The Wild and Scenic Rivers Act limits the land that can be bought in fee title to an average of no more than 100 acres per mile. In addition, on this Missouri National Recreational River segment, condemnation can not be used to acquire an interest in fee simple title and purchases can be from willing sellers only. By law, condemnation can only be used for easements and then only for a maximum of 5% of the land.

Guidelines for Existing and Replacement Structures. The following guidelines are only suggestions to landowners building on the banks of the river. They are also recommendations to counties preparing zoning ordinances. Guidelines for existing and replacement development are as follows:

There would be no effect on existing structures and uses.

Replacement structures should be set back at least 100 feet from the riverbank and built on a site with a minimum 100 feet of riverfront.

Replacement structures should be consistent with maintenance, screening, visibility, texture, and color recommendations.

Colors should be soft, subtle, earth tones that are similar to those in the surrounding environment.

Native plants should be used for landscaping. Vegetation should be maintained so that, except for the view corridors, structure would be screened from the river during the summer. Foundation plantings at the base of residences would be an acceptable means of vegetation screening (see appendix F).

Exterior maintenance of structures is important to the achievement of the recommendations in this plan.

Guidelines for Zoning and New Construction. Guidelines for zoning and new construction would be achieved through the use of the above-listed land use management tools. Technical assistance and some funding assistance to property owners would be available to help achieve these objectives. Guidelines for zoning and for new public and private construction are as follows:

The lot should have a minimum of 300 feet of riverfront.

The structure should be set back 200 feet from the ordinary high water mark.

Construction materials should meet the intent of the maintenance, screening, visibility, texture, and color recommendations of this plan.

Colors should be soft, subtle, earth tones that are similar to those in the surrounding environment.

Landscaping should use native plants.

Vegetation should be maintained, as determined in each alternative, so that the structure is screened during the summer.

Development should be unobtrusive so that the natural landscape dominates.

The undeveloped portions of property should contain native vegetation and a natural substory of grass and shrubs.

New buildings should be located on a contour higher than that reached by high water flows (79,500 cfs).

Boat ramps and boat docks along the river should be shared in order to minimize the need for the number and the need for access roads.

The setback for new structures should be equal to or greater than the 100-year floodline or be elevated or floodproofed to a level of at least 1 foot about the 100-year flood elevation to stay within Federal Emergency Management Administration flood insurance guidelines.

The 100-year flood flow for the 59-mile reach has been estimated to be 79,500 cfs by the Corps of Engineers (Omaha District 1981, Missouri River special flood hazard information maps). Any development subject to damage by flood waters or erosion should not be located lower than 1 foot above the stage corresponding to this discharge. An elevation equal to that generated by a 500-year flood would better ensure against disasters and could restrict development in valuable natural areas.

Guidelines for Agricultural Land. Farming and ranching practices are viewed as supporting the protection of the river, and this plan recognizes current and evolving agricultural use as a cultural attribute of the recreational river corridor. Encouraging use of land for agriculture helps to minimize future development within the corridor. Feedlots and confinement facilities would not be considered consistent with the recreational river designation. Currently there are no feedlots and confinement facilities along this stretch of the river within the boundary.

Agricultural and forestry practices should be similar in nature and intensity to those present in the area at the time of designation. Vegetation growing between farm fields may help to stabilize and retard erosion of banks, would provide a buffer zone of natural vegetation that would enhance scenic and wildlife habitat values, and could reduce some loading of pollutants into the river. Private property owners could be encouraged to set aside some agricultural land for wildlife habitat easements. Application of fertilizers and biocides should meet integrated pest management goals established by agricultural agencies. Financial assistance for livestock watering equipment could be used as an incentive to minimize trampling of riverbanks.

Guidelines for Public Land. Public land and facilities inside the boundary would continue to be managed for its dedicated purposes and for the purposes of the recreational river designation. Each action alternative would rely on the use of cooperative agreements and/or memoranda of understanding among government agencies and other partners to ensure consistency with this plan and to resolve jurisdictions and conflicting mandates. Existing public lands include wildlife easements as well as some areas that are dedicated to recreation. Fee and easement land owned by the Corps of Engineers would continue to be managed by them or in cooperation with other agencies. The Corps of Engineers would remain the lead decision-maker and point of contact for this land.

General Administration

Maintenance. Maintenance activities and facilities related to habitat development and management, including streambank protection, would be provided by state and federal agencies, as funding allowed. Funds to maintain recreational facilities have been budgeted primarily by counties and the Nebraska Game and Parks Commission. Additional funds may be needed from state and federal sources to maintain and enhance habitat as determined in the alternatives. With the permission and cooperation of property owners, federal funding could be used to help preserve significant cultural resources on private land inside the boundaries.

Law Enforcement. Current sharing of responsibilities across jurisdictional lines would be encouraged in both action alternatives. Generally, enforcement activities are specific to the laws and responsibilities of the various participating agencies. While state laws govern fishing, hunting, and trapping on private land, trapping is prohibited on federally owned land administered as part of the recreational river, unless authorized by specific statute. NPS regulations prohibit airboats and personal watercraft on the Missouri National Recreational River. The only exception is the use of airboats for emergency or approved administrative use.

RESOURCE MANAGEMENT

General

Following completion of this *General Management Plan*, more detailed cultural and natural resources management planning might be needed for the Missouri National Recreational River. If needed, a resource management plan, prepared by the National Park Service, would detail research needs, summarize information needs, and analyze and set priorities for resource management work. These plans could facilitate joint actions with the Corps of Engineers, the U. S. Fish and Wildlife Service, or the state game and fish agencies.

The section 1135 program of the Water Resources Development Act of 1986, as amended, would provide for technical assistance and funding for restoring habitat lost as a result of a COE project. (About 25% of the cost would be shared by a nonfederal partner.) Such programs could be used to restore habitat to compensate for changes in the river resulting from Gavins Point Dam or to create chutes and wetlands. The development of such planning tools could also be supported by federal or state technical and financial assistance.

Streambank Protection

The action alternatives recognize that streambank protection measures are necessary and authorized in the Missouri National Recreational River legislation. Wherever possible, the use of natural streambank protection or bioengineering techniques are recommended. Such techniques include cabling tree trunks and brushy material to the bank (Palmitter method), planting live willow stakes or live willow fascines (bundles), constructing live cribwalls, or any combination thereof. Vegetative means of streambank protection are compatible with protection of recreational riverine appearance and they encourage revegetation of the riparian corridor. Resource agency staff members are often available to provide technical assistance with these techniques.

When bioengineering techniques are not feasible nor practicable, erosion control techniques (including the use of rocks for streambank protection) would be permitted subject to conditions prescribed in this *General Management Plan.* The COE section 33 program authorizes the Corps of Engineers to stabilize streambanks on private land on the Missouri River under certain conditions. The Corps of Engineers could also buy interest in eroding land along the Missouri River from willing sellers as an alternative to stabilizing. Purchase of land is often more economical than stabilization and allows erosion to add sediment to the river system.

New streambank erosion control techniques would require a section 10/404 COE permit and would be used to protect structures and agricultural land. This policy would also apply when alteration or extension of structures would require a new section 10/404 COE permit. Each stabilization action would require an individual permit under normal (non-flood) circumstances. The Corps would cooperate to ensure that streambank protection is compatible with the purposes of the recreational river authorization.

For permitting purposes, acceptable materials would be determined on a case-by-case basis. Natural or natural-appearing materials would be encouraged. Clean brick and broken masonry would be considered if covered with natural-appearing materials. The material should be covered by topsoil and seeded. Streambank protection may also allow for protection of significant biological resources (special habitats such as wooded areas, islands, and sandbars) and significant cultural resources such as archeological sites on a case-by-case basis.

Natural Resources

General. The managing agency and partners would cooperate in the inventory and monitoring of river-related resources and would coordinate management for protection/restoration and enhancement of biologic resources. Natural river processes would be enhanced when possible. A coordinated effort would be made by all partners to protect and manage threatened and endangered species and sensitive and unusual habitat such as cottonwood forests, islands, and sandbars. Research that would support river-related interpretive programs and resource management objectives would be encouraged. Water quality would continue to be monitored by various federal and state agencies.

Floodplains and adjacent wetlands would be considered sensitive in all the alternatives, and they would be protected to the greatest extent possible. They reduce the adverse effects of flooding, maintain water quality, provide fish and wildlife habitat, preserve visual variety, and maintain biologic values. All action alternatives would preserve, restore, and increase wetlands in the river corridor. Wetlands would be protected and enhanced on public land (executive orders would be followed) and their protection would be encouraged on private land by preservation incentives, voluntary programs, and enforcement of state and federal law.

This plan would support efforts to control the spread of nuisance plants and state-listed weeds that compete with native plants and threatened and endangered species for habitat and that could be detrimental to agricultural crops. The managing agencies would work with local agencies under a cooperative agreement.

Management for Biologic Resources. Management for protecting, restoring, and enhancing biologic values would vary according to alternative.

Monitoring of Resources. Monitoring of resources would vary according to alternative. No entry onto private land would take place without property owner consent.

Threatened and Endangered Species. Federal and state endangered and threatened species would continue to be protected in all areas under federal or state jurisdiction. Policies and programs for the preservation and protection of the species and their habitat would continue by consultation among the U.S. Fish and Wildlife Service, Corps of Engineers, National Park Service, Nebraska Game and Parks Commission, and the South Dakota Department of Game, Fish and Parks. NPS policy (but not Corps policy) requires that federal candidate species be afforded equal protection to those species that are listed.

To avoid direct, indirect, and cumulative impacts potentially associated with new boat ramps, the following conditions would be met:

1) boat ramp placement would be ¼ mile from historic nesting islands
2) boat ramp construction would avoid the May-August nesting season
3) boat ramp design and parking lot size would seek to redistribute existing visitor use, rather that encourage additional use at locations that could impact the terns and plovers
4) if visitor use impacts exceeded carrying capacity standards (as determined by monitoring), management would take actions that would bring conditions back within standards
5) Site-specific environmental compliance, including compliance with section 106 of the National Historic Preservation Act, would be completed before any new boat ramps were constructed. As part of this site-specific compliance, information section 7 consultation under the Endangered Species Act would be reinitiated with the U.S. Fish and Wildlife Service

Actions that might be taken, would include the following:

a) increase public awareness through additional signing and posting
b) patrol island perimeters by boat, especially on holidays and weekends
c) limit numbers of people allowed to launch boats from boat ramps
d) close certain boat ramps

Cultural Resources

Management of Cultural Resources. Management of cultural resources would be accomplished through the cooperative efforts of property owners, public interest groups, local communities, and government agencies. The goal would be to preserve the significant historical, architectural, ethnographic, landscape, and archeological resources that make up the cultural heritage of the river corridor. The intent would be to work with others to minimize the loss of historic material and to conserve resources important for public education and scientific study. Preservation programs could not be implemented on private land without the approval and invitation of the owner.

Cultural Resource Inventory, Evaluation, and Monitoring. The National Park Service, in cooperation with the state historic preservation officers, would identify cultural resources inside the boundary and evaluate their significance and integrity using national register criteria. This includes the monitoring of significant sites on public land. Identification of historic properties eligible for the national register would help property owners qualify for restoration or rehabilitation funding or tax act certification. These activities could be undertaken on nonfederal lands in cooperation with landowners if funding was available.

Preserving and Protecting Cultural Resources. Continuation of resource stewardship by private owners is a major goal of all alternatives in this plan and would be particularly important in maintaining the cultural landscape. The National Park Service would work with other agencies and local communities to help ensure cultural resources were identified and protected during development of new or enlarged visitor facilities.

Shared expertise as well a variety of agreements and incentives could be used to preserve cultural resources. Federally funded or permitted projects must comply with the provisions of section 106 of the National Historic Preservation Act.

Visitors would be directed to public areas that can best accommodate use. Visitors would be educated about the importance of the sites and their preservation. Visitor use would be routinely monitored to ensure that resources were not damaged. If resources were threatened, protective measures would be developed. Management actions, including cooperative law enforcement, public education, and visitor management, would be used to ensure that the sense of community, trust among neighbors, and the serene nature of this recreational river continued and that resources were protected. Government-to-government consultation with Native Americans would help to prevent damage to ethnographic sites.

Museum objects and natural and cultural resource collections, archeological materials, site records, and other archival materials would continue to be the responsibility of individual land-managing agencies. Financial incentives (e.g., the National Park Service Heritage Preservation Fund grants) could be used to encourage care of artifacts from nonfederal land, such as support for local museums.

Continuing Research. Data was collected for this planning project (NPS 1994a, NPS 1994b, and NPS 1995), but site-specific inventories of cultural resources and a resource management plan (including provisions for management of collections) still would be needed.

VISITOR USE AND INTERPRETATION

Visitor Experience

Visitor experience is a phrase used to describe everything visitors do, learn, and enjoy in an area. In this plan, "visitor" refers to local people as well as those from afar. Visitor experience refers both to the experience visitors have while at the river and to the memories and insights they take with them when they leave.

The alternatives described in this *General Management Plan* would provide opportunities for people to learn about and enjoy the significance and history of the recreational river. Within the wide range of possible visitor experiences would be a number that could be reasonably provided to visitors. These are described as visitor experience goals. They contain the basic elements of what a visit to the recreational river should be — safe, informative, fun, enriching, relaxing, and memorable.

Visitors to the Missouri National Recreational River would have opportunities to

receive orientation and information before and throughout a visit to the recreational river

learn about river safety so that they can fully enjoy their recreational and cultural experiences

know that the Missouri National Recreational River is part of the wild and scenic river system

learn about appropriate activities and behaviors so that the river's resource values (threatened and endangered species, cultural resources, riparian habitats) are not adversely impacted

Interpretation and Visitor Services

Interpretation is a process of education. It stimulates curiosity and conveys ideas and stories and helps people to understand and discover deeper meanings and relationships. Interpretation is part of the visitor experience.

Visitors ask questions about lodging, food, and other basic needs when they visit the recreational river. They also ask about options for recreational activities on the river. Visitors often want to know about local history, and the Missouri River's role in western exploration and settlement. The natural history of the Missouri River area, including its wildlife and wildflowers, interests many people as well.

These types of questions can lead into the stories about the Missouri River and its inhabitants. The recreational river's interpretive themes would help to identify those stories and their contexts. Primary interpretive themes are those ideas that are central to the recreational river's purpose, resource significance, and visitor experience. Every visitor should have access to them. The themes provide the foundation for the recreational river's interpretive program, both inside and outside the recreational river boundary.

Regardless of the delivery method (personal programs, audiovisual programs, or publications), successful interpretation ties together factual information with sensory activities. The goal of the recreational river's interpretive programming would be to provide an educational and recreational experience that would lead to visitor enjoyment and protection of the resources.

Primary Interpretive Themes

The primary interpretive themes listed below serve as guidelines for describing the resources and significance of the Missouri National Recreational River. They are listed in no particular order below; there is some overlap because some themes cannot be addressed without discussing aspects of others. The primary interpretive themes would be applicable regardless of which action alternative is implemented; however, there would be differences in the emphasis placed on the themes.

Every visitor to the recreational river should have an opportunity to learn about the following ideas:

Lewis and Clark traveled the Missouri River while exploring the Louisiana Purchase.

Visitors can still see landscapes similar to those that Lewis and Clark saw.

The Missouri River, nicknamed the "Big Muddy," tells many stories of past explorations, settlements, and steamboat commerce, and of ongoing river changes. The river also influences future use and habitation.

The Missouri River has many moods, from raging and forceful to quiet and peaceful; the river has inspired many people.

There are many opportunities for people to use and enjoy the 59-mile segment of the Missouri National Recreational River. People also need to be aware of the river's dangers.

Changes to the Missouri River floodplain as a result of the construction of six mainstem dams have resulted in significant changes in plant and animal communities (including threatened and endangered species). The river requires thoughtful, cooperative management to function in a manner resembling its natural state.

The river unpredictably re-positions real estate. It can change course quickly, and shallow areas can become deep overnight.

Visitor Activities

Types and amounts of visitor use would vary by individual alternative. However, boating, fishing, hunting, and trapping would continue in all alternatives under state law. Trapping is prohibited on federally owned land administered as part of the recreational river.

Visitor Use Management

Indicators and standards would be established to protect natural and cultural resources and visitor experiences from excessive use. When resources begin to be damaged or use is excessive, the managing agency would act to avoid or mitigate damage or would control and regulate excessive use.

Visitor Development and Access

The alternatives would provide detail on the amount of development proposed. Some developed and primitive public camping would be available along the recreational river in South Dakota and Nebraska. Private property owners might provide additional campgrounds for public use. Such new development, if any, should comply with the intent and direction of this plan. There would be potential for development of scenic drives or for creation of scenic overlooks.

When constructed, the Vermillion-Newcastle bridge would provide an opportunity for an overlook and resource interpretation.

BOUNDARY

The proposed boundary for alternatives 2 and 3 would be the downstream end of the Gavins Point Dam excavated discharge channel (downstream boundary of the Lewis and Clark Project), 59 miles

downstream to Ponca Sate Park, Nebraska. The boundary has been revised from the original 1980 boundary to include areas of active erosion and four large archeological or cultural sites that are listed on the National Register of Historic Places. A portion of Clay County Park some distance from the river and some cropland has been deleted from the boundary as well.

The river and its islands are included but not used for the acreage calculations. Total acreage within this boundary proposal is about 17,414 acres. Copies of maps marked with the proposed changes to the boundaries can be seen at NPS offices in Omaha and O'Neill, Nebraska; at the U.S. Army Corps of Engineers office at Gavins Point Dam; at the courthouses in Dixon and Cedar Counties in Nebraska; and at Yankton, Clay, and Union County courthouses in South Dakota. Following completion of this *General Management Plan*, a reference to the boundary maps will be published in the *Federal Register*.

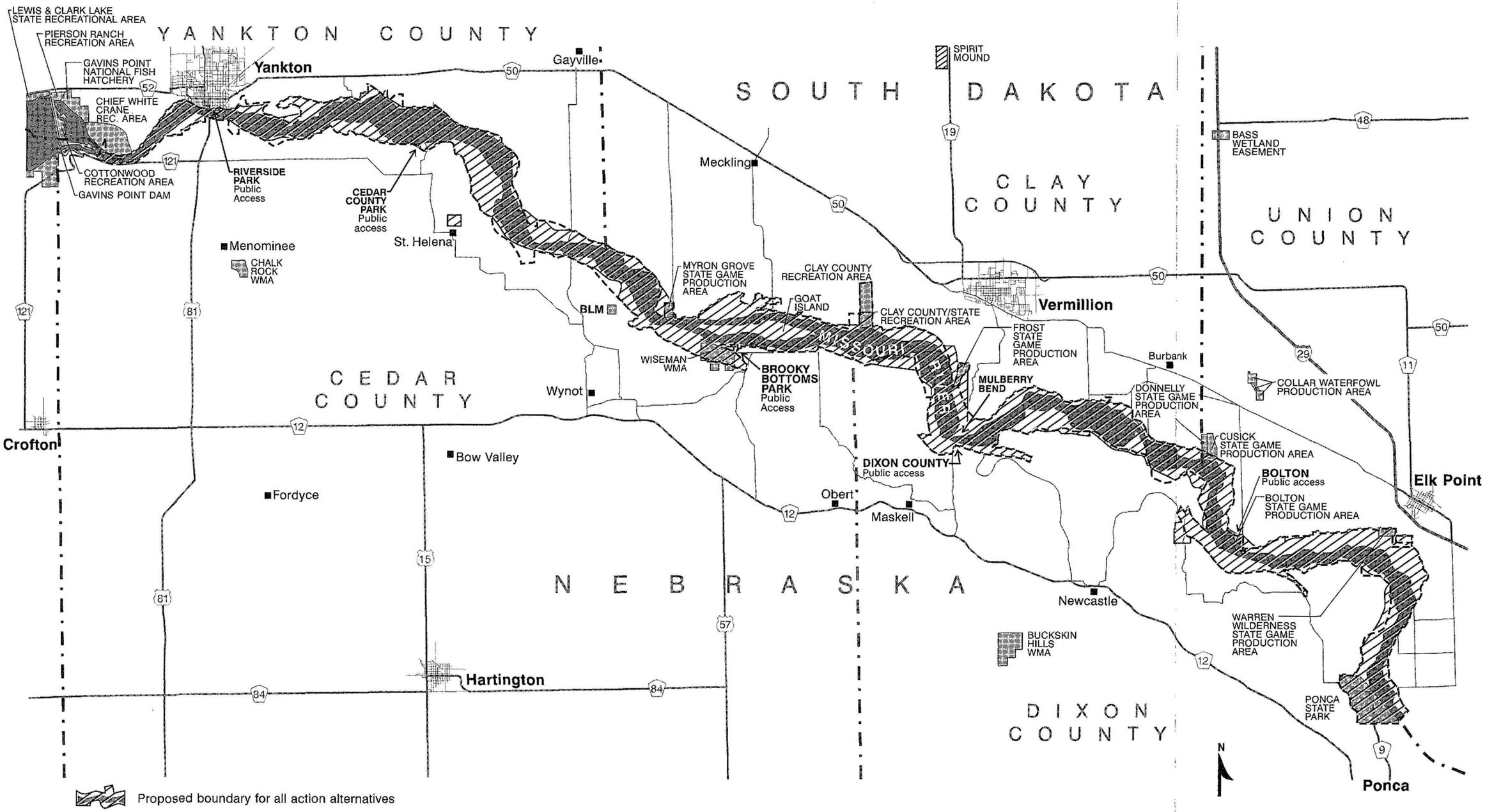
No property rights are lost on any private land inside the boundary of the recreational river. The inclusion of private land within the boundary does not mean that the land is slated for acquisition. The boundaries show only the area where resources are considered important and need protection. Lands would be acquired only if it becomes necessary for resource protection or if they are needed for recreational facilities. Since 1978 (when this river was designated), no land has been acquired.

ASSISTANCE ON ADJACENT LAND OUTSIDE THE BOUNDARY

Assistance would be provided to local governments and property owners only when requested or by consent. For example, recommendations for county zoning ordinances could protect riparian areas, steep slopes, or key vistas from intensive developments. Recommendations for county zoning could include landscape standards that would help to screen new developments from the river. The National Historic Preservation Act provides for grants, technical assistance, and educational programs to aid in preservation and protection of sites eligible for listing on the National Register of Historic Places. Designation of local historic districts or zoning could also be used to help protect these sites.

The Corps of Engineers could provide several opportunities for land protection and/or restoration under certain conditions. The section 22 program of the Water Resources Development Act of 1974, as amended (WRDA) would allow for technical assistance and funding (cost-shared) for reconnaissance-level water resources studies. Examples of potential studies include floodplain management, water supply, hydrology, recreation planning, and environmental studies. A sponsor would be required, generally from some government entity (city, county, or state). This program does not fund detailed feasibility studies or construction.

The section 1135 program of the Water Resources Development Act of 1986, as amended, would provide for technical assistance and funding for restoring habitat lost as a result of a COE project. (About 25% of the cost would be shared by a nonfederal partner.) Such programs could be used to restore habitat to compensate for changes in the river resulting from Gavins Point Dam or to create chutes and wetlands. The development of such planning tools could also be supported by federal or state technical and financial assistance.



Proposed boundary for all action alternatives

Original 1978 Missouri National Recreational River Boundary

Ordinary high water mark

Public and fee land

Agricultural land

Private development

0 3 6 9 12 MILES

0 5 10 15 20 KILOMETERS

BOUNDARY ALTERNATIVE

MISSOURI NATIONAL RECREATIONAL RIVER

United States Department of the Interior • National Park Service
DSC/Aug 1999/651/20,003B

ALTERNATIVE 2: RESOURCE PROTECTION/ RECREATION (PREFERRED ALTERNATIVE)

GENERAL CONCEPT AND PHILOSOPHY

This preferred alternative uses as a base the 1980 *Management Plan* and the *1980 General Design Memorandum*. It recognizes, however, that many aspects of those plans have not been carried out. It also recognizes that the intervening years have produced new laws to implement. Maintenance and restoration of biologic values in the Missouri River ecosystem are part of these new responsibilities. There has also been a change in public perception of the need for different levels of government to work together in partnership to increase the efficiency of all levels of government. Much of the difference between the two plans above and this preferred alternative is based in these concepts. This alternative description should be read together with the previous "Actions Common to Alternatives 2 and 3" section.

The primary goals of this alternative are to

preserve or protect natural and cultural resources

allow for streambank protection to protect croplands and wildlife habitat, as authorized and encouraged by the law

preserve and protect scenic qualities as seen from the river with minimal change

provide for low levels of visitor use in harmony with the special nature of this river and its inherent hazards

create public understanding of these goals through local interest group involvement

MANAGEMENT

Cooperative Agencies and Partnerships

The Corps of Engineers and the National Park Service could develop a revised cooperative agreement if needed. The Corps would be responsible primarily for construction of bank protection structures, recreational facilities, and other recreational river features as deemed necessary. The Corps would continue to manage river flows as outlined in the current Master Water Control Manual. Through offices in Omaha, Nebraska, the Corps would develop plans for implementation of the GMP/EIS, including design and construction, and would participate in other studies and monitoring efforts needed to ensure that the recreational river values were not impacted by proposed construction. The Corps could also offer assistance to the National Park Service for interpretive displays and features as needed.

The National Park Service would retain its role as administrator of the recreational river and would be more involved in day-to-day management activities. The National Park Service would work with counties, landowners, and others on land development and protection issues within the boundary. In lieu of the need for extensive acquisition called for in the *General Design Memorandum,* the National Park Service would seek to protect land through local partnerships and cooperative agreements. The NPS would be the lead for producing visitor information aids, preparing appropriate signing, and possibly developing historical and archeological interpretive sites away from the river. The National

Park Service would also recommend appropriate recreational development to the Corps, using the money set aside for matching grants for recreational river projects.

Both the Corps of Engineers and the National Park Service could accept donations of interests in land or work with cooperators to acquire easements to fulfill the purposes of the Wild and Scenic Rivers Act. The Corps would not, however, maintain management of donated lands, but would turn such lands over to the NPS, USFWS, the state, or counties for public management. In addition, the two agencies would work jointly on resource management issues, establishing partnerships with other agencies and private landowners to protect and enhance the values of the Missouri National Recreational River. Either agency may also seek partnerships with others to implement resource management or other activities to meet the purposes of the act. The National Park Service and the Corps would jointly host annual or semiannual public meetings in lieu of re-creating the MNRR advisory group. Host assignments would alternate between the two agencies. They would also confer on at least an annual basis on budget allocations, cost sharing, partnering, and joint projects. Both agencies would also continue to confer individually with private groups.

Land Use Management

In addition to the proposals under the "Actions Common to Alternatives 2 and 3" section, land protection objectives would maintain the rural scene, restrict intrusive development, and encourage maintenance of the landscape through local government and private means. Easements and zoning would be used to help maintain the rural scene and allow development in ways that emphasize the natural attributes of the river. Land in fee title might be acquired from willing sellers in a few cases in order to provide new public access to the river or cultural preservation and interpretation.

General Administration

Administration and Maintenance Facilities. Administrative offices and maintenance facilities for the Corps of Engineers already exist at Gavins Point. The National Park Service would operate from a nearby office, which is currently in O'Neill, Nebraska. Managers could combine existing facilities if deemed efficient to do so. Maintenance facilities would be needed by the various agencies as their responsibilities demanded. Added facilities for interpretation of cultural sites to visitors might be accompanied by a need for ranger stations and maintenance facilities. This would depend on the acquisition and the design of such facilities and the cooperating partners that might be involved.

Maintenance. The maintenance workload under this alternative would increase only slightly from current levels because few new visitor facilities are proposed. Funds to maintain existing facilities are presently budgeted by various federal, states and local agencies. Funds would need to be budgeted by the Corps of Engineers or National Park Service for any new facilities that are built. Funds would be needed for added work proposed to maintain and enhance habitat, as well as to assist in maintenance of any trails that are constructed.

Law Enforcement. Local, state, and federal governments would have existing law enforcement responsibilities in the project area, and cooperative relations would be sought. However, the National Park Service would retain and would intend to fully exercise federal law enforcement responsibilities on the water surfaces and on lands it owns in accordance with the administration of the national park system, the Wild and Scenic Rivers Act, and the act establishing the Missouri National Recreational River.

Staffing Needs. The Corps would have minimal existing support staff under this alternative. NPS involvement could be handled as collateral duty by staff assigned to the Niobrara National Scenic River and the Missouri/Niobrara/Verdigre Creek National Recreational Rivers. The NPS employees could be located close to the river and could be supervised as a subunit by staff at the O'Neill office.

Federal Costs. Cost categories include:

Category	COE Costs	NPS Costs
Labor	$80,000[a]	$283,000[b]
Equipment, supplies, materials, and transportation	5,000	95,000
Grants, contracts, agreements, and cost-sharing with cooperators		30,000
Technical and planning assistance for adjacent property owners		25,000
Land acquisition (both fee and easement)		100,000
Cultural and natural resources research		65,000[c]
Resources monitoring / studies	50,000	3,000[d]
Interpretive media at key river sites	20,000	128,000[e]
Develop two new river access sites, plus trails and roads	-----[f]	
Total	**$155,000**	**$729,000**

[a] Project manager GS-11, half-time; plus two design/construction engineers to prepare the *General Design Memorandum;* GS-12, one-fourth time. Does not include overhead costs associated with labor.

[b] Park manager, GS-13, one-third time; full-time employees: outdoor recreation planner, GS-12; two park rangers, RM&VP, GS-9; two maintenance workers, WG-7; administrative technician, GS-7

[c] One study annually

[d] One overflight and two boat trips annually and monthly onsite inspections

[e] Sixteen waysides (low profile/upright wayside exhibit) @ $6,000–8,000 each

[f] Construction costs to be developed in the *General Design Memorandum*, after nonfederal cost-share sponsor shows interest

There are no priorities associated with these costs; all are equally important. The managing agency would be the partnership of the Corps of Engineers, the National Park Service, and state and local governments. Therefore, presumably some of the above funds would come from the NPS budget and some from the other governments. The relative proportion of these funding sources is yet to be developed.

TABLE 2: ALTERNATIVE 2 — LAND USE/LAND COVER

Land Use/Land Cover Category	Public Land (acres)	Private Land (acres)	TOTAL (acres)
Cropland	335	7,163	7,499
Pasture/rangeland	188	2,526	2,714
Upland wooded forest	1,107	2,441	3,548
Floodplain forest	3	565	568
Palustrine wetlands	36	4,529	4,565
Riverine wetlands	193	15,422	15,615
Lacustrine wetlands	0	0	0
TOTAL	**1,863**	**32,646**	**34,509**

Numbers were rounded off to the nearest whole acre. The 34,509 acres include 17,414 acres above the ordinary high watermark.

RESOURCE MANAGEMENT

The primary goal of resource management under this alternative would be to protect and enhance Missouri River values as a relatively natural ecosystem with the following objectives:

- in accordance with the *Master Water Control Manual and Operating Plan*, allow for the seasonal high riverflows necessary for maintaining important river habitats and species*
- protect biologically valuable habitats essential to the river ecosystem through private and public means
- maintain the present scenic qualities as seen from the river with minimal change
- educate visitors about threatened and endangered species, protection and enhancement of biologic values, river processes, and the cultural resources and events that tell the story of the river
- provide for low levels of visitor use in harmony with the special nature of this river and its inherent hazards
- provide for recreational home development in harmony with the above objectives through local means and appropriate standards

*This *Final General Management Plan / Environmental Impact Statement* is consistent with the existing *Master Water Control Manual* and recognizes that the *Master Water Control Manual* is being updated. Flow releases from the dam are outside the scope of this plan, but the National Park Service, as administrator of the MNRR, favors an alternative that would protect and enhance the values for which the national recreational river was included in the national wild and scenic rivers system. In reaching a decision on the update of the *Master Water Control Manual,* the Corps will consider the needs of the MNRR along with the other needs of the Missouri River basin.

Streambank Protection

Streambank protection to protect croplands and wildlife habitat is authorized and encouraged by the law. Some erosion and expansion of banks might occur because the river has not yet stabilized to a post-dam condition. Streambank erosion control for agricultural land would have high priority if it could also provide new significant habitat. When feasible, erosion control structures would incorporate features to improve aquatic habitat and create new habitat and would be designed to give the appearance of a natural bank under normal flow conditions. Streambank erosion control should include experimentation with softer, environmentally sensitive methods using natural appearing and other approved materials. Purchase of rapidly eroding banks from willing sellers may be considered, if cost effective under Corps of Engineers policy, as an alternative to stabilization. Such purchase may also provide sediment to the river ecosystem. Section 10/404 streambank protection permits would include conditions to ensure the protection of threatened and endangered species and significant biological resources.

Natural Resources

General. Natural resource management would act to preserve and protect wildlife, instream habitat, and the natural function of the river. A primary emphasis would be on protection of species of special concern.

Management of Biologic Resources. This alternative would emphasize management for conserving, protecting, and enhancing riverine biologic values on public land and could include incentives for private property owners to improve the quantity, quality, and diversity of native wildlife and fishery habitat in the riverine-riparian ecosystem. Federal funding for biological resource protection would be available where the chances of success are high and the relative costs are low. Under the joint leadership of the Corps of Engineers and the National Park Service, other agencies, local entities, and private owners would work together to manage for the protection, restoration, and enhancement of biologic values.

Maintenance, protection, and enhancement of biologic values in the Missouri River ecosystem would be emphasized in this alternative. The meandering river, eroding banks, sandbars, backwater areas, cottonwood forests, and instream snag habitat were characteristics of the pre-dam river that would be maintained where feasible to compensate for the effects of the mainstem dams. Floodplains, wetlands, and nesting sandbar islands would be emphasized.

Strategies aimed at accomplishing biology-related objectives would be pursued through the annual work plans of the cooperating agencies. These objectives should be balanced to achieve the best effect. Within the constraints represented by a managed riverflow and the conversion of much of the old floodplain to agricultural crops, the biological objectives for the Missouri National Recreational River are

to maintain viable populations of native plants and animals well distributed throughout their geographic range

to maintain genetic variability in and among populations of native species

to maintain representative examples of the full spectrum of ecosystems, biological communities, habitats and their ecological processes

to implement management solutions at the landscape level that integrate human activities with the conservation of biologic resources

To accomplish these objectives, the Corps of Engineers and National Park Service would be aware of and concerned about the health of the surrounding watershed. Restoration would be focused on securing relatively healthy areas where the chances of accomplishing biological objectives are the greatest, expanding riparian and floodplain restoration, and developing carefully designed restoration strategies.

On private land, riverine protection could be more narrowly applied to riparian buffers and undeveloped floodplains along with other biological hotspots or intact riverine habitat patches. Programs of agencies that provide riverine habitat and open space would be supported. Implementation on private land would be through "bottom up" local protection and restoration efforts, incorporating minimum federal standards and regulations along with a flexible package of financial incentives, funding options, and technical assistance so that locally developed protection programs evolve. Other available assistance programs include the Corps of Engineers section 22 and 1135 programs (see the "Assistance on Adjacent Land Outside the Boundary" section in Actions Common to Alternatives 2

and 3). For the most part, case studies demonstrate that the productivity of degraded riparian areas can be restored, usually with a net gain in livestock forage.

Monitoring of Resources. Significant resources, such as shrub wetlands and floodplain forests, oxbows, islands, and sandbars, would be inventoried and monitored with emphasis on accomplishing goals and biological objectives. The managing partners would determine the means and magnitude for implementation of a monitoring program.

Threatened and Endangered Species. This alternative emphasizes the need for endangered species habitat creation efforts, including those for state-listed species, while recognizing that implementation would depend primarily on the commitment of other agencies and the private sector. The managing agencies would coordinate with the U. S. Fish and Wildlife Service, Nebraska Game and Parks Commission, and the South Dakota Department of Game, Fish, and Parks to further identify, protect preserve, and enhance federally and state-listed species and their habitat.

Cultural Resources

Management of Cultural Resources. This alternative proposes management activities that would emphasize the history and culture of the river and its surroundings. The emphasis would be secondary to the stress placed on biological goals, but visitors would be also able to learn about the historic importance of the area. There would be a greater understanding of the use of the river and its valley from prehistoric times, through the period of exploration and settlement, to the present. The landscape would retain much of its present character, intrusive development would be limited, and maintenance of the landscape beyond the boundaries would be encouraged. Cooperation among local communities and state and federal agencies would be sought to manage, protect, and interpret the resources in the river valley that relate to the rich history of the Missouri River while meeting biological goals of this alternative.

Cultural Resource Inventory, Evaluation, and Monitoring. Because unknown resources cannot be interpreted or managed effectively, cultural resources would be inventoried to document known and unknown sites. Areas threatened by vandalism, erosion, or natural resource management actions and sites proposed for interpretation would have the highest priority for documentation. Resources would be evaluated for their national register significance and integrity, and national register eligible properties would have priority for monitoring.

Preserving and Protecting Cultural Resources. This alternative makes no recommendations for acquisitions of specific sites. Instead, it recognizes that local cooperative resource protection efforts, including public heritage education, a local heritage preservation commission, archeological watch programs, and local participation in federal or state preservation programs are the best methods for protecting cultural resources.

Where personnel and funding were available, the National Park Service could offer technical assistance (e.g., regional or center historic preservation specialist or archeologists) and financial incentives (through NPS Heritage Preservation Fund grants). Sites outside the boundaries but in the river valley could be included in preservation and interpretation efforts through cooperative agreements or financial and technical assistance. Funding assistance could also be provided for access to cultural sites outside the boundary if the site is needed to help visitors understand the river's history, is nearby, and improved access is in the best interest of the site.

Sites vulnerable to damage from trampling, looting, or vandalism should be stabilized to prevent erosion or architectural damage by the owner or local entities. Artifacts should be inventoried and

collected as appropriate. The level of site access could be modified based on the best interest of the site and any potential for visitor use. Where national register-eligible resources were threatened and no protective measures were in place, acquisition of conservation easements or fee title to selected sites could be necessary.

Agencies would follow environmental and historic preservation laws and regulations when modifying areas to enhance natural river processes and protection/restoration of biologic values or during renovation of existing visitor facilities. If needed, mitigating measures would be developed by the managing agency in consultation with the Nebraska and South Dakota state historic preservation officers. Protective measures such as routine law enforcement patrols could be established if the need arose.

Continuing Research. Research programs, such as oral histories or archeological excavations, would help involve the community in resource protection while contributing to scientific knowledge about the area.

VISITOR USE AND INTERPRETATION

The visitor experience would emphasize the continuation of high quality wildlife observation, hunting, fishing, and boating in a relatively natural setting. Visitors would be able to have a quiet, contemplative experience on the river and would have a sense of discovery reminiscent of Lewis and Clark and other early travelers.

The interpretive theme emphasis would be on the Missouri River's natural systems, including the potential restoration of some areas. People would have opportunities to learn about the Missouri River's natural heritage and to learn about and help protect species of special concern. Interpretation would also highlight the 59-mile segment's rich history and culture. The visitor experience would also focus on visitor enjoyment of the character of the rural agricultural scene. Messages concerning visitor responsibility for protecting cultural resources would be presented.

Interpretation

Essential informational and orientation messages focusing on boating, hunting, and fishing, and safe river use would be provided. These messages would also emphasize visitor responsibility in conserving and protecting species of special concern.

Interpretive programming would focus on the river's natural resources and would emphasize changes to the river and the efforts of agencies to mitigate adverse effects. Interpretation and education would be offered both inside and outside the recreational river boundaries. Programs would use a variety of methods, such as environmental education programs in local schools and in neighboring communities. An effort would be made to build a local constituency to help protect the river's natural values.

An interpretive and educational program would be developed to focus on the interconnection between cultural and natural resources and changes to the river over time. A variety of interpretive methods would be used, including written educational materials and interpretive displays at river access sites. Basic orientation and information for visitors would be provided, and interpretation and heritage education would be developed around the historic and cultural resources of the area.

The National Park Service would work cooperatively with local and regional school districts, historical societies, ethnic organizations, and others to interpret and celebrate the recreational river story. Volunteers would be sought to supplement these efforts.

Visitor Activities

River-based activities for visitors would be low key and would complement the natural values of the river. Present uses of the river, including boating, fishing, hunting, and trapping, would continue on nonfederally owned park land.

River-based activities would respect the natural values of the river. Very few federal services would be provided, and visitors would have to watch for sandbars, floating debris, and snags. The sense of remoteness would add to the quality of the visit for some people. Existing uses would continue and conflicts would be avoided between different user groups by keeping visitor uses at present levels.

Visitor Use Management

The managing agency would encourage river users to enjoy the river in ways that were consistent with the river's values. Resource protection and land stewardship messages would be presented through interpretation.

The emphasis on river history and cultural resources would assist in dispersing visitors beyond the boundaries. Visitors would have more places to learn about the history of the river and more ways to understand the river.

Visitor Development and Access

Development of new visitor or staff support facilities, including river access, would not be extensive. Such development would be kept outside significant resource areas. Where possible, land-based visitor services and facilities would be developed outside the recreational river boundaries on public land or private land through cooperative efforts. Some development of interpretive facilities would allow visitors to appreciate the Missouri River as an historic highway. Development of new river access sites could be at two locations: one near Elk Point and one between Myron Grove and Yankton, both in South Dakota. The safety and appearance of public access facilities would be improved, but not with the intention of expanded use.

Additionally, new hiking opportunities would be provided for visitors to explore and learn about cultural resources of the river on both sides of the river. New trailheads would be small and might require new or improved access roads. New trails would be designed for low impact and would be self-guided interpretive nature trails contributing to the aesthetic and educational aspects of the recreational river. Decisions about the number and locations of such facilities would be made in cooperation with neighboring agencies and private individuals. The purchase of a trail easement might be required. The managing agency might assist with funding a portion of trails, trailheads, and related work.

ALTERNATIVE 3: RECREATIONAL EMPHASIS

GENERAL CONCEPT AND PHILOSOPHY

This alternative proposes management and interpretation of the river that would provide enhanced recreational opportunities for visitors. In this alternative, the river would be considered underused, and actions described in this alternative would increase use and allow enjoyment by a greater number of people without destroying the special qualities of the river. Access points would be dispersed to prevent crowding. Visitors would have a greater understanding of the special qualities of the river. Interpretation of cultural resources would be important for resource protection as well as for visitor education and enjoyment.

Implementation of recreational objectives would be emphasized, as long as they were consistent with the need to protect natural and cultural resources and endangered species habitat. This alternative would seek to maintain natural features in the river corridor, such as sandbars and beaches, backwater areas for recreational fishing, and open space and picnic areas. Visitor use would be encouraged and visitor opportunities would be expanded, which could include some compatible private development, without adversely affecting significant natural or cultural resources or other private property owners.

MANAGEMENT

Cooperating Agencies and Partnerships

A revised cooperative agreement between the Corps of Engineers and the National Park Service could be written if needed and signed by both agencies as described under alternative 2. The other management concepts in that alternative would be true of this alternative also.

The National Park Service as "administrator" would work with states, counties, landowners, and others on land development and protection issues from the riverbanks outward within the boundaries. Closer coordination with these entities might be needed because of the generally more permissive development standards of this alternative. The extensive acquisition called for in the *General Design Memorandum* would still not be needed here, however. The National Park Service would also lead in providing greater levels of visitor information aids, appropriate signing, and the possible development of historical and archeological interpretive sites away from the river, in concert with the anticipated higher levels of use. The National Park Service might recommend the development of appropriate recreational facilities to the Corps of Engineers.

Land Use Management

Private and public recreation development, including river access points, scenic roads, trails, and visitor structures, would remain, and future opportunities for expansion would be sought. Residential and other private development would remain, and future expansion would be allowed. Land needed for visitor facilities would be acquired from willing sellers. Ranching and farming would be expected to continue.

County zoning would be encouraged in this alternative. Easements, zoning, or tax incentives would be used to control development. Land in fee title might be acquired from willing sellers by the federal government in order to provide visitor facilities and access points.

General Administration

Administration and Maintenance Facilities. In recognition of its larger responsibilities for boat ramps, trails, and campgrounds, the National Park Service would need facilities and offices near the river. The new facilities for visitor use would require ranger and maintenance facilities.

Maintenance. The maintenance workload under this alternative would increase from present levels because new visitor facilities are proposed. Funds to maintain existing facilities are budgeted by various federal, state, and local agencies. Funds would be budgeted by the National Park Service for operation and maintenance of new facilities.

Law Enforcement. Law enforcement responsibilities would be carried out as described under alternative 2.

Staffing Needs. In addition to the current levels of staff for the Corps of Engineers and the National Park Service, additional NPS employees would be needed to handle the added duties. Greater staff time would be involved in developing interpretation, negotiating cooperative agreements with local governments and individuals, managing campgrounds and trails, and coordinating law enforcement both on and off the river. The NPS employees could be located close to the river and could be supervised as a subunit by staff at the O'Neill office.

Federal Costs. Cost categories include:

Category	COE Costs	NPS Costs
Labor	$120,000[a]	$434,000[b]
Equipment, supplies, materials, and transportation	5,000	145,000
Grants, contracts, and agreements and cost-sharing with cooperators		30,000
Technical and planning assistance for adjacent property owners		25,000
Land acquisition (both fee and easement)		100,000
Provide two to four new campgrounds, including access roads	------[c]	
Develop two new river access sites, plus trails and roads	------[c]	
Develop two scenic overlooks	------[c]	
Cultural land natural resources research		130,000
Resources monitoring / studies	60,000	
Assistance in developing interpretive sites, bulletin boards, kiosks, and publications	20,000	
Total	**$205,000**	**$864,000**

[a] Project manager GS-11, three-fourths time, plus two design/construction engineers half-time, plus one interpretive ranger one-fourth time. These are upfront costs and do not include overhead costs associated with labor.

[b] Park manager, GS-13, one-third time; full time: unit manager, GS-12; outdoor recreation planner, GS-12; two park rangers, I&VS, GS-9; park ranger, RM&VP, GS-11; two maintenance mechanics, WG-9; administrative technician, GS-7; part time: four park ranger-interpreters, GS-4; two motor vehicle operators, WG-4.

[c] Construction costs will be developed during the development of the *General Design Memorandum*, after a nonfederal cost-share sponsor shows interest.

Remaining costs would be developed prior to finalizing this plan. There are no priorities associated with these costs; all are equally important. The managing agency would be the partnership of the Corps of Engineers, the National Park Service, and state and local governments. Therefore, presumably some

of the above funds would come from the NPS budget and some from the other governments. The relative proportion of these funding sources is yet to be developed.

RESOURCE MANAGEMENT

The implementation of recreational objectives would be emphasized in this alternative. That may result in more activities directed at maintaining existing habitat rather than seeking opportunity to increase or enhance habitat. There would be a need however to meet all of the existing requirements in law to protect natural and cultural resources and endangered species habitat. The natural features in the river corridor, such as sandbars and beaches, backwater areas for recreational fishing, and open space and picnic areas, would be monitored and maintained. Interpretation of cultural resources would be important for resource protection as well as for visitor education and enjoyment.

Streambank Protection

Streambank erosion control could be used to protect land, residences and other significant structures (barns, silos, and others), as long as significant biological resources and recreational values were uncompromised. Some new stabilization projects could be needed to facilitate access and safe use of the river by larger numbers of visitors. In addition, more riverfront development might result in an increased need for streambank protection in order to protect investments.

Natural Resources

General. Natural resource management would occur as required by federal, state, and local laws and regulations; however, an emphasis would be placed on providing opportunities for fishing, hunting, trapping, and nature study. Trapping is not permitted on federal land administered for the purpose of the recreational river. Habitat important to threatened and endangered species would continue to be protected. This could be accomplished through timing of recreational use and patrolling of sensitive resource sites.

Management of Biologic Resources. The Corps of Engineers and the National Park Service, in cooperation with the U. S. Fish and Wildlife Service, state wildlife agencies, and local entities and property owner groups, would work together to manage for the protection, restoration, and enhancement of biologic values. Generally, management for protecting and enhancing biologic resources would be less intensive than alternative 2. Improving backwater areas and adding sandbars to increase recreational fishing opportunities may also benefit biological resources.

Monitoring of Resources. The National Park Service and Corps of Engineers would assist in the monitoring of resources within the recreational river. The Corps efforts would likely focus primarily on riverine species, while the NPS efforts would likely focus on terrestrial species; however, neither would be precluded from assisting the other with their efforts.

Significant resources within and adjacent to the river would be inventoried and monitored in order to protect them from increased visitor use and recreational activities. Visitor activities that could result in harmful effects on threatened and endangered species would be restricted to a level that would not harm the species. For example, restrictions could prohibit camping, picnicking, and sports or games on tern and plover islands.

Threatened and Endangered Species. Management of threatened and endangered species and their significant habitat would be less intensive than in alternative 2, but adding to jeopardy situations for endangered species would be avoided. For example, habitat improvement that also enhances fishing or other recreational opportunities, would be emphasized under this alternative.

Cultural Resources

Management of Cultural Resources. The emphasis on recreation in this alternative would include the recreational value of understanding the history of human use in the river valley. Cultural resource management would focus largely on the development of historic resource interpretation, balanced with protective measures for significant sites.

Cultural Resource Inventory, Evaluation, and Monitoring. Resources would be inventoried and evaluated for national register significance. Areas proposed for concentrated visitor use or development would have the highest priority for survey and evaluation. Properties eligible for the National Register of Historic Places and sites located in areas of high visitor use or proposed for interpretation would be monitored, and appropriate mitigation measures would be developed to help ensure these resources are not impacted during increased visitor recreational activities.

Preserving and Protecting Cultural Resources. Public education, site documentation and stabilization, and development of mitigating measures would be crucial to prevent damage to sites located in high visitor use areas. Law enforcement would also be vital to protect sites and to help ensure that visitor use does not intrude on private property owners. Frequently, significant cultural sites are best protected from irretrievable loss through their anonymity. Where funding was available, incentives such as heritage preservation grants, could be used to encourage resource preservation. National register-eligible sites would have the highest priority for protection. Where there was no other alternative for resource protection, funding would be sought to purchase the site.

Continuing Research. Research would be the same as described for alternative 2.

VISITOR USE AND INTERPRETATION

The visitor experience would include a range of recreation and public use opportunities beyond what is presently available. People of all ages and abilities would enjoy river activities that do not interfere with others and that do not adversely impact river resources. Quiet contemplative activities, consistent with river values, would be encouraged.

Interpretation

Interpretive facilities and programming would include a broad range of information, orientation, and interpretation services that would emphasize recreational options as well as safety messages. Interpretation would emphasize all of the river's natural, cultural, and recreational themes. Messages concerning resource stewardship and respect for private property rights would also be presented. Interpretive services could be provided both within and outside of the river boundary. With the exception of vulnerable cultural sites, most interpretation would be provided through self-guiding methods.

Some visitors would need information and other kinds of assistance requiring the managing agency to provide more publications, information kiosks, wayside exhibits, and seasonal contact stations in dispersed locations convenient to areas of visitor congregation.

Visitor Activities

Current uses of the river would continue. Additional recreation would be made available through the development of new campgrounds, hiking and biking trails, scenic roads, and visitor contact facilities.

Visitor Use Management

Visitors would have more places to visit and more ways to use the recreational river under this alternative.

Visitor Development and Access

Development would be planned to enhance visitor services and an appreciation of the Missouri River as a historic highway. Public access facilities would be improved to address safety and appearance concerns and to serve a greater number of visitors. Development would support expanded visitor services that would be provided in more places. New land-based visitor facilities could be built at existing or new access sites to meet visitor information needs. The managing agencies might seek partners to build or operate facilities. Land would have to be acquired for these facilities, or cooperative agreements would be arranged with public and private owners. Visits would be encouraged through active support of land- and water-based activities. Development of new river access sites is proposed at only two locations: one near Elk Point and one between Myron Grove and Yankton, both in South Dakota. The safety and appearance of public access facilities would be improved. The intention would be to provide more opportunities to accommodate expanded use.

The National Park Service would work with counties to guide development and growth in a manner appropriate to the goals of the riverway. One or two campgrounds would be provided on each side of the river. The location of the campgrounds has not been determined. Sites would be chosen based on reasonable access to major roads; nearby geographic, cultural, or natural features of interest; lack of conflict with other nearby land uses; and dispersal along both sides of the river. Private property owners would be encouraged to provide these campgrounds, or if not provided by the private sector, the managing agency would build them. New campgrounds might require new or improved access roads. The managing agency might choose to assist with funding the roadwork done within the boundaries.

The National Park Service would work with local entities to identify new hiking trail opportunities. As trails were conceived and willing sellers of land were identified, the trails might be built. New trailheads would be small and might require new or improved access roads. The number or location of such facilities has not been determined. Sites would be chosen based on connecting river-related features or where loop trips could be routed to include geographic, cultural, or natural features of high interest. They would be provided along routes that would minimize conflicts with other activities. The routes would be chosen in cooperation with potential cooperators. The National Park Service or the Corps of Engineers might choose to assist with funding a portion of trails, trailheads, and related work within the boundaries.

ASSISTANCE ON ADJACENT LAND OUTSIDE THE BOUNDARY

Local entities would be encouraged to foster the development of tour routes and scenic overlooks along the river. Such facilities would help visitors gain an understanding of the river and the role it played in the region's history. For the most part, these roads would be located outside the river boundary in order to obtain the most scenic views. In addition, the National Park Service would work cooperatively with local governments to provide more sites for visitors to learn about the natural and cultural history of the river and region. The National Park Service might assist with planning (but not construction or maintenance) of scenic roads outside the boundary as long as the roads were within the boundary or within view of this portion of the Missouri River valley.

TABLE 3: SUMMARY OF ALTERNATIVES

Action	*Alternative 1:* Continuation of Existing Conditions (No Action)	*Actions Common to* Alternatives 2 and 3	*Alternative 2: Resource* Protection/Recreation (Preferred Alternative)	*Alternative 3:* Recreational Emphasis
Concept	The National Park Service would continue as overall administrator of the recreational river; the Corps of Engineers would continue its current management presence; and the *General Design Memorandum* (GDM) would remain in effect.	Protection of natural and cultural resources and management of visitor use would be provided. Traditional farming and ranching practices on private land would continue. Landscape changes would be managed primarily through the use of relatively nonintrusive tools. Acquisition of easements or fee land would occur only when less intrusive means failed.	1980 *Management Plan* and 1980 GDM would be used as a baseline; the primary goals would be as follows: natural and cultural resources would be maintained and enhanced; streambank protection would protect croplands; scenic qualities would be maintained; low levels of visitor use would be accommodated; local interest group involvement would be established.	Management and interpretation of the river would provide enhanced recreational opportunities. Visitor use would be encouraged without destroying the special qualities of the river. There would be increased, but dispersed, access points.
Management	Cooperative agreement details respective roles of NPS and COE. The Corps would continue management of some recreational development in partnership with local agencies. Varied federal, state, and local law management would continue.	Several government agencies would continue to have responsibilities along the MNRR. Management would be the responsibility of the NPS and COE. The NPS would be administrator or overseer and the Corps would be the day-to-day onsite manager. If needed, a revised cooperative agreement would reflect current policies and authorities.	The Corps and the National Park Service could develop a revised cooperative agreement. Each would have specific responsibilities. The Corps would continue to manage river flows as outlined in the current Master Water Control Manual.	A revised cooperative agreement could be written and signed by both agencies as described under alternative 2. Other management concepts would be the same as alternative 2.

Action	Alternative 1: Continuation of Existing Conditions (No Action)	Actions Common to Alternatives 2 and 3	Alternative 2: Resource Protection/Recreation (Preferred Alternative)	Alternative 3: Recreational Emphasis
Land Use Management	Ranching and farming would continue under the management of individual property owners. If current conditions continued, there would be no federal land acquisition in fee. Land acquisition along the river by counties and by both states for several recreational sites and access on both sides of the river might continue. Existing residential and other private development areas would remain. New developments are proposed and would be built within the boundary from time to time.	The Corps and the National Park Service would share the responsibility of overseeing and coordinating the management of the MNRR. The National Park Service would retain overall authority to administer the MNRR as a component of the wild and scenic rivers system, and the Corps would continue to be responsible for most construction activities, with advice provided by the National Park Service. There could be a revised agreement between the NPS and COE, with the NPS role being somewhat larger than now. The river managers would work with landowners to protect as much land within the boundary as possible.	Land protection objectives would maintain the rural scene and allow development in ways that emphasize the river's natural attributes. Land in fee title might be acquired to provide new public access to the river or cultural preservation and interpretation. County zoning would be encouraged.	Private and public recreation development would remain and future opportunities for expansion would be sought. Land needed for facilities would be acquired from willing sellers; ranching and farming would continue. County zoning would be encouraged.
Visitor Development and Access	Existing roads and public river access would likely occur slowly in response to local needs. River users would continue to be primarily local people. The Corps could provide cost-share funding for development of scenic drives, trails, etc., provided funding was available. Controls over private and commercial development along the river would be limited to federal floodplain restrictions plus state and county restrictions. Cabin and housing areas would be developed or enlarged based on market demand, and private property owners might provide additional campgrounds for public use.	Detail would be provided on the amount of development proposed. Some developed and primitive public camping would be available along the recreational river in South Dakota and Nebraska. Private property owners might provide additional campgrounds for public use. Such new development should comply with the intent of the plan. Scenic drives or creation of scenic overlooks could be developed.	Development of new visitor or staff support would not be extensive. New hiking opportunities would be provided for visitors to explore and learn about cultural resources on both sides of the river. New river access sites would be near Elk Point and between Myron Grove and Yankton, SD. Safety and appearance of access facilities would be improved.	Development would support expanded visitor services and new land-based facilities. Private property owners would be encouraged to provide one to two campgrounds on each side of the river; campgrounds could be built by the managing agency. The National Park Service would work with local entities to identify new hiking trail opportunities. New river access sites would be near Elk Point and between Myron Grove and Yankton, SD. The National Park Service and the Corps might choose to assist with funding the roadwork, a portion of trails and trailheads, and related work.

Action	Alternative 1: Continuation of Existing Conditions (No Action)	Actions Common to Alternatives 2 and 3	Alternative 2: Resource Protection/Recreation (Preferred Alternative)	Alternative 3: Recreational Emphasis
General Administration	Maintenance workload would remain the same; maintenance of projects built with matching funds from the Corps would be the responsibility of the cost-share sponsor, with the exception of endangered species construction. Law enforcement would continue to be provided occasionally by state and local authorities to manage visitor activities. Corps and NPS staffing needs would be minimal. The Corps and the National Park Service would each have one part-time employee.	Facilities related to habitat development and management would be provided by state and federal agencies as funding allowed. Current sharing of law enforcement responsibilities across jurisdictional lines would be encouraged. Facilities would be provided by the Corps as funding allowed; current sharing of responsibilities across jurisdictional lines would be encouraged.	Maintenance facilities would be needed by various agencies as responsibilities demanded. The maintenance workload would increase only slightly from current levels. The Corps and the National Park Service would need to budget funds for any new facilities. Additional funds would also be needed for added work. Local, state, and federal governments would have existing law enforcement responsibilities and cooperative relationships would be sought. The Corps would have minimal existing support staff under this alternative, and the National Park Service would have six full-time and one part-time employee.	Facilities and offices would be near the river. Maintenance workload would increase. Law enforcement would continue to be provided by existing state and federal authorities. Additional NPS staffing would be required. The NPS would have eight full-time and six part-time employees.

Action	Alternative 1: Continuation of Existing Conditions (No Action)	Actions Common to Alternatives 2 and 3	Alternative 2: Resource Protection/Recreation (Preferred Alternative)	Alternative 3: Recreational Emphasis
Resource Management	**Natural:** The National Park Service would encourage property owners to conserve or restore lands and the ecosystem to their natural state. Natural resources would mostly be managed and protected by private property owners and state wildlife agencies because much of the habitat protection work in the *General Design Memorandum* has not been realized. Resource management of threatened and endangered species would involve activities by the Corps, in consultation with the U.S. Fish and Wildlife Service, the National Park Service, and Nebraska and South Dakota.	**Natural:** Implementation of all existing plans for the river by federal, state, and local partners would continue. The managing agency and partners would cooperate in the inventory and monitoring of river-related resources and coordinate management of protection/ restoration and enhancement of biologic resources. Floodplains and adjacent wetlands would be protected to the greatest extent possible. Federal and state endangered and threatened species would continue to be protected in all areas under federal or state jurisdiction.	**Natural:** The Missouri River would be protected and enhanced as a relatively natural ecosystem. Natural resource management would act to preserve and protect wildlife, instream habitat, and the natural function of the river. Maintenance, protection, and enhancement of biologic values would be emphasized. Streambank protection to protect croplands and wildlife habitat is authorized and encouraged by the law. Floodplains, wetlands, and nesting sandbar islands would be inventoried and monitored. Federal and state-listed species would be further identified, protected, preserved, and enhanced.	**Natural:** Federal, state, and local groups would work together to manage natural resources and for protecting and enhancing biologic resources, but it would be less intensive than alternative 2. Emphasis would be placed on offering opportunities for fishing, hunting, trapping, and nature study. Backwater areas and sandbars would be opened to recreational use. Situations that would jeopardize endangered species would be avoided. Significant resources would be inventoried and monitored by the National Park Service and the Corps.
	Cultural: The Corps' responsibility would continue to be limited to protecting archeological resources on its own land. Private property owners and government agencies would continue to manage resources on their land, and minimal law enforcement would be available to reduce the minimal levels of looting or vandalism. Federal undertakings that could affect national register or national register eligible properties would be subject to section 106 of the National Historic Preservation Act. Future research would be limited to state historical societies and local historians.	**Cultural:** Cultural resources would be managed through cooperative efforts of property owners, public interest groups, local communities, and government agencies. The National Park Service, in cooperation with state historic preservation officers, would identify cultural resources inside the boundary and evaluate their significance and integrity using national register criteria. The National Park Service would work with other agencies and local communities to help ensure cultural resources were identified and protected during development of new or enlarged facilities.	**Cultural:** Management activities would emphasize the history and culture of the river and its surroundings. Local cooperative resource protection efforts would be used for protecting cultural resources. When personnel and funding were available, the National Park Service could offer technical assistance and financial incentives. Sites vulnerable to damage should be stabilized and artifacts inventoried and collected as appropriate. Research programs such as oral histories and archeological excavations would be used for resource protection.	**Cultural:** Cultural resource management would be focused largely on interpretation of historic resources, balanced with protection of significant sites. Significant cultural resources would be inventoried, evaluated, and monitored to protect them during increased visitor recreational activities. Public education, site documentation and stabilization, and development of mitigating measures would be used to prevent damage to sites in high visitor use areas.

Action	Alternative 1: Continuation of Existing Conditions (No Action)	Actions Common to Alternatives 2 and 3	Alternative 2: Resource Protection/Recreation (Preferred Alternative)	Alternative 3: Recreational Emphasis
Visitor Use and Interpretation	The visitor experience would be limited to activities and interpretation currently available on the river; interpretation and information would continue to be available through publications from local tourism and economic development offices; visitor use would remain primarily local, with a modest increase in visitation. Boating, fishing, hunting, and trapping would not be expected to change from current levels.	Visitors would have opportunities to learn about and enjoy the significance and history of the recreational river. The primary goal of interpretive programming would be to offer an educational and recreational experience that would lead to visitor enjoyment and protection of the resources. Primary interpretive themes would serve as guidelines for describing the resources and significance of the river. The managing agency would act to avoid or mitigate damage or would control and regulative excessive use of resources.	Same as Actions Common to Alternatives 2 and 3.	A range of recreational and public use opportunities would be offered beyond what is now available. Interpretation would emphasize all the river's natural, cultural, and recreational themes. Interpretation services could be provided within and outside the river boundary. Current use of the river would continue.
Boundary	The boundary would be the same as that described in the 1978 legislation.	The boundary would be the downstream end of the Gavins Point Dam excavated discharge channel (downstream boundary of the Lewis and Clark Project), 59 miles downstream to Ponca State Park, Nebraska. Lands would be acquired only if it becomes necessary for resource protection or if they are needed for recreational facilities.	Same as Actions Common to Alternatives 2 and 3.	Same as the preferred alternative.

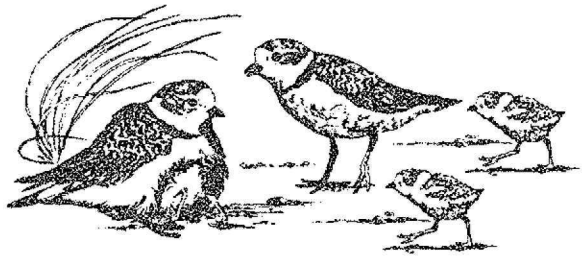
Action	Alternative 1: Continuation of Existing Conditions (No Action)	Actions Common to Alternatives 2 and 3	Alternative 2: Resource Protection/Recreation (Preferred Alternative)	Alternative 3: Recreational Emphasis
Assistance on Adjacent Land Outside the Boundary	No direct assistance to local entities would be provided by federal agencies. The section 1135 program of the Water Resources Development Act would provide for technical assistance and funding for restoring habitat lost as a result of a Corps project.	For the most part, roads and overlooks would be outside the river boundary to obtain elevated views of the river landscape. Assistance would be provided to local governments and property owners only when requested or by consent. The Corps would provide several opportunities for land protection and/or restoration under certain conditions. The section 1135 program of the Water Resources Development Act would provide for technical assistance and funding for restoring habitat lost as a result of a Corps project.	Same as Actions Common to Alternatives 2 and 3.	In addition to the actions identified in the "Actions Common to Alternatives 2 and 3, local entities would be encouraged to foster the development of tour routes and scenic overlooks along the river. The National Park Service would work cooperatively with local governments to provide more sites for visitors to learn about the history of the river and the region. The NPS might assist with planning of scenic roads outside the boundary.

TABLE 4: SUMMARY OF IMPACTS

Topic	Alternative 1: No Action	Alternative 2: Preferred Alternative	Alternative 3: Recreational Emphasis
Natural Resources	There would be no expected impacts on geologic processes or features, physiography, paleontological resources, or mineral extraction activity. Impacts on prime and unique farmland would continue at a slow rate. Soil erosion would continue. Damage to natural resources would likely increase. Wildlife populations and habitat could be impacted. Continuation of existing MNRR programs under the old GMP would not adversely affect threatened and endangered species. Maintenance of existing structures for streambank erosion could continue. New structures could be built by the Corps of Engineers (COE). Impacts on water, air, and noise would be negligible.	There would be no expected impacts on geologic processes or features, physiography, paleontological resources, or mineral extraction activity. A beneficial impact would occur on prime and unique farmland. Soil loss from riverbank erosion and some agricultural practices would continue; proposals would have long-term beneficial effects on preserving remnants of native vegetation; fish and wildlife populations should benefit from proposed actions. Increased efforts to maintain native plant conditions and monitor recreational use would benefit bald eagles, terns, and plovers. Maintenance of existing structures for streambank erosion could continue. New structures could be built by the COE on donated wildlife habitat easements as funding permitted. Wetland and floodplain protection would be improved. There would be no effects on water, air, or noise. Specific conditions would be met to avoid direct, indirect, and cumulative impacts associated with new boat ramps.	There would be no expected impacts on geologic processes or features, physiography, paleontological resources, or mineral extraction activity. No impact on prime and unique farmland would result. Existing impacts on soils would continue as described under alternative 1. Trends of declining native vegetation would probably be stabilized, but active improvement of native vegetation from restoration projects would be less likely than from alternative 2. Wildlife and habitats would be protected with more emphasis on sport hunting and fishing. Threatened and endangered species would not be adversely affected. Wetland and floodplain protection would generally be improved. Maintenance of existing structures would continue. Increasing the number of summer homes and cabins along the river might increase the demand for streambank protection. The preservation of the natural appearance of the river would be positively enhanced.
Cultural Resources	Lack of coordinated management and funding would result in limited adverse effects, mostly from neglect. Because of unknown future development along the rivers, impacts on cultural resources cannot be predicted. Historic resources would continue to be protected under public and private stewardship; however, they could be adversely affected by neglect, changes in demographics, and inappropriate development and visitor use. Prehistoric resource could be negatively impacted from inappropriate uses, undirected recreational activities, development, and continued lack of agency personnel and funding. There is potential for adverse impacts on ethnographic resources.	Cooperative efforts among agencies and local citizens to identify and protect resources would benefit cultural resources. Historic resources would benefit from added community and agency attention, but unless funding was available, historic resources would suffer. Prehistoric resources would be protected, and interpretation of selected sites would be beneficial. However, if funding and staff were lacking, resources could be adversely impacted. Ethnographic resources would benefit.	Generally, resources would benefit from greater interpretation and preservation information if staffing and funding were available to adequately meet program needs. New development and increases in recreational use could adversely impact historic resources, but this impact largely would be mitigated from added community and agency attention. If funding and staffing were available to implement programs, more intensive management would help prevent most adverse impacts on prehistoric resources. Effects on ethnographic resources would be the same as alternative 2.

Topic	Alternative 1: No Action	Alternative 2: Preferred Alternative	Alternative 3: Recreational Emphasis
Visitor Use and Interpretation	Scarce interpretation would result in minimal knowledge and enjoyment of the river by many visitors. There would be no change to the current river experiences for visitors; however, construction of new boat ramps or other visitor use facilities would not be precluded in this alternative. Occasional crowded conditions might exist on peak days. Current management of visitor use would continue, although additional studies would still be done if needed. Site-specific environmental compliance regarding visitor use would be done if future construction warranted.	Water-based visitor use would remain the same while land-based use could increase slightly for a small net visitor use increase. The quality of river experiences would not change significantly; visitors would benefit from the opportunity to attend, participate in, and learn from interpretive programs. An increase in visitor use management tasks could be required.	More recreational activities and interpretive programming would create more visitor enjoyment and understanding of the river's values. The addition of more land-based recreational facilities would increase the land-based visitor use and could be significant at the regional level. There would be no increase in water-based visitor use because the boat ramps would be designed to redistribute existing visitor use. Additional site-specific visitor use monitoring could be conducted in conjunction with construction, if cost-share sponsors were interested in such construction and if the construction moved forward. Visitor use would be monitored to manage visitor use so that the values for which the MNRR was designated would not be impacted. Land-based visitor use management methods, such as increased law enforcement, visitor education, etc., and monitoring of land-based and river-based visitor use would be necessary.
Socioeconomic Resources	There would be an unknown but probably slight benefit on the regional economy. There would be no impacts on land use, property owners, and regional populations. Unknown but minor beneficial net effects would occur on county expenses and revenues. A minor beneficial increase in employment opportunities would probably occur.	There would be an unknown but probably measurable benefit for the regional economy. No local impact would occur on land use, property owners, and regional population. A net adverse effect on county government through the demand for county service would occur. Some employment options would be decreased if land acquisition resulted in larger holdings. Other employment options would increase with increased development and with management and operation of the recreational river and with increased demand for services. There would be an unknown but probably minor increase in employment opportunities.	There would be a modest benefit on the regional economy. Land use, property owners, and the regional population would be affected the same way as described under alternative 2. The net effect on county expenses and revenues would probably be minor. There would be an unknown but probably minor increase in employment opportunities.

Affected Environment



BRIEF DESCRIPTION OF THE RIVERWAY

The Missouri River is considered the longest river in the United States, if one includes its tributary streams in Montana. The river shared with the Oregon Trail and the Santa Fe Trail the distinction of being one of the three main thoroughfares to the far west. In early historic times, it was a wild and unpredictable river that transported tons of freight.

The river is now harnessed in its upper and middle reaches by a series of multipurpose dams and reservoirs. In its lower reaches, the river has been further tamed by channelization. The 59-mile segment of the Missouri River from Gavins Point Dam in South Dakota to Ponca State Park in Nebraska is one of the few remaining reaches that is unchannelized and undammed, providing a remnant of the original free-flowing Missouri. This segment of the river has been designated as a national recreational river because of the remarkable natural and cultural values that are worthy of preservation.

Natural features along the corridor include two large wooded islands, wooded Nebraska bluffs, and views of wide expanses of water with sandbars and steep or gentle riverbanks. The two large high-bank islands (James River Island and Goat Island) are covered by dense cottonwood and dogwood stands and are rare for the present day Missouri River. The 300- to 400-foot high Nebraska bluffs are outstanding because they are an uncommon topographic feature in the surrounding landscape. Due to the river's action, some of the bluffs have eroded into sheer cliffs. The soil and subsoil show up clearly in brown, yellow, and gray horizontal layers.

NATURAL RESOURCES

Along the Missouri River from Gavins Point Dam downstream to the Missouri state line, researchers have found that in the time since dam construction and channelization, deciduous vegetation has decreased 41%, wetlands by 39%, sandbars by 97%, and grasslands by 12%. Cultivated land meanwhile increased 43 fold in a 90-year period. The fish community has declined 80% from its 1940 level. Endangered and threatened species such as the interior least tern, piping plover, bald eagle, and pallid sturgeon all use the river.

This section of the Missouri River is one of only two sections that reveal the original appearance of the middle Missouri River. The native plants and animals are still quite plentiful. There are species from at least 27 families of plants, 17 families of mammals, 29 families of birds, 10 families of reptiles and amphibians, 15 families of fishes, and 45 families of insects in the corridor (COE 1980). Preservation of the river setting would provide the opportunity to see the river similar to what it once was throughout its significant history.

GEOLOGY, PHYSIOGRAPHY, AND PALEONTOLOGY

The northern high plains region is based on rocks of marine origin generally lying at the surface. The adjacent land along the river is characterized by gently sloping bluffs to the north and steep, dissected bluffs rising sharply from the floodplain on the south. The oldest rocks of the area are the bluff forming, chalky limestone of the Niobrara Formation and the shales of the Pierre Formation. These accumulated in shallow seas that occupied the western interior of North America between 85 and 65 million years ago as the Mesozoic Era drew to a close.

These older deposits are covered in places with deposits of streams, wind, and glaciers over the last 5 to 10 million years. The project area is situated between the glaciated and unglaciated portions of the Missouri Plateau in the Great Plains Province of the Interior Plains. According to scientists, the river's course marks the terminus of the southern advance of the Mankato Substage of the Wisconsin glaciation period in the region. The wide floodplain of the Missouri River consists of sandy soils deposited by the river since the Pleistocene.

Field study of the Missouri River environs by paleontologists has been sporadic following 19th century expeditions. Marine strata of the Niobrara and Pierre formations that make up the Nebraska bluffs have yielded fish and mollusk fossils and occasionally a specimen of a marine vertebrate. There has been no systematic search for such remains by any institution. The known fossil sites of younger age are nearly all gravel pits where small but significant collections of Pleistocene vertebrates have been obtained. Only four sites known from the scientific literature occur in this area of the Missouri National Recreational River.

Mineral Resources

The main mineral-related activity in the project area is the extraction of building materials, including sand, gravel, clay, and chalk. These deposits are generally in the bluffs along the river. There are many active and abandoned extraction sites along the Missouri River.

Small coal and peat deposits are present in Dixon County, Nebraska, but no hardrock mining or coal mining has been done in the project area. There are no active oil and gas fields anywhere in the project

area. Exploratory wells were drilled in the past, but none were commercially successful. There is no indication of renewed industry interest in the project area.

VEGETATION

Natural vegetation along the river is composed primarily of two major plant communities, the floodplain forest of willow and cottonwood, and the elm and oak woodland typical of the bluffs that border the floodplain in Nebraska.

Varying stages of floodplain vegetative succession are evident throughout the project area. On the sandbars and newly deposited accretion land adjacent to the riverbanks grow the pioneer species of floodplain succession: annual weeds, short-lived grasses, sedges, and seedling willow and cottonwood. Farther back and higher above the water table, larger willow and cottonwood trees dominate until finally a floodplain forest of cottonwoods occurs on the highest banks and islands. The understory in the mature cottonwood forest is primarily dogwood, sumac, wild grape, and poison ivy. Much of the mature cottonwood forest on the high banks adjacent to the river has been replaced with pasture and cultivated cropland, though remnant groves remain. The two large islands also support substantial groves of mature vegetation. Riparian vegetation has been severely reduced by clearing for agriculture. Over one-half of that remaining is forested, dominated by cottonwood with lower densities of green ash, slippery elm, red cedar, Russian olive, mulberry, and box elder. The sparse vegetation under the mature cottonwoods consists mostly of scouring rush, Kentucky bluegrass, smooth brome, and switchgrass. Riparian grasslands along the river are dominated by Kentucky bluegrass, smooth brome, and other invasive grass and weeds. Agricultural conversion of wetlands and riparian forest has eliminated over 60% of the natural areas within 0.6 mile of the river (Clapp 1977).

In contrast to mixed floodplain forest and agricultural use on the floodplain are the hardwood forests of the adjoining bluffs. There are several places where the river flows at the base of the bluffs. The slopes support a dense growth of oak, ash, mulberry, and walnut, with burr oak as the dominant species. Where grazing has been limited, there is a good understory shrub layer with such species as dogwood and sumac. This hardwood forest is dominant on the north-facing slopes and in the many draws and ravines of the bluffs. Near the hilltops where soil moisture is less abundant and where there is a south or west exposure, the forest is replaced by native grass mixed with yucca.

Sand dune habitat is interspersed between the other plant communities in the river corridor. The Elk Point dunes are white, undulating sandhills that rise up to 20 feet. Distribution of vegetation in these areas is variable. Sand dunes include areas with no vegetation, areas with considerable grass and forb cover, and areas with tall cottonwoods only or with tall cottonwoods and an understory of willows, cottonwood saplings, or alfalfa.

There are sandbars in or adjacent to the river that are essentially unvegetated. Sandbars provide important resting areas for migrating waterfowl, feeding locations for breeding shorebirds, and important breeding sites for piping plovers and least terns.

Cultivation of the fertile floodplains began in earnest with the populating of Nebraska and South Dakota or "the region" in the late 1800s. Thousands of acres of floodplain forest were cleared and prairies were mowed, grazed, and plowed for crops. The construction of dams, dikes, and streambank protection eventually provided some control of the river and furthered the conversion of native vegetation to domestic crops.

Plant communities were mapped for the project area using Geographic Information System (GIS) technology with data provided by the Nebraska Natural Resource Commission and the U.S. Fish and Wildlife Service National Wetlands Inventory. The plant communities include agricultural lands, upland forest, and floodplain forest. The woody draws, cottonwood forest floodplains, and remnant prairie patches are among the best of the last large river natural resources remaining in conjunction with a free-flowing reach of the Missouri River.

Leafy spurge and spotted knapweed are widely distributed in the project area and are designated as noxious weeds by the state of Nebraska. Purple loosestrife is not designated as a noxious weed but is spreading rapidly and threatening wildlife habitat on the Missouri River. It forms dense stands on several hundred acres of wetlands found on the bottomlands and islands. Hybrid cattails are widespread in wetlands along the river. Eastern red cedar, a native tree, is spreading into grassland and developing dense thickets due to suppression of prairie fires. In the uplands, other woody species besides red cedar are also encroaching into native grassland, including green ash, slippery elm, and smooth sumac. Smooth brome is widespread in both the uplands and in the bottomlands, and Russian olive has invaded many of the shrubland and bottomland forests, especially those subject to heavy grazing (COE 1991b and 1994).

SOILS

The recreational river boundary contains land in Cedar and Dixon Counties, Nebraska, and Yankton, Clay, and Union Counties, South Dakota. Soil surveys have been completed for Nebraska and for Yankton and Union Counties, South Dakota (SCS 1979). The soil survey for Clay County, South Dakota, is being updated.

The soils vary from level and nearly level silty and clayey soils on the floodplains of the Missouri River and its terraces to undulating to steep loamy and clayey soils on uplands. Most soil types are moderately to well drained. The Sansarc soil series consists of shallow, well-drained soils formed in residual material from clayey shale on the breaks of the Missouri River. The Inavale soil series consists of deep, somewhat excessively drained soil formed in sandy riverwash material on the Missouri River. The silty clay soils on the Missouri River floodplain are deep and poorly drained, such as those in old oxbows. Most of these areas support native vegetation and are used as wildlife habitat.

PRIME AND UNIQUE FARMLAND

Prime farmland, one of several kinds of important farmlands defined by the U.S. Department of Agriculture, is land that is best suited to growing food, feed, forage, fiber, and oilseed crops. It may be cultivated land, pasture, woodland, or other land, but it is not urban or built-up land.

The project area is primarily rural. Agriculture plays an important role in the overall economy. Primary agricultural products include cattle, hogs, corn, oats, soybeans, and alfalfa.

The croplands and rangeland plant communities include a range of cover types such as row crops, alfalfa fields, mixed-grass prairie, wet-mesic prairie, and tallgrass prairie, as well as both grazed and hayed areas.

FISH AND WILDLIFE

Fisheries are significant though somewhat degraded. Habitat on the Missouri River between Gavins Point Dam and Ponca State Park is more typical of an unchannelized, natural river conditions than reaches farther downstream. Native fish in this Missouri River segment are relatively productive and include sauger (*Stizostedion canadense*), carp (*Cyprinus carpio*), channel catfish (*Ictalurus punctatus*), goldeye (*hiodon alosoides*), shovelnose sturgeon (*Scaphirhynchus platorynchus*), gizzard shad (*Drosoma cepedianum*), river carpsucker (*Carpiodes carpio*), and a naturally reproducing population of paddlefish. This reach is one of the recovery-priority areas for the pallid sturgeon. Other common species in the Missouri River include shorthead redhorse (*Moxostoma macrolepidotum*), freshwater drum (*Aplodinotus grunniens*), and gar (*Lepisosteidae*).

The native river fishes have declined due to migration blockage, loss of habitat, change in habitat, and competition from new species that have taken advantage of the changes, all primarily due to the river regulation effects of the mainstem dams. These regulatory practices have resulted in a less turbid river and an annual cycle of riverflows (hydrograph) that causes lower than normal river elevations during critical months for fish breeding. The mainstem and tributary reservoirs are used to store spring runoff that is released in late summer and fall. Since this is a reversal of the natural hydrograph, life cycles of plants, nesting birds, aquatic insects, and fish are adversely affected. No peaking of Gavins Point releases at the level for power production has been done for many years. In some years, it has been necessary to peak a few thousand cfs one day in three to prevent lest terns and piping plovers from nesting at low elevations. Releases on the two down days are increased to the peak release in mid to late summer to support navigation flows.

The mainstem dams have controlled flooding, and development has encroached into the old erosion zone near the river, where habitat was best for fish and wildlife. The forest-grassland community has been slowly replaced by agriculture, industry, and private dwellings. From its headwaters in Montana to the mouth at St. Louis, the Missouri River has lost 4.4 million acres of fish and wildlife habitat in this manner. It is estimated that 475 million pounds of annual fish production has been lost since the dams and channelization were completed. Their decline is an indication of changes from the natural Missouri River ecosystem, such as the loss of snags and organic matter, two features vital to aquatic habitats.

Wildlife is plentiful in and along the Missouri River, but types of wildlife have changed since the settling of the West. A recent survey of the area identified 48 species of mammals. Small mammals, including mice, voles, bats, moles, rats, and ground squirrels, made up roughly 60% of the species. Furbearers contributed another 20%. White-tailed deer (*Odocoileus virginianus*) and mule deer (*Odocoileus hemionus*) are the only large mammals in the project area; white-tailed deer may be found throughout the length of the water project. Coyote (*Canis latrans*), red fox (*Vulpes vulpes*), and badger (*Taxidea taxus*) are common. Other small fur-bearing animals include raccoon (*Procyon lotor*), mink (*Mustela vison*), weasel (*Mustelidae*), muskrat (*Ondatra zibethicus*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), Plains spotted skunk (*Spilogale putorius interrupta*), beaver (*Castor candensis*), rabbit, (*Sylvilagus floridanus*), and bobcat (*Felis rufus*).

For mammals as well as reptiles, the species composition has not changed significantly from early historic times, except for the loss of grizzly bear (*Ursus arctos*) and large herbivores like buffalo (*Bison bison*) and elk (*Cervus elaphus*). The community makeup, however, has been affected by land use changes.

The river corridor is home year-round for 25 bird species. An additional 58 species commonly nest in the area, while another 15 species are common winter residents. Over 115 species regularly use the corridor on their spring migration and 110 return through the area during their fall migration. The

Missouri River ecosystem is a significant pathway for migratory birds. Migrating species benefit from bottomland, which serves as wintering, feeding, breeding, and staging grounds. There has been relatively little change in the diversity of the bird community from the historic past, although loss of habitat has affected numbers.

The river and island complexes are important wildlife habitat. The chutes and backwater areas of islands provide feeding, resting, and breeding areas for waterbirds and furbearers.

THREATENED AND ENDANGERED SPECIES

The U.S. Fish and Wildlife Service has determined that eight species that are protected under provisions of the Endangered Species Act of 1973 (as amended) could be affected by the proposed action for the Missouri National Recreational River. The peregrine falcon (*Falco peregrinus*), whooping crane (*Grus americana*), interior least tern (*Sterna antillarum*), Eskimo curlew (*Numenius borealis*) pallid sturgeon (*Scaphirhynchus albus*), black-footed ferret (*Mustela Nigripes*) and American burying beetle (*Nicrophorus americanus*) are listed as endangered. The piping plover (*Charadrius melodus*), bald eagle (*Haliaeetus leucocephalus*), western prairie fringed orchid (*Platanthera praeclara*), and prairie white-fringed orchid (*Platanthera leucophaea*) are classified as threatened. Eskimo curlew, black-footed ferret, and prairie white-fringed orchid occurring within the project area is not probable (see appendix E).

Potential rare species areas were determined using GIS technology in consultation with South Dakota Game, Fish and Parks and Nebraska Game and Parks biologists. These areas could provide habitat for 71 identified rare, threatened, or endangered species, both federal and state. Species were identified and noted if they were known to be or had a strong potential to be in the project area. These species were then assigned a probability of occurrence within each of the 17 general plant communities. Individual community rankings were then computer-generated to map high value areas.

Peregrine Falcon

Peregrine falcons are generally associated with wetlands and open areas, such as cropland and grassland. Peregrine falcons almost always nest on steep cliffs more than 150 feet high and close to water. They feed almost exclusively on birds captured in flight in areas such as woodlands, marshes, and open grasslands (COE 1994).

The wintering habitat of the peregrine falcon is poorly understood and no nesting or wintering activity has been documented in recent times. Some adults remain near the nest cliff year-round; others move from their northernmost breeding grounds during the winter to forage farther south. Most observations in South Dakota and Nebraska are of peregrine falcons migrating in late April, early May, September, and October (USFWS 1995).

Whooping Crane

Whooping cranes are sometimes seen in South Dakota and Nebraska during spring and fall migrations. They can be found in cropland and pasture, wet meadows, and shallow marshes. They use shallow portions of rivers, lakes, reservoirs, and stock ponds. Both freshwater and alkaline basins are used for feeding and resting. They roost in shallow water. Nearby Boyd, Knox, and Charles Mix Counties are on the eastern edge of the whooping crane migration corridor. No sightings have been confirmed within

the 59-mile segment of the Missouri River. Whooping cranes migrate through South Dakota and Nebraska between October 1 and December 1 in the fall and March 15 and May 15 in the spring. The *Whooping Crane Recovery Plan* was revised in 1986 (USFWS) and describes actions needed to ensure their survival and aid their recovery.

Interior Least Tern and Piping Plover

The interior least tern nests on sparsely vegetated sandbars or shoreline areas that provide unobstructed visibility in a wide channel. The size of nesting sandbars varies from under 1 acre to many acres. Varying riverflows affect the size and quality of nesting habitat. The primary nesting period for this species is from early May to late August. About 10% of all terns (anywhere) nest along the Missouri between Ft. Peck Reservoir, Montana, and Ponca, Nebraska. The remaining short, free-flowing stretches of river, including the Missouri segment below Gavins Point Dam to Ponca State Park, provide the primary sandbar nesting habitat for terns. Forty-three percent of the Missouri River tern population nests in the 59-mile segment of the recreational river.

Terns select nest sites away from the water's edge and at high elevations when sufficient habitat is available. Most terns nest in areas where there is less than 5% vegetative cover and where the cover is only a few inches tall. The least tern eats primarily fish, feeding in shallow waters of rivers, streams, and lakes.

Least tern populations have declined as a result of alterations of habitat (USFWS 1994). Channelization and construction of reservoirs and pools have contributed greatly to the elimination of much of the tern's sandbar nesting habitat; 76% of the Missouri River within the tern's range is either channelized or impounded.

Current regulation of dam discharge poses additional problems for terns. Reservoirs have controlled the flows that scour sandbars. River main stem reservoirs now trap much of the sediment load, which results in less aggradation and more degradation of the riverbed and, subsequently, less sandbars. Predation of chicks, disturbance by people and domestic pets, trampling by grazing cattle, and flooding during the nesting season are other factors that have contributed to population decline. The *Interior Population of the Least Tern (Sterna antillarum) Recovery Plan* (USFWS 1990) describes actions planned to return the species to nonendangered status throughout its range.

The Corps has developed an implementation plan intended to increase numbers of birds, their fledging ratios, to manage flows to avoid impacting nests, to increase public awareness, and to increase the acres of suitable nesting habitat. In addition, during high-flow years, the Corps has initiated the collection of eggs and chicks for rearing in an incubation setting at the Lewis and Clark Lake Project Office.

The national recreational river provides important nesting and chick-rearing habitat for the Missouri River population of least terns, with 31% of the total adult birds systemwide (including the Missouri River reservoirs) being found within the national recreational river (based on surveys over the past 12 years). Numbers of adult least terns varies annually within Missouri River segments. Numbers of adult terns from 1986– 1997 have averaged 183, ranging from 80 in 1997 to 272 in 1993 (U.S. Army Corps of Engineers 1996 and 1997). Numbers of adult birds are linked to the amount of sandbar habitat available, which is correlated with the amount of water in the Missouri River (which consists of discharges from Gavins Point Dam combined with the discharges from the James, Big Sioux, and Vermillion Rivers). For example, in 1993, discharges from Gavins Point dam were reduced to as low as 6,000 cfs in order to reduce the inflow of water to downstream portions of the Missouri River which

were flooding. In 1997, releases were as high as 70,000 cfs to reduce the amount of water stored in upstream reservoirs so those reservoirs could accept the record inflow from snowmelt.

In 1991 there was an international plover census (Haig and Plissner 1992). There are three historic breeding ranges (Northern Great Plains, Great Lakes, and Atlantic Coast). The Northern Great Plains population, which nests on wetlands and riverine systems, numbers approximately 2,500. Thirty-four percent of the Missouri River piping plover population nests in the 59-mile segment of the recreational river. On riverine systems, plovers usually nest in association with terns.

The piping plover nests on sparsely vegetated sandbars, sand and gravel shorelines of rivers, and alkali wetlands. The amount and distribution of nesting site vegetation affects plover habitat and reproductive success. Studies suggest that plovers select a higher nest site when available, and that birds select sites away from the water's edge as well as being relatively high above the water (USFWS 1994). The primary nesting period is from early May to late August.

The MNRR provides important nesting and chick-rearing habitat for piping plovers within the Missouri River system, with 29% of the adult birds systemwide being found within the MNRR (based on combined data from surveys over the past 12 years). Numbers of adult piping plovers in the MNRR from 1986–1997 have averaged 115 adult birds, ranging from 22 in 1997 to 212 in 1988 (U.S. Army Corps of Engineers, 1996 and 1997). Numbers of plovers are also related to the amount of sandbar habitat in the river, but not as much as for least terns, since piping plovers also regularly nest on the prairie couteau in the Dakotas, and are found on gravel pits and reservoir shoreline areas more so than the least terns.

Nesting habitats on the Missouri River typically are dry sandbars located midstream in wide, open channels and with less than 25% vegetative cover. These conditions provide the essential requirements of wide visibility, protection from terrestrial predators, isolation from human disturbance, and sufficient protection from rises in river levels. The optimum range for vegetative cover on nesting habitat has been estimated at 0%–10%, and the majority of the plovers nest where vegetation is less than 10 centimeters tall (USFWS 1994). Open, wet, sandy areas provide feeding habitat for plovers. Forage areas include the nesting island and adjacent sandbar flats.

The reasons for decline of the piping plover are basically the same as the least tern: alterations of habitat resulting in elimination of sandbars, altered flow regimes, predation, and disturbance by humans. Actions to ensure long-term stability and survival of piping plovers that would lead to their removal from the endangered species list are described in the *Great Lakes and Northern Great Plains Piping Plover Recovery Plan* (USFWS 1988).

Pallid Sturgeon

The pallid sturgeon is a large native river fish found in the Missouri River and the lower reaches of major tributaries. The recreational river may contain some of the most significant habitat for potential natural reproduction of the sturgeon between the Yellowstone River in Montana and Ponca State Park. The *Pallid Sturgeon Recovery Plan* (USFWS 1993) identified the area below Gavins Point Dam to the confluence with the Mississippi River as one of four areas on the Missouri River for priority implementation of recovery actions.

Pallid sturgeon are well adapted to life on the bottom in swift waters of large, turbid, free-flowing rivers. The floodplain, backwaters, chutes, sloughs, islands, sandbars, and main channel waters that

form the diverse river ecosystem provide the habitat requirements for pallid sturgeon and other native large-river fish, such as paddlefish, lake sturgeon, blue sucker, and various river chubs.

Destruction and alteration of habitat by human modification of the river system is believed to be the primary cause of decline in reproduction, growth, and survival of pallid sturgeon (USFWS N.d.). The physical and chemical elements of channel morphology, flow regime, water temperature, sediment transport, turbidity, and nutrient input all once functioned to provide habitat for pallid sturgeon and other native species. On the main stem of the Missouri River, approximately 36% of riverine habitat within the pallid sturgeon's range was transformed from river to lake habitat by construction of six dams and another 40% of the river downstream of dams has been channelized. The remaining 24% of the habitat has been altered due to changes in water temperature and flow caused by dam operations. The Missouri River dams also are believed to have adversely affected pallid sturgeon by blocking migration routes and by inundating spawning and nursery areas.

Western Prairie Fringed Orchid

The western prairie fringed orchid is usually found in tallgrass calcareous silt loam or subirrigated sand prairie. There are orchids in Hall, Lancaster, Otoe, Sarpy, Seward, and Cherry Counties in Nebraska. In South Dakota the orchid historically was found in wet meadows in the Big Sioux Valley in Minnehaha County, South Dakota. Although the orchid is not known to grow now in South Dakota, potential habitat does exist, so it may be present in South Dakota.

American Burying Beetle

The American burying beetle has recently been collected (1993 and 1994) in Dawson, Lincoln, Keya Paha, and Cherry Counties in Nebraska. Beetle habitat is not clearly defined, but recent captures suggest the possibility of riparian woodlands, wetland forest, mixed agricultural land (including pastures and mowed fields), and grassland. Historic locations for the beetle in South Dakota include Haakon, Union, and Brookings Counties. There may be beetles on some of the older wooded islands, but none have been confirmed.

The beetle is attracted to carrion anywhere in South Dakota or Nebraska that has significant humus and topsoil suitable for the burying of carrion, on which it is dependent for food. The beetle is one of the largest of its kind and is a strong flier, which enables it to move great distances in search of its prey.

Bald Eagle

Bald eagles use mature riparian forested areas near streams and lakes. The large cottonwood trees along the Missouri River have reached their maturity and are beginning to degenerate. Eagles depend on these trees for nesting, perching, and roosting. Cottonwood regeneration has been almost nonexistent due, in part, to the preclusion of natural overbank flooding along the Missouri River. Ultimately, successional changes lead to replacement of cottonwoods by smaller climax species, such as green ash. Destruction of wild areas through development and increased human activity are adversely affecting the suitability of both breeding and wintering areas.

Although most of the mature floodplain forest has been dramatically reduced since settlement (Bragg and Tatschl 1977), the floodplain along most of the flowing reaches has sufficiently large cottonwood trees for nesting. Three major areas of mature cottonwood forest remaining on the Missouri River in

South Dakota are known to support wintering populations of bald eagles, including portions of the recreational river, particularly in the Yankton/James River Island area. Bald eagle wintering habitat was identified in a U.S. Fish and Wildlife Service report (USFWS 1986). Nineteen areas were identified as being known wintering areas or having potential as wintering areas.

Migrating and wintering bald eagles may be found in South Dakota and Nebraska from November 1 to April 1. The eagles feed on fish and weak or injured waterfowl near the open tailwaters downstream from Gavins Point Dam. Actions to ensure long-term stability and survival of the bald eagle in the northern recovery region are described in the *Northern States Bald Eagle Recovery Plan* (USFWS 1983).

CANDIDATE SPECIES AND SPECIES OF CONCERN

Table 5 lists species for which current information indicates that listing by the U.S. Fish and Wildlife Service as threatened or endangered may be appropriate, but for which conclusive data on biological vulnerability and threat are not available. It is NPS policy (but not Corps policy) to give these species the same consideration and protection as federally listed species. An example of a candidate species is the paddlefish, whose populations have decreased throughout its range (Hesse et al. 1993).

WATER RESOURCES

Surface Hydrology

The Missouri River in the project area is still in a relatively natural state. It is the only river segment downstream of Gavins Point Dam that has not been channelized by dikes and revetments. It is characterized by a wide, meandering channel with shifting sandbars and subsidiary channels.

The river has seven principal aquatic habitats: the main channel, main channel border, sandbar, pool, chute, backwater, and marsh. The sandbar, backwater, and marsh habitats are especially threatened. These habitats are extremely productive and dynamic, and are not duplicated in the channelized or impounded segments of the river.

Hydroelectric power production does not determine the magnitude of the Gavins Point release. The limited storage capacity of Lewis and Clark lake ensures that Fort Randall Dam releases are passed through Gavins Point Dam within two to three days. Gavins Point smooths the peaking releases normally made from Fort Randall. The Gavins Point release is determined by system storage and the severity of downstream flooding , not the Fort Randall release. It is also the focal point for controlling uniform riverflows on the open Missouri and contributes significantly to navigation.

TABLE 5: FEDERAL AND STATE THREATENED, ENDANGERED, OR CANDIDATE SPECIES

COMMON NAME (SCIENTIFIC NAME)	FEDERAL	NEBRASKA	SOUTH DAKOTA
Vertebrates — Birds		**Status**	**Status**
Bald eagle (*Haliaeetus leucocephalus*)	T	ST	SE
Black tern (*Chlidonias niger*)	Of concern		
Cerulean warbler (*Dendroica cerulea*)	Of concern		
Eskimo curlew (*Numenius borealis*)	E	SE	SE
Ferruginus hawk (*Buteo regalis*)	Of concern		
Interior least tern (*Sterna antillarum athalassas*)	E	SE	SE
Loggerhead shrike (*Lanius ludovicianus migrans*)	Of concern		
Osprey (*Pandion halieatus*)			ST
Peregrine falcon (*Falco peregrinus*)	E	SE	SE
Piping plover (*Charadrius melodus*)	T	ST	ST
Western burrowing owl (*Athene cunicularia hypugea*)	Of concern		
Whooping crane (*Grus americana*)	E	SE	SE
White-faced ibis (*Plegadis chihi*)	Of concern		
Vertebrates — Mammals			
Black bear (*Ursus americanus*)			ST
Black-footed ferret (*Mustela nigripes*)	E	SE	SE
Mountain lion (*Felis concolor*)			ST
Plains spotted skunk (*Spilogale putorius interrupta*)	Of concern		
Northern river otter (*Lutra canadensis*)		SE	ST
Swift fox (*Vulpes velox*)	Of concern	ST	ST
Vertebrates — Fish			
Banded killifish (*Fundulus diaphanus*)			SE
Blacknose shiner (*Notropis heterolepis*)		ST	
Blue sucker (*Cycleptus elongatus*)	Of concern		
Central mudminnow (*Umbra limi*)			SE
Finescale dace (*Phoxinus neogaeus*)		ST	ST
Flathead chub (*Platygobio gracilis*)	Of concern		
Lake sturgeon (*Acipenser fulvescens*)	Of concern	ST	
Longnose sucker (*Catostomus*)			ST
Northern redbelly dace (*Phoxinus eos*)		ST	ST
Paddlefish (*Polyodon spathula*)	Of concern		
Pallid Sturgeon (*Scaphirhynchus albus*)	E	SE	SE
Pearl dace (*Margariscus margarita*)		ST	SE
Plains minnow (*Hybognathus placitus*)	Of concern		

COMMON NAME (SCIENTIFIC NAME)	FEDERAL	NEBRASKA	SOUTH DAKOTA
Plains topminnow (*Fundulus sciadicus*)	Of concern		ST
Sicklefin chub (*Macrhybopsis meeki*)	Of concern		ST
Sturgeon chub (*Macrhybopsis gelida*)	Of concern		ST
Topeka shiner (*Notropis tristis*)	Of concern		
Troutperch (*Percopsis omiscomaycus*)			ST
Western silvery minnow (*Hybognathus argyritis*)	Of concern		
Vertebrates — Reptiles and Amphibians			
Blandings turtle (*Emydoidea blandingii*)	Of concern		ST
Eastern hognose snake (*Heterodon platirhinos*)			ST
False map turtle (*Graptenys pseudogeographica*)	Of concern		ST
Lined snake (*Tropidoclonion lineatum*)			ST
Northern redbelly snake (*Storeria occipitomaculata*)			ST
Spiny softshell (*Apalone spinifera*)			ST
Invertebrates — Freshwater Mussels			
Elktoe (*Alasmidonta marginata*)	Of concern		
Scaleshell (*Leptodea leptodon*)	Of concern		
Spectacle case pearly mussel (*Cumberlandia monodonta*)	Of concern		
Invertebrates — Insects			
American burying beetle (*Nicrophorus americanus*)	E	SE	
Plants			
Blowout penstemon (*Penstemon haydenii*)		SE	
Bulrush (*Scirpus hallii*)	Of concern		
Butterfly weed (*Gaura neomexicana spp. coloradensis*)		SE	
Prairie white-fringed orchid (*Platanthera leucophaea*)	T		
Western prairie fringed orchid (*Platanthera praeclara*)	T	ST	

T = Federal Threatened; E = Federal Endangered; ST = State Threatened; SE = State Endangered

The actual May through September Gavins Point releases for the 30-year period 1967 through 1996 average 33,500 cfs. The reservoir system first filled to normal operating levels in 1967. Output from the COE's Long Range Study (LRS) Model, which uses inflows dating from 1898 through 1993, shows that the May through September Gavins Point release would have averaged 33,400 cfs using the Corps; current water control plan guidelines (1997). The L.S. model results from the period of record data 1898 through 1993 compare favorably with the recent actual historical data 1967 through 1996 as far as Gavins Point average release data for May through September. Highest sustained Gavins Point releases have been 60,000 to 61,000 cfs from August through November in 1975 and 60,000 to 70,000 cfs from June through November 1997. The record November 1997 Gavins Point release of 70,000 cfs was to help evacuate the highest annual runoff in 100 years record, which was 48.7 million acre-feet, 197 percent of normal. Releases only averaged 8,000 cfs in August 1993 to help control the great Midwest Flood of 1993. The 100-year Gavins Point flood release is estimated to be 79,500 cfs.

The Corps of Engineers performs flow management of the river to accomplish purposes authorized by Congress. General guidelines for flow determinations are spelled out in the Corps' *Master Water Control Manual*, and system release plans are updated monthly depending on reservoir system storage, anticipated system inflows and multipurpose requirements. An annual operating plan is published each year, which forecasts intended operations assuming varying water conditions. Each fall, federal and state agencies, Indian tribes, the general public, and all others are invited to comment on a draft annual operating plan.

Management continues to be determined by the Corps of Engineers, primarily according to the *Master Water Control Manual* and the Corps' annual operating plans. Consultation with the National Park Service, the U.S. Fish and Wildlife Service, and others occurs during the draft stages of the annual operating plan.

Wetlands

Thirteen lacustrine, palustrine, and riverine wetland community types were identified and mapped for the recreational river using USFWS National Wetlands Inventory data. The categories were further classified by the Nebraska Game and Parks Natural Heritage Program into wetland community types based on their habitat similarities and association with rare, threatened, and endangered species. The *Nebraska Wetlands Priority Plan* (1991), written by the Nebraska Game and Parks Commission in cooperation with Fish and Wildlife Service, identified this river segment as a wetland complex that qualified for acquisition consideration under provisions of the National Wetlands Priority Conservation Plan.

Backwater chutes, pools, and lakes were a part of the braided river channel created by erosion and sedimentation. Wetlands, created by changes in channel shape, were maintained by periodic flooding. Lack of flooding has changed the species composition of remaining wetlands.

Floodplains

The upper and lower sections of the Missouri River are influenced by the presence of the large dams and extensive riverflow regulation by the Army Corps of Engineers. The river bed has degraded in a number of areas leading to steeper banks, which in turn decreases bank stability. Eroded bank material contributes to the formation of mid-channel bars. Current erosion rates, deposition patterns, etc., reflect the river's attempt to adjust to the regulated flow regime. The floodplain along both sides of the river generally has substantial galleries and patches of large cottonwoods and associated species. In places, the floodplain forests extend up to 1 mile from the river. Cottonwoods are also commonly associated with several large islands within the free-flowing Missouri River segment.

Before portions of the Missouri River were channelized and impounded, it annually eroded portions of its floodplain (USFWS 1993). Most of this erosion has now stopped. Erosion was a natural function of the river system. Through erosion, inorganic sediments, organic matter, and large woody debris were introduced into the river. This material was essential to habitat dynamics and nutrient cycling. Such sediment and nutrient discharge are the raw materials for habitat development. Construction of dams eliminated 80% of this material.

The 100-year and 500-year floodplains were determined and mapped using GIS technology. Areas prone to flooding were mapped with data provided by the Nebraska Game and Parks Commission, in consultation with COE and NPS hydrologists. The flood-prone areas were then used to evaluate the

existing (alternative 1) boundary. Some potential sites for new facilities are located in the 100- and 500-year floodplains.

The ordinary high water mark was interpreted from 1:24000 scale color aerial photography taken in October 1991. Vegetation patterns were the key indicator used; if there was no vegetation in a flow pattern, it was assumed to be inside the ordinary high water mark.

Water Quality

Water quality in the project area is generally good. Water quality measurements have been collected at Gavins Point Dam and Yankton, and data has been collected near the mouths of the two major tributaries, the James River and Vermillion River. Water released from Gavins Point Dam generally complies with the requirements listed in the Federal Water Pollution Control Administration's *Water Quality Criteria*, dated April 1, 1968. The inflows from the James and Vermillion Rivers have occasional high levels of fecal coliform bacteria; however, this is not expected to cause sufficient water quality degradation in the Missouri River to limit its use for primary contact recreation. Degrading point-source water quality influences are downstream of the study area near Sioux City, Iowa.

Selenium is found in eastern South Dakota. The Corps of Engineers did an analysis of the Missouri River water and sediment during 1992 in conjunction with a project to create habitat for interior least tern and piping plover. Sample sites included Niobrara, Nebraska, and Running Water, South Dakota, west of this segment. Results indicated that selenium amounts were below the limits set in state water quality standards and recommendations by the Environmental Protection Agency (EPA).

Dams caused the water of the Missouri River to become less turbid, or much clearer, by reducing natural sediment transport in the river. It is believed that high turbidity did not affect the primary energy source of the river, the erosion caused by main channel meandering, or the runoff from tributaries (Hesse et al. 1988).

Water quality standards established by both Nebraska and South Dakota require that the water be suitable for primary contact recreation and warmwater fish propagation. The standards can only be applied to controllable pollution sources. A possible major source, nonpoint agricultural land use, is not included. Contact recreation is not expected to be limited anywhere except possibly near the James and Vermillion Rivers.

AIR QUALITY

Air quality is an important resource that directly affects the visitor experience. The Clean Air Act (42 U.S.C. 7401 et. seq.) was amended in 1977 to preserve, protect, and enhance the air quality in national parks, wilderness areas, and other nationally significant areas. Under the act, the recreational river was designated as a class II clean air area. This means that moderate, well-planned industrial growth could be permitted near the recreational river as long as the class II maximum allowable increases for particulate matter, sulfur dioxide, and nitrogen dioxide are not exceeded. The federal land manager (the assistant secretary of the interior for the U.S. Fish and Wildlife and Parks) and the National Park Service have the responsibility to protect the area's air quality-related values, including visibility, plants, animals, soils, water quality, cultural and historic objects and structures, and human health.

Congress amended the Clean Air Act again in 1990. The amendment retained and enhanced the park and wilderness provisions. Section 169A of the Clean Air Act established a national goal of preventing

future and remedying existing visibility impairment that results from anthropogenic sources of air pollution.

Air quality in the project area is generally good. The project area is in the Nebraska Intrastate Air Quality Region. The project area is an attainment area for the National Ambient Air Quality Standards. The clean air and good visibility for scenic views are important values of the project area.

NOISE

Noise levels in the project area are varied, with relative tranquility in some areas, typical urban sounds in more developed areas near towns, and seasonal sounds of motorboats in other areas. The opportunity to experience a quiet, natural environment is part of the relatively primitive recreational experience that is valued on the recreational river.

CULTURAL RESOURCES

The cultural resources along the river require consideration in planning and resource management. Archeological, historic, and cultural landscape resources include places and objects that reflect and have meaning to past and present human cultures or that have important information about them. These tangible resources are nonrenewable; once their significant material aspects are gone, they are lost forever. Renewable ethnographic resources are associated with traditional human use and may include sacred sites and traditional use areas.

PREHISTORIC RESOURCES

This segment of the Missouri River lies at the juncture of several geographic, climatic, and environmental transition zones that include plains, prairies, and woodlands. For thousands of years this rich and varied topography, geology, animal life, and vegetation have provided opportunities for many different prehistoric Indian groups to hunt, gather, trade, and build settlements. The archeological remains of their tools and weapons, campsites and habitations, food, and religious and ceremonial objects provide clues to their lifestyles. Each of the prehistoric Indian groups adapted to the area and its resources differently, which resulted in observable distinctions among the area's sites.

A number of archeological projects have been conducted in or near the recreational river and are summarized in NPS 1994c and Ludwickson et. al (1981). Surveys have varied in coverage, research direction, reporting, analysis of data, and terminology. Most of the sites have been defined by the presence of surface materials, and only limited excavations have been conducted in the area.

Of the 285 sites within or adjacent to the riverway, only three are Euroamerican (two mills and a cemetery). However, a number of the sites are multicomponent. These sites contain evidence of occupation or use by several different groups, often over a long period of time, and may include historic features. The rest of the sites can be defined only as prehistoric or protohistoric. (Generally, Protohistoric sites were created during the time when Euroamerican exploration and early settlement were occurring). The prehistoric and protohistoric sites include burials and burial mounds, villages, and campsites with scattered lithics and ceramics. These archeological sites fall into the following periods and/or cultural affiliations that have been identified by archeologists.

Paleoindian Period

Paleoindian people hunted large game such as the now extinct mammoth and *Bison antiquus* from about 11,500 to 7,900 B.P. These sites are often identified by the presence of Clovis, Folsom, or Llano type projectile points. Three Paleoindian period sites have been found along the Missouri River in or immediately adjacent to the project area.

Archaic Period

Like the Paleoindians before them, Archaic groups occupying the area from about 8,500 years before present (B.P.) to about 2,000 years B.P., relied on a wide range of animals and gathered food. However, scientists speculate that climatic changes contributed to the extinction of large animals, which made Archaic people more dependent on vegetables and smaller game.

A number of Archaic sites have been found along the Missouri River, but only four have been identified in or adjacent to the study area.

Woodland Period

The development of farming and new technology and tools such as the bow and arrow and ceramics marked the transition into the Plains Woodland period (from about 2,000 to 800 years B.P.). When compared to earlier times, this period is characterized by an increasing complexity in the numbers and variety of tool types and styles, shelters, and in types of animals used for food. It is thought that bison hunting and gathering were supplemented by horticultural crops like corn and squash. Symbolic items and elaborate mortuary practices suggest increasing ritual or religious behavior.

Numerous Woodland sites found in the area include burial mounds, base camps, habitation sites that once had lightly built skin or thatch-covered structures in a dense cluster, hearths and pits, and traces of wigwam type structures. Remains of maize, squash, gourds, bison, and a variety of woodland animals have been found at these sites, along with numerous lithic materials and decorated ceramics.

Great Oasis

Great Oasis appears to have been an independent cultural group practicing extensive trade (especially in shells) with other groups to the east from whom they may have acquired corn. Area Great Oasis sites date between about 1,150 and 850 years B.P. and are contemporaneous with Late Woodland occupations in Nebraska and southeastern South Dakota. Great Oasis sites often include the remains of moderately large villages or small camps with storage pits that held large quantities of cultivated plant foods. Artifacts include distinctive pottery.

A number of Great Oasis sites occur along the recreational river and include scatters of lithic materials and ceramic shards, campsites, storage pits, and some burials.

Coalescent Tradition

During the period from around A.D. 1000 to A.D 1400, cultures collectively known as the Central Plains Tradition developed in Kansas, Nebraska, and western Iowa. These groups built villages of loosely scattered square earth lodges that contrasted with the compact villages of the Middle Missouri Tradition (built north and upriver from the study area). Interaction among these two groups and prehistoric farmers from the upper Midwest (the Oneota) resulted in a new cultural tradition in the study area from about A.D. 1300 through historic times. This Coalescent Tradition includes St. Helena Phase sites along the Missouri River.

Numerous Coalescent and/or St. Helena Phase sites have been recorded along the Missouri River between the upper Niobrara and Ponca. Of these the majority are within the project area. St. Helena Phase sites include at least 17 village, house, and burial sites within the Indian Hill Archeological District in Dixon County, Nebraska. Other important St. Helena Phase sites are the Shulte site in Cedar County, Nebraska with 18 earthlodges, and the Wiseman Village and nearby Wiseman Mounds. One site associated with a Western Oneota occupation is near the river in South Dakota.

HISTORIC USE

Historic Indian tribes, including the Omaha, Ponca, Santee Dakota, Pawnee, Arikara, Ioway, and the Brule and Oglala Divisions of the Lakota, are also believed to have used the area. The Omaha and Ponca are closely related and are believed to have once been parts of the same tribe. French maps show Omaha Indians on the land along the Missouri River, and they are known to have participated in the fur trade. They settled in what is now northeastern Nebraska and adjacent South Dakota during the 17th century and built political alliances with the Ponca. An Omaha site at Bow Creek was occupied during the 1730s. Ponca homelands were generally west of the project area, although at the time of contact with Euro-Americans, traditional Ponca hunting grounds extended all the way from southeastern South Dakota to near Lincoln, Nebraska.

The Pawnee may have been part of the Coalescent Tradition of the Dakotas, and their historic homeland was along the Loup and Platte Rivers in central Nebraska. Archeologists also believe that before the 1500s the ancestors of the historic Pawnee once lived in small farming hamlets scattered along the Missouri River. Other than occasional bison hunts, the Pawnee apparently made little use of this area in historic times. They had no permanent villages within the project area. The tribe was removed to the Indian territory in the 1870s.

The Arikara lived in earthlodge villages, some with central plazas. The Arikara and Pawnee are both thought to have been part of the Coalescent Tradition of the Dakotas and may have been associated with prehistoric St. Helena Phase sites along the Missouri River. The archeological record suggests the Ioway came into the recreational river area around 1700 and left circa 1720 to 1750. The Yankton Sioux located in an area near present-day Gavins Point Dam, and several of their village sites are still present in that vicinity.

Several area sites have been dated to the protohistoric period, a time when Europeans first began to explore the area, including the "Bad Village" of the Omaha and the Santee/Yankton Village. Smutty Bear's Yankton Village and Yankton Village sites are above Gavins Point Dam near Yankton. Area sites also include Sedentary Sioux and Omaha, Oneoto, and Ponca.

In the early 1800s relations between the Dakota and the U.S. government were generally peaceful, and several major treaties established boundaries for the tribe. Wars with the Chippewa encouraged some emigration westward, but the Santee or the eastern Dakota were widely scattered following the Minnesota Sioux uprising of 1862. In 1866 one group of Santee were forcibly relocated to what is today the Santee Reservation in Knox County, Nebraska.

Euroamerican exploration of this area began in the early 1700s when the Mallet brothers ascended the Missouri in search of trade routes. Spanish traders soon followed, and by 1739 traders and explorers had built encampments at the mouth of the Niobrara River. A number of trading posts were built along the Missouri River in association with the fur trade. Several of these forts were situated along the 59-mile stretch of the Missouri River, including Ft. Vermillion I, McClellans Trading Post, and a Columbia Fur Company Post.

Acquisition of the area as part of the Louisiana Purchase in 1803 led to the 1804–1806 Lewis and Clark expedition that hoped to link exploration with westward expansion and American commercial development. The Lewis and Clark expedition diaries described geographic features and landmarks along the route, several of which are still visible. These features include Mineral Bluffs (just above Elk Point), the Ionia "volcano", recorded by Clark on August 24, 1804; Spirit Mound, visited by the expedition on August 25; and Calumet Bluff, the site of the expedition's first council with the Plains Indians on August 30, 1804. While none of Lewis and Clark's campsites have been verified

archeologically, general locations have been identified from journals and local landmarks. Locations include campsites near Mineral Bluffs, Sweeney Bend, the mouth of the Vermillion River, Goat Island, northeast of St. James, near the mouth of the James River, and opposite and a little below the present city of Yankton. On their return in 1806, they camped in the vicinity of Rush Island. Some of these landscapes as seen from the river are also reminiscent of the scenes reported by Lewis and Clark. Features recorded during their 1804 visit include cottonwood stands, islands, and bluffs along the river.

During the mid-1800s a series of military expeditions explored the Missouri River valley seeking transportation routes across the Great Plains. As fur tophats went out of style, the fur trade network ceased to be a powerful force in the area. Official federal Indian policy during the first half of the 19th century included assimilation and removal of Indian tribes. Around the time of the Civil War, overland and by steamboat travel through the area increased as Euroamericans seeking land and gold in the West began to filter through the region. Treaties with Indian tribes were negotiated and repeatedly violated, and conflicts between tribes and Euroamericans escalated. Eventually a chain of military forts was constructed across the northern Plains.

By the 1880s most Indians had been confined to reservations where their survival depended on the Indian agencies. Various religious groups sent missionaries to minister to Indians, soldiers, and travelers and to establish missions and build churches on the reservations.

As tribes were removed to reservations, land in the study area came open for settlement. Immigration into the area was encouraged by the Homestead Act of 1862 and aided by the development of reliable overland routes, such as the Fort Randall Stage and Wagon Road, increased steamboat and ferry service on the river, and construction of railroads (the Chicago, Milwaukee, and St. Paul Railroad in South Dakota and the Chicago and North Western Railroad in Nebraska). During the late 1870s and early 1880s, immigrants from France, Ireland, the Scandinavian countries, Czechoslovakia, Germany, and German-Russia settled in this area and established farms and ranches, small market villages, and crossroads communities, such as the communities of St. Helena and Wynot. Originally treaties provided for individual allotments on the new Santee reservation, but the Dawes Act of 1887 provided for opening of nonallotted land to settlers. During the last three decades of the 19th century the main force in Santee life was assimilation.

Late 19th and early 20th century immigrants built a number of local communities like St. Helena, Concord, Dixon, North Bend, and Ponca. Historic Euroamerican structures and features from the late 1800s and early 1900s include general stores, postal facilities, mills, farms, churches, school buildings, granaries, railroad depots, and cemeteries. A number of century farms (farms owned by the same family and located on the same property for at least 100 years) are present along the river. Danish settlers formed the nucleus of Norway Township in Clay County, and their barns and houses, built in the Danish style, are part of a thematic national register nomination. Czech farmsteads dot the landscape in Yankton County. Fifty-seven cultural sites have been documented in or adjacent to the river, including farmsteads, historic houses and barns, cemeteries, and sites associated with early settlement.

A number of the river's other historic resources are related to transportation themes. The river was the primary highway to the northern Plains until the late 1800s. At least five steamboats are known to have been lost in the MNRR stretch of this historic transportation conduit. The wrecks probably now lie beneath silt and sandbars. The historical record (Chittenden 1897) for steamboat wrecks loosely links these locations to bends in the river (many of which no longer exist) and to tributaries (which still do exist). Therefore, the exact locations are not known, and it is likely that any wrecks would be deeply buried, especially near Yankton (two wrecks reported), near the mouth of the James River (one wreck), and near the mouth of the Vermillion River (two wrecks).

Railroads facilitated the development of communities like Yankton and Burbank, both of which have numerous historic homes and businesses listed on national and state registers of historic properties. The Meridian Bridge spanning the Missouri River at Yankton was a significant engineering accomplishment because its design provides two vertically stacked spans for motor traffic and a vertical lift span to allow the passage of boats beneath. During the early 20th century a number of transportation routes were established or improved, including South Dakota State Route 50, built along the Fort Randall Stage and Wagon Road.

Ponca State Park, developed in 1934, is a planned recreational facility whose structures and landscape design illustrate public works projects built during the Great Depression. The park also demonstrates the growth of 20th century tourism and recreation along the Missouri River in Nebraska.

Extensive flooding prompted the passage of many flood control measures during the mid-1900s. The Flood Control Act was passed in 1944 to capitalize on the potential of the Missouri River. This law created a program, later known as the Pick-Sloan Plan, which has had far-reaching benefits for the entire Missouri Basin through flood control, irrigation, navigation, development of recreation areas, fish and wildlife conservation, and production of hydroelectric power. Construction related to the Pick-Sloan Plan created a number of utility corridors and engineering structures, including the Gavins Point Dam and powerhouse, which were built during the mid 1950s.

Cultural Landscapes

The pastoral qualities of the landscapes are widely appealing, but a cultural landscape is more than a beautiful scene: "It is a space on the surface of the earth that has a degree of permanence, with its own distinct character, either topographical or cultural, and above all a space shared by a group of people. When these people modify their patch of ground, a cultural landscape results" (NPS 1994).

The river valley contains a series of cultural landscapes that were created through the interaction of people with natural forms and forces. The landscapes include residences and farm buildings (many of them historic), bridges, roads and trails, fences and corrals, orchards and gardens, cultivated fields, grazing land, and forested areas. The arrangement of these features on the land and the spatial relationships among them combine to create these rural landscapes. These landscapes are characteristic of this area, not only because of the landforms and vegetation, but because of the ways people settled the land and used its resources, particularly with traditional farming and cattle ranching. The states of South Dakota and Nebraska have identified numerous historic resources that contribute to agrarian and ethnic landscapes. For example, settlers constructed residences and farm buildings of native chalkstone. Often the design and arrangement of these buildings was guided by the availability of local materials, the topography, and by cultural traditions.

NATIONAL REGISTER OF HISTORIC PLACES AND NATIONAL HISTORIC LANDMARKS

Very few of the cultural resources of the study area have been rigorously studied and evaluated to determine national register eligibility, national historic landmark (NHL) status, or level of significance in a national context. In Nebraska, within or immediately adjacent to the recreational river boundaries, six historic properties are listed on the National Register of Historic Places: the Bow Valley Mills, the Meridian Bridge at Yankton, Schulte Archeological Site, Wiseman Archeological Site, Ponca Historic District, and the Indian Hill Archeological District. Most South Dakota national register sites are within the Yankton and Vermillion Historic Districts. A number of South Dakota farms included in a

noncontiguous thematic nomination of Czech folk architecture in southeastern South Dakota are close to but not within the boundaries of the river. In recognition of its importance to American history, the route of the 1804–1806 Lewis and Clark expedition was designated as a national historic trail in 1978.

The *Historical Overview and Inventory of the Niobrara/Missouri National Scenic Riverways* (NPS 1994b), the *Draft Archeological Overview and Assessment, Niobrara/Missouri National Scenic Riverways* (NPS 1994a), and the *Draft Cultural Anthropological Overview of the Niobrara/Missouri National Scenic Riverways* (NPS 1995) helped to identify prehistoric and historic resources in the study area that have potential for further evaluation for national register eligibility. Specific recommendations include further study of Gavins Point Dam, the powerhouse(s) and other features related to the Pick-Sloan Plan to determine their national significance as related to technology, engineering, and invention. Further study of the ethnic sites, structures, and communities to determine their potential as nationally significant historic districts, cultural landscapes, or multiple resource nominations is also recommended. Ethnographic resources associated with traditional farming and ranching and with ethnic settlements are included in the area's cultural resource base. During preparation of the *Cultural Anthropological Overview* (NPS 1995), researchers consulted with Indian tribes to identify tribal concerns, traditional uses, and sensitive areas. This information would be used in project planning to ensure that important resources are protected, but information would not be made public unless tribes so request. Additional research is needed to further document traditional ranching and farming and the cultural landscapes associated with these activities.

VISITOR EXPERIENCE

There is little or no identification of, or orientation to, this unit of the national wild and scenic rivers system for visitors. The area is not often a destination for national visitors; the majority of use is by local people in Nebraska and South Dakota. The recreational river offers a variety of river-related activities, including boating, fishing, hunting, trapping, and wildlife viewing. There is both private and public access to the 59-mile stretch of the Missouri River.

There is no single entry point into the recreational river. Local users put their boats onto the 59-mile stretch of the Missouri River at any of the public or private boat ramps. There are many small towns on both the South Dakota and Nebraska sides of the Missouri River, so there are multiple arrival experiences in the local area. The river can be crossed only at Gavins Point Dam and at Meridian Bridge at Yankton, South Dakota.

There are two businesses on the 59-mile stretch of the Missouri River where visitors can purchase supplies: the Sportsman's Steak House (a restaurant and bar) and Atens Resort (boat rental and repairs, bait shop, and restaurant).

This section of the Missouri River offers a variety of experiences. Local people, especially those who grew up in the area, recognize the river's beauty and bounty. A variety of scenery surrounds river users, and views include broad, open vistas. People who fish, hunt, or canoe on the Missouri River can hear the sounds of nature, including moving water and wind in the trees. The river has a calming effect on people. The calm, quiet experiences on the river are almost always balanced with the challenges of negotiating watercraft around, over, or through low water, sandbars, snags, and other river obstacles.

VISITOR USE AND INTERPRETATION

VISITOR USE MANAGEMENT

The earliest study that included estimates of visitor use was the 1976 study, the results of which were contained in the 1977 *Umbrella Study* (U.S. Army Corps of Engineers 1977). This study estimated annual recreation-days at 950,000, of which the majority of use was for swimming (298,000), followed by fishing (214,000) and camping (129,000). Hunting, picnicking, boating, and canoeing were combined for 309,000 recreation-days. This study also estimated that the ultimate demand for recreation within the MNRR would be 1,700,000 recreation-days, but no estimate was given on when that ultimate demand would likely be reached. No information exists as to what methodology was used to determine recreation-days in this study, and participants in the visitor use portion of the study are no longer with the Corps. Therefore, these data can only be taken at face value and cannot be compared with any confidence to more recent visitor use studies.

In 1991 the Corps contracted for initial visitor use studies in conjunction with the *Master Manual* review. The extensive survey sample was composed of fishing license holders. The participants provided data on number of trips to river sites, number in party, types of recreational activities, and duration of stay. The reach from Gavins Point Dam to Sioux City, which includes the MNRR, had 404,000 recreation user-days estimated from the survey. A number of concerns were raised regarding the limitations of the sample of fishing license holders, since boating is a significant recreational activity in the open river.

Another visitor use study was done by the Nebraska Game and Parks Commission in 1993 (Hesse et al.1993), which documented visitor use along the Missouri River, including the MNRR segment. The study results were reported in user-hours, not user-days, and the activity breakdown was much finer than in the 1976 study. For example, instead of fishing, activities were broken down by types of fishing activity such as seining. The Corps used these data when writing Volume 6C, entitled *Economic Studies, Recreation Economics, of the 1994 Master Water Control Manual Draft EIS*. The user-hours for each recreation activity were converted into user-days, based upon the survey average hours per recreation activity and expanded to the population with the survey methodology. Total user-days for public access points in the river reach were estimated at 721,000 recreation days. Although the identified number of cabins in the 1993 survey were used, a separate mathematical calculation was developed by a Corps' recreation team to estimate cabin use at 227,000 recreation days per year. The total recreation days were estimated at 948,000.

INTERPRETIVE PROGRAMS AND FACILITIES

Orientation/Information

There are few orientation or informational materials available to the public that pertain expressly to the recreational river. The Department of the Interior and the Corps of Engineers published a *Public Information Fact Sheet* on the Missouri National Recreational River. It offers a map, information about available facilities, and safety and river use messages. The recreational river is not identified with signs or noted on local highway signs.

Both Nebraska and South Dakota publish boating, fishing, and hunting guides that include the recreational river (in addition to Lewis and Clark Lake and other water-based recreational resources).

These guides provide information concerning boating, fishing, and hunting regulations on the river and safety messages.

Interpretive Programs

Only a limited amount of interpretation on the Missouri River's natural and cultural history can be found along this stretch of the Missouri River. The interpretive exhibits in Yankton and at Gavins Point Dam are adjacent to the recreational river. However, the area's history and cultural heritage is more extensive than these exhibits would suggest.

For example, the region's rich and complex Native American history is barely covered. Several tribes are mentioned in the context of their initial contacts with the Lewis and Clark expeditions in August and September 1804 and September 1806, but there is no treatment of prehistoric occupation of the area or of tribal histories subsequent to white contact.

There is little interpretation available concerning the Euroamerican settlement of the region. Waves of European immigration included the Danish, Swedish, Norwegian, Irish, Czech, Bohemian and German-Russians. Physical evidence of the impact of immigrant and American ranchers, farmers, and settlers is all around the recreational river. Present-day visitors to the area can learn about this history through personal contacts with local people or by participating in local festivals, fairs, rodeos, or other activities.

The natural resources of the Missouri River are interpreted only minimally. Changes in the Missouri River's physical appearance and the history and operational aspects of the Corps of Engineers' efforts to control Missouri River flooding are presented in the Lewis and Clark Visitor Center at Gavins Point Dam. Staff at South Dakota's Lewis and Clark Recreation Area west of Yankton offer programs on basic aspects of natural history.

There is an existing Corps program for endangered species (especially least terns and piping plovers) interpretation along the Missouri River, including the MNRR. Public awareness actions include radio and televised public service announcements during nesting season, school visits, campground talks, seasonal interpretive signs and posters (especially near boat ramps), and an Internet access site.

Missouri River Interpretive Facilities

Ponca State Park. The Nebraska Game and Parks Commission offers an informational and interpretive brochure on Ponca State Park in Ponca, Nebraska. The brochure discusses the Lewis and Clark expedition as well as the park's flora and fauna.

Interpretation of the Lewis and Clark expedition of 1804–1806 was formalized at Ponca State Park in 1997. The National Park Service, under a cooperative agreement with the state of Nebraska, built a river observation deck at Ponca State Park and installed wayside exhibits interpreting the expedition, the latter in coordination with the Lewis and Clark National Historic Trail.

Lewis and Clark National Historic Trail. The Lewis and Clark National Historic Trail (established by Congress in 1978 as a component of the national trails system) is administered by the National Park Service, in partnership with many federal, state, and local agencies, private organizations, and private landowners. Interpretation is provided along the trail from Illinois to Oregon. In Nebraska the historic expedition is interpreted in several parks and museums along the Missouri River, as well as by a series of state historical markers. Planning is underway by the National Park Service to construct a series of

interpretive kiosks and panels along the expedition route through Nebraska. The National Park Service is working with the Corps of Engineers and the Nebraska Game and Parks Commission to construct interpretive kiosks at Lewis and Clark Visitor Center at Gavins Point Dam and in Ponca State Park, in Ponca, Nebraska.

Spirit Mound. A new organization, the Spirit Mound Trust in Vermillion, South Dakota, is raising funds to purchase and protect Spirit Mound. Visited and described by Lewis and Clark on August 25, 1804, the mound is located 6 miles north of Vermillion. A sign for the site is in place at the turnoff on South Dakota Highway 19.

Yankton. The Yankton Area Chamber of Commerce offers a walking and auto tour brochure for the city of Yankton. Visitors can walk or drive to nearly 40 different historic residences and buildings, including the Historic Downtown Yankton District (National Register of Historic Places). Some of the attractions include the G.A.R. Hall, Gurney Seed & Nursery, Carnegie Library, A.M.E. Church, and many individual residences. Only the Cramer-Kenyon Heritage Residence is open to the public for tours. The chamber of commerce hands out thousands of the brochures every year to walk-ins, conventioneers, and visitors to the Yankton Riverboat Days and Summer Arts Festival held every August. The estimated number of people who take the self-guided tour is 2,000–3,000 per year. The Riverboat Days Festival attracts over 100,000 annually to Yankton.

Dakota Territorial Museum. The Dakota Territorial Museum in Yankton, South Dakota, interprets the early years of the town's history. Operated by the Yankton County Historical Society, the museum contains several historic buildings, including a schoolhouse, railroad depot, and blacksmith shop. The main building houses American Indian artifacts and memorabilia from Yankton's years as a transshipment point on the river and as capital of the Dakota Territory. Visitation to the museum averages 10,000 people annually.

Gavins Point Dam. The Corps of Engineers offers public tours of the powerhouse at the dam. There are interpretive displays about the dam and powerhouse functions. Printed orientation and information brochures about COE areas are provided for visitors.

Lewis and Clark Regional Visitor Center. The Corps of Engineers' Lewis and Clark Visitor Center is at Gavins Point Dam on the Nebraska side. The visitor center offers interpretive exhibits that cover a wide range of history and natural history topics. The Lewis and Clark expedition, transportation routes, fur trade, steamboat era, railroading, and harnessing the river are a few of the subjects. Artifacts from the main stem dam construction and early Corps explorations are on display. Large picture windows offer views of the dam and lake. The number of people visiting the Lewis and Clark Visitor Center has varied up and down from 20,000 to 45,000 annually since its opening in 1976. Most recently, the number of visitors totaled 37,310 in 1997 and 32,543 in 1998.

In spring 1996 the Corps of Engineers, in cooperation with the National Park Service, installed interpretive wayside exhibits at a visitor center overlook. These wayside exhibits interpret the Lewis and Clark expedition in coordination with the Lewis and Clark National Historic Trail.

Lewis and Clark Recreation Area, South Dakota. This area lies just west of the recreational river segment. On summer weekends, interpretive programs are offered for visitors at the Lewis and Clark Recreation Area managed by the South Dakota Department of Game, Fish and Parks. Recreation area staff members present the programs throughout the area, and subjects focus on crafts and natural history. At the Gavins Point unit of the recreation area, people can visit an interpretive shelter. Interpretive panels offer information on the Yanktonai people of the region; on Missouri rivercraft,

including steamboats and keelboats; and on the Lewis and Clark expedition meeting with the Yankton at Calumet Bluff in 1804.

Lewis and Clark State Recreation Area, Nebraska. This area also lies just west of the recreational river segment. The Nebraska Game and Parks Commission manages six areas along Lewis and Clark Lake encompassing 1,315 acres. Facilities include a marina with 80 boat slips, gas, a convenience store, 286 camping pads, 178 with electrical hookups, water, restrooms, and showers. The recreation area lacks a visitor center and it does not have any interpretive exhibits. A brochure is in the planning stage. Visitation for 1995 was estimated at over 100,000 people. Interpretive programs or facilities are not available at Nebraska's Lewis and Clark State Recreation Area.

RECREATIONAL FACILITIES

There are more than 15 public and private access areas on the Missouri River from Gavins Point Dam to Ponca State Park. All South Dakota areas are on the left bank (L) and all Nebraska areas are on the right bank (R).

Gavins Point Tailwaters, Nebraska (River mile 810.+R)

The Corps of Engineers manages Gavins Point Dam and its recreational facilities. On the Nebraska side, the tailwaters area is available for fishing all year. There are picnic shelters, a playground, a fish cleaning station, and restrooms. A double-wide concrete ramp allows access to the river.

Gavins Point Tailwaters, South Dakota (River mile 810.+L)

There are several developed COE areas downstream from the dam on the South Dakota side of the river that offer recreational facilities. Collectively, the Pierson Ranch area, Chief White Crane area, training dike area, and Cottonwood area have concrete boat ramps, a campground, electric hookups, a jogging and bike trail, picnic shelters, a playground, restrooms, a fish cleaning station, a fishing pier, and a beach.

Aten Resort, Nebraska (River mile 808.8R)

This privately owned resort provides limited access to the Missouri River. A gravel ramp may be unusable due to heavy siltation. The resort offers a boat dock, restrooms, and concessions.

Riverside Park, South Dakota (River mile 805.8L)

Owned by the city of Yankton, this public park has a double-wide boat ramp for access to the river. The park offers a campground, boat docks, restrooms, picnic tables, firepits, ball diamonds, a playground, and an amphitheater. This park was developed under the 1980 *General Management Plan* for the MNRR, using this funding and authorization in conjunction with the cost-share sponsor, the city of Yankton.

St. Helena Access, Nebraska (River mile 798.8R)

This public access point is owned by Cedar County and offers a single-wide boat ramp. The site has picnic tables and shelters, firepits, restrooms, and a campground.

Wiseman Wildlife Management Area, Nebraska (River mile 786.0R)

This area is managed by the Nebraska Game and Parks Commission. It is dedicated to the management of habitat for fish and wildlife. Activities include hunting, fishing, trapping, and nonconsumptive use of wildlife.

Myron Grove Game Production Area, South Dakota (River mile 787.2L)

Operated by the South Dakota Department of Game, Fish, and Parks, this area has a boat ramp, a dock, parking, and restroom facilities. The area is known locally as "High Line" landing because of an electric powerline that once spanned the river here. This river access point was developed under the 1980 *General Management Plan* for the MNRR, using this funding and authorization in conjunction with the cost-share sponsor, Clay County, South Dakota.

Brooky Bottom Landing/Cedar County Park, Nebraska (River mile 784.9R)

This small public park is owned by Cedar County and offers a double-wide concrete boat ramp for river access. The site has picnic tables and shelters, benches, restrooms, and a campground.

Vermillion Boat Club, South Dakota (River mile 782.6L)

Privately owned, this site offers limited access with a membership. The site has a single-wide concrete boat ramp. Recreational facilities and activities include a boat dock and restroom. Only members and guests can use the boat ramp.

Clay County State Recreation Area and
State of South Dakota Recreational Area, South Dakota (River mile 780.8L)

This area consists of two adjacent parks. The Clay County State Recreation Area is a 200-acre park with no river access. The park has a rodeo grounds, picnic area, and playground. There is little or no camping. The state recreational area provides parking and a boat ramp for river access. Most of the public use is on the riverfront; the boat ramp is heavily used in the summer.

Frost Wilderness Area, South Dakota (River mile 778.0L)

The South Dakota Department of Game, Fish, and Parks operates this wilderness area as an undeveloped forest area along the river. There are no facilities and river access is not very good. There is little public use.

Indian Hills Park, Nebraska (River mile 764.5R)

This park is privately owned. It has a boat ramp, picnic tables, camp pads with electrical hookups, and additional open areas for camping. The present ramp is at the foot of the bluffs.

Mulberry Bend Wildlife Management Area, Nebraska (River mile 775.4R)

The new Mulberry Bend Wildlife Management Area boat access facility was a community project facilitated by the Nebraska Game and Parks Commission. A small park offers parking, a vault restroom, and a boat ramp (accessible) on a gravel county road.

Bolton Game Production Area, South Dakota (River mile 763.5L)

The South Dakota Department of Game, Fish, and Parks operates this unimproved area. There is some clearing of underbrush and trees for parking. The boat ramp is sometimes unusable due to high water. A few local people use the area, but there is little other public use. Access is poor because of a dirt road entrance.

Ponca State Park, Nebraska (River mile 753.5R)

Sitting on top of bluffs overlooking the Missouri River, this scenic 859-acre state park offers many recreational amenities. Established in 1934 by the state of Nebraska and developed by the Civilian Conservation Corps, the park has access to the river via a wide concrete boat ramp. Recreational facilities include housekeeping cabins, a campground with electrical hookups, restrooms, showers, picnic areas and shelters, scenic overlooks, hiking trails, and a swimming pool. This park offers an excellent view of the unchanneled river in its natural state. Attendance at Ponca State Park in 1998 was 260,450.

RECREATIONAL ACTIVITIES

The river offers a scenic area with opportunities for boating, fishing, canoeing, and wildlife observations in a relatively undeveloped landscape. River users can feel a sense of slow passage through a historic transportation corridor with its prehistoric and historic American Indian occupation, Lewis and Clark expedition campsites, fur trade, steamboating activities, and surrounding rural landscape. The various recreational activities along this segment of the Missouri River are described below.

Camping

Developed public camping is available at the COE Gavins Point Dam tailwater areas. Downriver, developed public camping is available at Riverside Park, St. Helena access, and at Ponca State Park. Private campgrounds open to the general public within the recreational river are at Indian Hills Park and Brooky Bottom.

Hiking/Trails

The only current areas for public hiking within the recreational river are in Ponca State Park. There are hiking trails throughout the park, and horseback trail rides are offered during the summer.

The Lewis and Clark National Historic Trail does not include a continuous hiking corridor; rather it consists of rivers and reservoirs, short trail segments, and marked highways, which sometimes very loosely follow the expedition routes. Visitors have options for hiking, driving, or boating segments of the trail. The number of visitors who follow the historic trail along this section of the Missouri River is not known but is increasing with the approach of the expedition's bicentennial in 2004–2006.

Fishing

There is abundant fishing along the recreational river throughout the seasons. Gavins Point tailwater species include walleye, sauger, channel and flathead catfish, crappie, eel, drum, paddlefish, buffalo, smallmouth bass, white bass, and carp. Species in the Missouri River below Gavins Point include channel and flathead catfish, drum, carp, sauger, walleye, white bass, crappie, sturgeon, and paddlefish.

Hunting

Hunting is popular along the Missouri River. Waterfowl hunting along the river and in its marshy backwaters is some of the best in Nebraska and South Dakota. White-tailed deer are hunted in the bluffs above the river and in the creek bottoms through the grasslands and croplands. Wild turkeys are hunted along the river bottom and in forests, while pheasants, bobwhite quail, and Hungarian (gray) partridge are hunted in agricultural fields. Squirrels are hunted in the forested bluffs along the river. The only public hunting along the 59-mile stretch of the Missouri National Recreational River in Nebraska is in Ponca State Park, where deer hunting is allowed with a special permit. Hunting occurs on private land with permission of the landowner.

Scenic Drives

Other than the overlooks at Ponca State Park, there is little access to the river for people seeking open, scenic views. Because land use is primarily agricultural, there are few roads along the river for scenic drives. In Nebraska there are two short sections of county road along the river.

Lewis and Clark Lake

Lewis and Clark Lake, impounded behind Gavins Point Dam, extends about 25 miles upstream from the dam, is immediately upstream of the recreational river, and covers 33,000 acres. This lake is one of the largest, most intensively developed, water-based recreational resources in a 200-mile radius. The lake provides accessible deep water and has highly developed facilities for shoreline recreation on the South Dakota side (Lewis and Clark Recreation Area) as well as less intensive recreational development and access on the Nebraska side (Lewis and Clark Lake State Recreation Area). The Corps of Engineers also provides recreational facilities near the dam.

Recreational activities on the lake include boating, waterskiing, sailing, swimming, fishing, and hunting. Campsites are offered on both sides of the lake, and picnicking, horseback riding, bicycling,

hiking, cross-country skiing, and snowmobiling are popular. Because of the extensive recreational facilities and activities that it provides, Lewis and Clark Lake attracts a great number of visitors from throughout the surrounding area, particularly from the states of Nebraska, South Dakota and Iowa. In 1994 visits to the South Dakota state recreational facilities reached 1,043,451. Visits to the Nebraska state recreational facilities on the lake reached 95,206 in 1994. The total number of visits (head count) at Lewis and Clark Lake (including Nebraska and South Dakota facilities, COE facilities, and areas with walk-on and drive-though use) from October 1, 1993, to September 30, 1994, reached 1,630,718.

RECREATIONAL USE PATTERNS

Missouri River

Downriver from Yankton and the developed facilities on Lewis and Clark Lake and at Gavins Point Dam, the character of the river changes dramatically. There are few land-based services on either side of the river for river users, with primitive river access being the norm. The majority of visitation is local.

Commercial boat rental services are available. Traditional uses of the river by local people include boating, fishing, hunting, trapping, wildlife watching, and the use of personal watercraft and airboats, both of which are illegal on national park system waters. The Missouri River has constantly changing sandbars and snags and is difficult to navigate; safe use of the river requires some knowledge and experience.

Most river use occurs from Memorial Day to labor Day, especially on good-weather weekends and holidays. The nature of the river precludes certain uses of the river; however, typical uses on any given weekend includes numerous boats and sunning and playing volleyball on sand beaches such as at Goat Island. Boat use on the river increases during higher than normal releases from Gavins Point Dam, since more water reduces the tendency for boats to get stuck on underwater sandbars.

Summer use of cabins and trailers along this section of the Missouri River is high and increasing, based on anecdotal observations by local residents. Developments on the recreational river consist of permanent residences, seasonal residences, cabins, and trailers. In the area of Brooky Bottom Park and Sportsman's Steak House, there are about 50 cabins and houses. Other homes and cabins are in the Holmes addition (river mile 786–786.5 in South Dakota); 14–15 summer trailers at the Vermillion Boat Club (river mile 782.6); development at river mile 782.8–783; and development at the Ponderosa, south of Burbank, South Dakota (river mile 769–770). There is also a loose cluster of homes and cabins near river mile 772 at the mouth of the Vermillion River.

Although several visitor use studies have been completed in the past 20 years, none have been done using consistent collecting and recording methodology. Inconsistent data hinder the analysis of visitor use trends. Baseline visitor use studies are needed, as is ongoing monitoring of visitor use. For more information on existing visitor use studies, see pages 29 and 30.

SOCIOECONOMIC RESOURCES

The socioeconomic region is defined as Cedar and Dixon Counties in Nebraska and Yankton, Clay, and Union Counties in South Dakota. The information in this section was derived from a 1993 report prepared for the National Park Service by the University of Nebraska-Lincoln Bureau of Business Research.

DEMOGRAPHICS

The regional population has decreased 7% during the last 65 years. The population gains in Clay and Yankton Counties have nearly offset the substantial decreases in the other three counties. The 1990 census recorded 59,000 people in the five-county region. Since there has been no significant exodus of younger people, the median age is similar to the average for Nebraska and South Dakota. There is substantial immigration to the area; only 61% of the residents are living in the state where they were born. The population is 98% white. There are no American Indian reservations in the immediate project area.

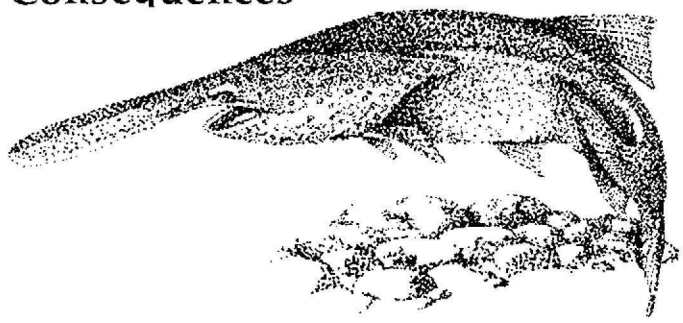
EMPLOYMENT AND INCOME

Total employment in 1990 was approximately 33,000. Between 1975 and 1990 farm employment decreased sharply from 20% to 13% and is now approaching the average for the two states. Government employment decreased slightly to 20%, which is higher than the state averages for either Nebraska or South Dakota. The rest of the economy experienced a broad-based increase in employment, especially in the manufacturing and service sectors. The net effect was that overall employment in the region increased 12% between 1975 and 1990. During this same period total employment for the two states increased 25%.

The primary sources of employment are government, manufacturing, service sector, and retail sales. Tourism makes a minor contribution to the regional economy. In 1990 tourism was responsible for approximately $5 million in payroll, 580 jobs, and $4 million in tax receipts. This overstates the impact of tourism because most visitor use is by local residents and generates no added economic benefit to the regional economy. Economic benefits result only to the extent that visitors bring in money from outside the region.

Regional per capita income ($14,774 in 1990) is lower than in most surrounding counties or in South Dakota, Nebraska, or the nation as a whole. The poverty rate is 15%, which is only slightly higher than the average for the two states. After adjusting for inflation, it becomes apparent how different components of personal income changed between 1975 and 1990. Farm income varied due to weather and prices, but the overall trend was down. Nonfarm income also decreased. These decreases in earnings were more than offset by growth in income sources other than employment. Per capita government transfer payments (retirement, medical, welfare payments) were 54% higher in 1990 than in 1975, substantially outpacing the growth in the two states and the nation. Such payments now account for 17% of total personal income and would be expected to continue to increase as the population ages. Dividends, interest, and rent income also grew dramatically and now account for 19% of total personal income.

Environmental Consequences



INTRODUCTION

The National Environmental Policy Act requires that environmental documents disclose the impacts of a proposed federal action and any adverse effects that could not be avoided if the proposed action was implemented. In this instance, the proposed federal action would involve implementation of the general management plan for the recreational river. Through comparison of the impacts of each alternative, the relative merits and drawbacks of each can be evaluated, and informed decisions for managing the recreational river can be made. The environmental consequences addressed in this document pertain to actions resulting from implementation of the *General Management Plan.*

This *General Management Plan* is a vehicle to establish long-term management objectives, identify issues, and establish courses of action, including areas of further study, necessary to address the issues. The range of alternatives provide an opportunity to assess various options for meeting management objectives from a programmatic viewpoint.

The alternatives in this plan offer general strategies for long-term management and protection of land and water resources and recreational use. This is a general analysis and addresses the potential results of following different alternatives of management. Because no specific land purchase or construction projects are proposed, and the alternatives are general strategies for long-term management, the consequences (or impacts or effects) can only be assessed in general terms. Where possible, direct and indirect effects are identified. As actions mentioned in this plan are implemented, site-specific environmental compliance requirements will be met.

THE DERIVATION OF IMPACT TOPICS

To compare the impacts of the alternatives and focus the discussion of potential consequences of proposed actions, specific impact topics were selected. These were based on federal laws, regulations, and executive orders; National Park Service *Management Policies*; knowledge of the resources; resource studies; and concerns expressed by private property owners, special interest groups, and other agencies.

Soils

Soils support plant and wildlife habitat that exists along the recreational river. Potential facilities and visitor activity could affect soils. Impacts to soils could include erosion, compaction, and/or soil mixing resulting in an inability for the soil to support plant and wildlife habitat.

Prime and Unique Farmland

Prime farmland, one of several kinds of important farmlands defined by the U.S. Department of Agriculture, is the land that is best suited to food, feed, forage, fiber, and oilseed crops. Federal agencies are required to analyze the impacts of federal actions on agricultural lands. The policy was developed to minimize the effect of federal programs in converting prime, unique, or locally important farmland to nonagricultural uses.

Vegetation

NPS management policies state that the National Park Service will seek to perpetuate native plant life as part of natural ecosystems. The vegetation communities along the recreational river are important resources that provide habitat, prevent soil erosion, and create an aesthetically pleasing environment for visitors.

Wildlife/Fisheries

NPS management policies state the National Park Service will seek to perpetuate native animal life as part of natural ecosystems and to perpetuate the inherent integrity of water resources and aquatic ecosystems.

Threatened and Endangered Species

The Endangered Species Act requires an examination of the impacts of federally funded and permitted actions on all federally listed threatened and endangered species. NPS policy also requires an examination of the impacts on species of special concern.

Wetlands, Floodplains, and Streambanks

Executive order 11990 and NPS management policies require an examination of the impacts of federally funded and permitted actions to wetlands. Executive order 11988 and NPS policies require an examination of impacts on floodplains and of potential risks involved with placing facilities within floodplains.

Water Quality

NPS management policies state the National Park Service will seek to perpetuate surface and groundwaters as integral components of aquatic and terrestrial ecosystems. The National Park Service will seek to restore, maintain, or enhance water quality consistent with the Clean Water Act.

Air Quality

The Clean Air Act requires federal land managers to protect air resources and NPS management policies address the need to analyze air quality during planning.

Noise

Noise levels have the potential to impact visitor experience and adjacent landowners and therefore have been analyzed.

Cultural Resources, Including Cultural Landscapes

The National Historic Preservation Act and NPS planning and cultural resource guidelines call for the consideration and protection of historic properties in planning proposals. As defined by the National Historic Preservation Act, the term historic properties refers to all cultural resources, including prehistoric archeological sites, cultural landscapes, and historic sites eligible for or listed on the National Register of Historic Places. Areas along the recreational river contain numerous archeological and historic resources valuable in American history and prehistory.

Ethnographic Resources

Laws such as the National Historic Preservation Act, the American Indian Religious Freedom Act, the Native American Graves Protection and Repatriation Act, and NPS policy require attention to American Indian concerns in planning. Because the Santee and Yankton Sioux and Ponca tribes have traditional ties to the land and value special sites and resources within the three recreational rivers, ethnographic resources are addressed in the following impact sections. The National Historic Preservation Act also recommends that ways be found to preserve diverse historic, ethnic, and folk cultural traditions, so impacts on local ranching and farming communities would also be considered.

Visitor Activities

What types of activities, where they occur, when they occur, and how many visitors participate in various activities within the park have a direct impact on the quality of the visitor experience and the ability of the park staff to protect the resource base. Visitor activities and use are key to the mission of the National Park Service and are included in the impact section as part of the planning discussion.

Visitor Use Management

The management of visitor use is a critical element of overall park management. Where, when, for what purposes, and in what volumes visitors use the park are elemental aspects of a well functioning park. Proactive management of visitor use can prevent problems and conflicts before they result in unacceptable resource damage or degradation of the visitor experience; therefore, this topic is addressed in the plan.

Interpretation

Interpretation and orientation are integral functions of any national park. How these functions are implemented and how successfully they provide information to the public and visitors can greatly affect visitor use and enjoyment of the park. These activities can also be effective management tools for resource protection.

Recreational River Staff Payroll and Other Expenditures

The Missouri National Recreational River does not exist separately from the local and regional economic and social environment. NEPA and CEQ implementing regulations recognized that federal actions, such as creating and developing units of the national park system, could affect local and

regional economic and social conditions. One of the most direct socioeconomic impacts of a park is the hiring of staff and expenditure of funds to support the staff. Such expenditures tend to have a positive effect on the local area.

Land Use, Property Owners, and Regional Population

Creation of a new park unit invariably results in some changes in land use, and possibly ownership that may affect the local populace. These potential changes need to be addressed as part of the planning and decision making process related to the development of any new park.

County Expenses and Revenue

Development of this park would encourage recreational use of the Missouri River. Increased use would place some extra burden on local authorities for law enforcement and emergency services. Often national park status may also lead to changes in property values — increases in value for property adjacent to the park due to increased desirability as residential sites. Acquisition of private property for park purposes will lead to the removal of land from the local real estate tax roles. Such impacts on local county expenses and revenues are examined as part of the affected socioeconomic environment.

Employment

Besides the direct employment of park staff, national park units tend to indirectly provide additional employment opportunities in recreation-related businesses such as motels, restaurants, automotive services, and guide services as a result of increased visitation to the region. Such opportunities could be locally important and are therefore analyzed.

ALTERNATIVE 1: NO ACTION

IMPACTS ON NATURAL RESOURCES

Geology, Physiography, and Paleontology

Analysis. Alteration of geologic processes or features, physiography, or paleontologic resources are not expected. There are no major earthmoving or blasting activities proposed that would impact geologic processes or features or cause substantial alteration of the topography. Minor facility development would not impact the above resources. Prior to any facility development, paleontologic assessment would be done, and facilities would be relocated to avoid any scientifically important paleontologic resources should they be discovered.

Conclusion. There would be no expected impacts on geologic processes or features, physiography, or paleontologic resources.

Mineral Resources

Analysis. Extraction of sand, gravel, clay, and chalk would continue at dispersed sites scattered along the river valley. Mining has the potential to impact resource values along the river valley. The Wild and Scenic River Act does not preclude mining or mineral extraction on private land. Existing uses supply local needs and are relatively small in scale. Demand and cost of hauling long distance make large-scale expansion of activity unlikely. Mining is conducted under state and federal regulations with required permits.

Conclusion. There would be no expected impacts on mineral extraction activity or new impacts on mineral resources.

Prime and Unique Farmland

Analysis. Cropland and pastureland meeting USDA criteria of prime and unique farmland could be impacted by private real estate development. The trend of dispersed small-scale residential development would continue along the river at the discretion of landowners. Most of the land on the South Dakota side of the river is under zoning control (except for Yankton County), but none of the land on the Nebraska side of the river is controlled by zoning. Some real estate development has occurred in riparian forest, with no effect on farmland. Riverbank erosion of farmland would continue, influenced by river channel movement, waterflow management, and placement of riprap. Economic considerations of the value of farmland versus the cost of riprap discourages increased erosion control efforts.

Conclusion. Impacts on prime and unique farmland would gradually continue from riverbank erosion and from landowners converting cropland to residential development.

Soils

Analysis. Riverbank erosion would continue. The process of river downcutting would lead to higher and less stable banks, resulting in collapse and soil loss. Development and agriculture have the potential to cause topsoil erosion. Landowners reduce soil loss by certain farming methods. Conservation programs also help prevent soil loss.

Conclusion. Soil erosion impacts would continue due to increase in riverflows, agriculture, and private development.

Vegetation

Analysis. Historic data and aerial photographs indicate a decline of native grassland and riparian forests. Lack of flooding, introduction of nonnative plants, and conversion of land to agriculture and development impact native plant communities. Fire suppression has contributed to the increase of red cedar. Lack of early season flooding and ice scouring have increased sandbar vegetation. Cottonwood riparian forests have matured and are not reproducing due to lack of periodic flooding. Some landowners participate in vegetation conservation and revegetation programs. Damage to natural resources caused by human uses would affect vegetation due to the lack of required protection measures and limited law enforcement.

Conclusion. Natural vegetation surface area and species composition would continue to decline. Under this alternative damage to natural resources would be expected to increase.

Fish and Wildlife

Analysis. State and federal regulations and conservation programs would continue to provide protection. Upland fish and wildlife habitat protection largely depends on private landowner actions. Some landowners participate in habitat enhancement programs. Habitat loss could occur from conversion to agriculture, residential development, and alteration of riverflows. Future modification of water release levels and seasonal timing might improve conditions for some species.

Conclusion. Fish and wildlife populations and habitat could be impacted if land uses significantly changed over time.

Threatened and Endangered Species

Analysis: Current ongoing programs under the existing *General Management Plan* would continue. These include funding to support recovery efforts of the least tern and piping plover and studies to gain additional information on the pallid sturgeon. Although no new construction is planned, this alternative does not preclude new construction. If new construction would occur, then site-specific compliance would be done.

Conclusion: Continuation of existing MNRR programs under the old *Management Plan* would not adversely affect threatened and endangered species.

Wetlands, Floodplains, and Streambanks

Analysis. A significant overall decrease in quantity and quality of wetlands has occurred due to historic modification of the river and floodplain. River downcutting has lowered the water table, drying oxbow ponds. River downcutting has also reduced the quantity of backwater chute wetlands. Oxbow ponds and marshes fill in and change over time without periodic flooding to rejuvenate them. Ponds and seasonally wet areas have been drained for agriculture. Regulation of floods has encouraged conversion of floodplain native vegetation to agriculture and other development. Wetland restoration might result over the long term from proposed changes in riverflow management and from incentives in existing state and federal conservation programs.

Streambank erosion could continue where streambank protection is not in place. Private individuals could continue to apply for streambank protection permits as erosion threatens their property. The Corps of Engineers could continue to maintain the section 32 streambank protection structures as appropriations are available for such purposes. New structures or extension of old structures in newly eroding areas could occur. Landowners could continue to allow for COE maintenance of existing structures through permanent easements. Donation of permanent easements to create wildlife habitat and allow for streambank protection could become an active program.

Conclusion. Dam construction has had a significant indirect effect in reducing wetlands and encouraging floodplain development and agriculture. With recent conservation and agricultural policy, the process may have stabilized. There could be continued maintenance of existing structures along the streambanks. New structures could be built by the Corps. Land use changes without strong controls would ultimately result in adverse impacts on wetlands and floodplains. There would be adverse impacts on streambanks, even with some mitigation efforts.

Water Quality

Analysis. Water quality is considered to be generally good. No point sources of contaminants have been identified. Water sampling at the mouth of the James River indicates localized elevated fecal coliform counts. There are no livestock yards along the river, but some agricultural chemicals could reach the river. Residential septic disposal has potential to contaminate the river where systems are close to the river and inadequately operated. Increasing shoreline development could increase contamination.

Conclusion. Water quality is generally adequate for water contact recreation and warm water fisheries, with no short- or long-term impacts expected.

Air Quality

Analysis. Air quality is good. No heavy industry occurs in the area, and farming practices do not depend on burning fields or waste. Short-term localized impacts could occur from construction-related dust or emission. No significant reduction of air quality is expected in the near future.

Conclusion. Air quality is good and no adverse impacts would be expected.

Noise

Analysis. Motor noise is occasionally produced by boats and some agricultural activity; however, natural conditions dominate. Human caused sources are not expected to significantly increase.

Conclusion. Impact from human-caused noise is minor and not expected to be adverse.

IMPACTS ON CULTURAL RESOURCES

General

Analysis. Cultural resources on public land would generally benefit from continued management by existing agencies, but lack of a coordinated, comprehensive management effort would continue fragmented preservation efforts. Higher priorities for mandated programs (recreation, riverbank stabilization) leaves limited funding for cultural resource protection and research, and would result in neglect or occasional negative effects.

Conclusion. Lack of coordinated management and funding would result in limited adverse effects, mostly from neglect. Because of the unknown future development along the rivers, impacts on cultural resources cannot be accurately predicted.

Historic Resources

Analysis. Most property owners would continue current stewardship practices, but neglect, demographic changes, and occasional inappropriate uses would continue to diminish the number and quality of historic structures. Little technical assistance would be available to help preserve or document historic resources. The absence of strong protection programs and educational programs would contribute to deterioration and resource degradation. In areas lacking zoning or other protective measures, inappropriate development or visitor use could compromise the integrity of historic resources, including cultural landscapes.

Conclusion. Most historic resources would continue to be protected under public and private stewardship. However, historic resources could be adversely affected by neglect, changes in demographics, and inappropriate development and visitor use.

Prehistoric Resources

Analysis. Land managing agencies could continue to suffer a lack of personnel, funding, and program direction to fully identify, evaluate, and protect prehistoric resources. Present levels of private stewardship would likely continue. The present level of resource impacts does not appear to be significant, but impacts could increase in the future with unmanaged visitor use and development.

Conclusion. There could be adverse impacts from inappropriate uses, undirected recreational activities, development, and continued lack of agency personnel and funding.

Ethnographic Resources

Analysis. Lack of agency coordination and funding could mean that sensitive areas would remain unidentified, and without identification, no protective measures would be put into place. There is potential for inadvertent damage to ethnographic resources from construction or visitor activities.

Conclusion. There is potential for adverse impacts on ethnographic resources.

IMPACTS ON VISITOR USE AND INTERPRETATION

Interpretation

Analysis. Identification, orientation, and information about the recreational river would continue to be minimal. The scarcity of in-depth interpretation programming along the recreational river would continue. Visitors would have limited knowledge of facilities, activities, safety, and recreational opportunities on the river, resulting in confusion, lost time, or possible shortened visits.

Conclusion. Visitors would have limited knowledge and enjoyment of the river.

Visitor Activities

Analysis. Types of recreational uses on the river would not be expected to change from present conditions. Occasional crowded conditions for visitors might exist on peak days.

Conclusion. There would be no change to the current river experiences for visitors; however, construction of new boat ramps or other visitor use facilities would not be precluded in this alternative. Site-specific environmental compliance would be done if construction occurred.

Visitor Use Management

Analysis. Management of visitor use would continue to be on an as-needed basis. Visitor use studies and management of visitors would not be precluded in this alternative, and could be done, if needed, subject to availability of funding. The levels of use would not be expected to change significantly from present conditions.

Conclusion. Current management of visitor use would continue, although additional studies could still be initiated if needed. Site-specific environmental compliance regarding visitor use would be done if future construction warranted.

IMPACTS ON SOCIOECONOMIC RESOURCES

Recreational River Staff Payroll and Other Expenditures

Analysis. The regional economy would benefit to the extent that outside monies were used to fund payroll, operations, and construction associated with the national river. However, the level would be quite small. Federally funded streambank protection would also provide economic benefits.

Conclusion. Under this alternative, there would be an unknown, but probably slight, benefit to the regional economy.

Land Use, Property Owners, and Regional Population

Analysis. Land use in South Dakota could be affected by county zoning. If zoned, current land uses would be expected to continue; however, new land uses would be subject to county zoning. The Federal Emergency Management Administration requires the implementation of flood hazard regulations limiting construction in the 100-year floodplain as a prerequisite to the provision of federally subsidized flood insurance. The enforcement of such regulations might limit the construction of residential structures of any type close to the river. Market conditions have not yet resulted in land being converted to feedlots or other incompatible land use. However, residential homes, new cabin development, and developed campgrounds have been built and could accelerate in the future. Even in counties that have zoning, such as Union County, considerable residential development could occur, since minimum lot sizes along the river are 2 acres. The managing agency could purchase conservation easements to prevent such conversions, but it has had no history of doing so. The decisions have rested with property owners and with county governments. The managing agency would not condemn land to prevent incompatible land uses. Limiting land use could result in at least a perceived loss of freedom and a reduced potential for economic gain. When this was accomplished through zoning, property owners would probably not be compensated for any resulting decrease in the value of the land, nor would they pay more if land values increase.

Conclusion. Under this alternative, there would be a potentially minor adverse local impact on land use, property owners, and regional population.

County Expenses and Revenue

Analysis. There might be an increase in recreation and dispersed residential and other private development. This would increase both property tax revenues and demand for services. Overnight use might increase slightly. The counties might potentially implement lodging taxes. To the extent the counties choose to levy such taxes, revenue would increase with increased overnight use.

Increased visitor use and dispersed residential and other private development would result in increased maintenance cost for roads and parks and more demand for law enforcement and other emergency services.

This unit would not be staffed with federal employees trained and equipped to respond to fire, rescue, and law enforcement emergencies. Federal funds would not be available to contract with county governments or others to provide such services. Since no federal or state funds would be used to provide such services, the only mitigation of the increasing demands placed on the county governments would be the rising valuation of property and tax revenues.

The county tax base would increase as agricultural land was converted to residential and other private development. The resulting increase in tax revenue would at least partially offset the increased services required to support these land uses.

No conservation easements or fee land would be purchased by federal, state, or county government or by any nongovernmental organization. Since no land would be purchased by the government, none would be removed from the county tax base.

Conclusion. Under this alternative, increased use and continued conversion of agricultural land to residential and other private development might have a net adverse impact on the county government through the demand for county services.

Employment

Analysis. Employment options would increase with increased development and with increased demand for services.

Conclusion. Under this alternative, there would be an unknown, but probably minor beneficial, increase in employment opportunities.

CUMULATIVE IMPACTS

Analysis

Other ongoing actions that are reasonably foreseeable within the MNRR area include the implementation of a new master water control regime (ongoing EIS), the Vermillion-Newcastle bridge (completed EIS with funding for bridge available), and the Highway 81 bridge (ongoing EIS). Also, the Corps does annual management and monitoring activities for the least tern and piping plover to implement the USFWS 1990 Biological Opinion. The current tern and plover management plan has expired, and the Corps is in the process of writing a new habitat-based management plan for the birds. The Corps also has a protocol established for collection of eggs and chick rearing within the Missouri River, including the MNRR.

Although other plans are in existence (state SCORPS, Lewis and Clark Trail plan, Nebraska Trails Plan, etc.), implementation of these actions would not be considered reasonably foreseeable because there would be no ongoing environmental compliance, funding, nor design plans, for future construction.

Of the reasonably foreseeable actions, the *Master Manual* update and the Highway 81 bridge are too early in the EIS process to have determined an alternative and related impacts associated with that alternative. Therefore, it would be speculative to try and anticipate which alternative would be selected and include that within our cumulative assessment. It is important to be aware that these other planning projects are ongoing within the MNRR. The Vermillion-Newcastle bridge project, however, does have a selected alternative and associated impacts, so that could be considered cumulatively with this GMP/EIS. Also, it is reasonably foreseeable that the Corps would continue tern and plover habitat creation and management actions, even though the plan with specific locations has not yet been finalized. The construction actions proposed in this GMP/EIS themselves are only tentative at this point, since no cost-share sponsors, design plans, or funding has been established yet. Site-specific analysis of cumulative actions would be done in conjunction with site-specific environmental analysis when, and if, anything is built as a result of this plan.

The impacts associated with the Vermillion-Newcastle bridge would be as follows: short-term temporary minimal water quality, air quality, and noise impacts associated with bridge construction; minimal, but permanent wetland impacts associated with bridge placement (1/3 acre in Nebraska and 1/10 acre in South Dakota), which would be mitigated; positive impact on local economic activity, in conjunction with the increase of traffic between the towns of Vermillion and Newcastle and the surrounding area; and potential increase in land-based recreational use based on development of a bike path from Vermillion to the river in conjunction with the bridge project. No effect on threatened or endangered species would occur, as long as mitigation (stabilization of Mulberry Point and planting additional trees for eagle habitat) was implemented.
The Corps' tern and plover management program would provide a positive impact on terns and plovers.

Concentration of visitor use in a previously undisturbed area could increase the loss of cultural resources over time. Vandalism and illegal artifact collecting also may damage irreplaceable resources and destroy scientific evidence through the undocumented removal or disturbance of objects from their original locations. Once artifacts are removed from an area, it might be impossible to determine who used the site, when it was used, or the national register significance of the site. Over time, these activities would reduce the number and quality of sites, and there would be a cumulative impact on the sites and on the data base, which could skew and limit the information available for research.

Construction of the Vermillion-Newcastle bridge might impact an archeological site on the Nebraska side of the river. The Nebraska Department of Road would try to avoid the site or would mitigate effects on it.

Conclusion

Under alternative 1 existing actions on the MNRR would continue. This alternative would not preclude future development but would not propose any new development at this time. The cumulative impacts of this alternative, in conjunction with the other reasonable foreseeable actions, concludes that there would be a localized increase in traffic and economic activity in the Vermillion-Newcastle area, which would not be significant to the MNRR as a whole, as well as temporary construction-related impacts in that same area.

Various efforts and programs would be focused on preventing adverse cumulative impacts on cultural resources; however, some impacts would occur.

UNAVOIDABLE ADVERSE EFFECTS

Continued trends could result in a net loss of agricultural land to erosion and a net loss of natural resources if mitigating measures are not effective.

Increased use and continued conversion of agricultural land to residential and other private development might have a net adverse impact on the county government through the demand for county services. Whether this would actually take place cannot be predicted.

THE RELATIONSHIP BETWEEN SHORT-TERM USES AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The primary short- and long-term use of the project area would be agricultural. Long-term productivity would be affected if agricultural land was converted to private developments. The long-term ability of the area to maintain natural resources, the current quality of life, and the visitor experience would decrease incrementally as these trends continued.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible commitments of resources cannot be reversed, except perhaps in the extreme long-term. Irretrievable commitments of resources are those that are lost for a period of time — a resource is devoted to a use that simultaneously precludes other uses. This plan is not predicted to significantly preclude any such uses.

ALTERNATIVE 2: THE PREFERRED ALTERNATIVE

IMPACTS ON NATURAL RESOURCES

Geology, Physiography, and Paleontology

Analysis. Alteration of geologic processes or features, physiography, or paleontologic resources are not expected. There are no major earthmoving or blasting activities proposed that would impact geologic processes or features or cause substantial alteration of the topography. Minor facility development would not impact the above resources. Prior to any facility development, paleontologic assessment would be done, and facilities would be relocated to avoid any scientifically important paleontologic resources should they be discovered.

Conclusion. There would be no expected impacts on geologic processes or features, physiography, or paleontologic resources.

Mineral Resources

Analysis. Impacts would be similar as described under alternative 1. If mining activity increased, impacts would likely be mitigated by cooperative efforts made by various levels of government.

Conclusion. No new impacts would be anticipated.

Prime and Unique Farmland

Analysis. No new impacts on prime and unique farmland would result from recreational river management programs. Impacts on cropland from river bank erosion would continue as described under alternative 1. Impacts from long-term residential development might be less than would occur under alternative 1; however, much would depend on decisions by landowners and local government. Economic incentives (such as conservation easements) and improved development planning could influence development and reduce impact on farmland.

Conclusion. More prime and unique farmland would be retained.

Soils

Analysis. The trend of soil loss from riverbank erosion and some agricultural practices would continue as described under alternative 1. There would be no expected new impacts.

Conclusion. There would be no expected new impacts.

Vegetation

Analysis. Emphasis on monitoring and restoring remnants of native vegetation, plus improved education, interagency cooperation, and landowner incentives, could reverse the trend of declining native vegetation conditions. Impacts on native vegetation have resulted from a variety of past actions, including clearing for agriculture, control of floods, fire suppression, and introduction of non-native vegetation. Reversing these impacts would take long-term cooperative effort. Only a small percentage of the river valley would be affected and would depend on willing landowners.

Conclusion. Proposed management would have long-term beneficial effects on preserving remnants of native vegetation, with potential restoration of limited sites.

Fish and Wildlife

Analysis. Fish and wildlife habitat would benefit from proposed protection and enhancement along with native vegetation conditions described above. There would be no effect on state management of game and fish. Fish and wildlife populations may increase with improved habitat conditions; however, many other variables affect wildlife, such as real estate development, agricultural practices, riverflow management, and long-term weather patterns.

Conclusion. Fish and wildlife and populations should benefit from proposed actions.

Threatened and Endangered Species

Interior Least Tern/Piping Plover

Analysis. The interior least tern (least tern) and the piping plover are discussed together because they share the same breeding and nesting habitat during the same summer timeframe. The avoidance measures for boat ramp construction discussed in the action alternatives would be implemented to avoid impacting the least tern and piping plover and their habitats. The overwhelmingly local use of existing boat ramps would be projected to continue, even with the addition of two new boat ramps within the MNRR. Local use, in combination with a steady population in the area, would likely result in a redistribution of existing users from more distant boat ramps to the new boat ramps; therefore, riverine use is projected to remain steady in spite of the new boat ramp construction. All other proposed construction is land-based and would not impact the riverine habitat of the birds.

Conclusion. Anticipated management and construction activities associated with this alternative would have no adverse effect on the least tern and piping plover.

Bald Eagle

Analysis. Potential construction activities associated with this alternative would most likely occur during the warmer months when eagles are not present. Care would be taken to avoid removal of large cottonwood trees during construction. A buffer zone would be established around any nesting eagles, if present, if construction is proposed nearby. In addition, site-specific compliance would be done when and if any construction took place.

Conclusion. Anticipated management and construction activities associated with this alternative would have no adverse effect on the bald eagle.

Pallid Sturgeon

Analysis. There have been only seven documented pallid sturgeons captured within the MNRR since 1952, with the most recent capture in 1994 (USFWS pallid sturgeon database). Because these fish are rare, specific habitat needs are uncertain. Generally speaking, any type of construction that alters the bottom contours of the river (river morphology) could cause an impact. The proposed construction under this alternative is either land-based or would not cause an alteration of river morphology.

Conclusion. Anticipated management and construction activities associated with this alternative would have no adverse effect on the pallid sturgeon.

Peregrine Falcon, Whooping Crane, Western Prairie Fringed Orchid, American Burying Beetle

Analysis. These species are being analyzed together, since it is highly unlikely that these species are within the project area, although there would be a potential for these species to be present at some point during the lifetime of the project. Site-specific environmental compliance would be done prior to undertaking any proposed construction, at which time the likelihood of the presence of these species would be more closely examined, based on the habitat requirements for each species.

Conclusion. Anticipated management and construction activities associated with this alternative would not adversely effect the above species.

Wetlands, Floodplains, and Streambanks

Analysis. The two proposed boat ramps would have direct, minor, local, inconsequential impacts on wetlands and floodplains. Benefits of generalized protection and restoration of wetlands by changes in riverflow management and conservation programs would be the same as under alternative 1. Site-specific restoration projects could result from increased management for natural resource values. No sites have been identified at this stage of planning. Impacts on floodplains from development might be lessened by increased awareness of conservation measures, improved planning, and potentially by easement purchase.

Impacts on streambanks would be the same as alternative 1 with certain exceptions. Landowners would provide wildlife habitat easements to the Corps of Engineers, so that construction of added streambank protection structures would be possible. In its own work, and in permitting private applications, the Corps of Engineers would encourage, but not demand, the use of bioremediation techniques for streambank protection.

Conclusion. No significant impacts on wetlands or floodplains would result from proposed actions. The two proposed boat ramps would have no impacts on waters of the U.S. Site-specific environmental analysis, 404 permitting, and mitigation would be undertaken when a location for these boat ramps was chosen. However, minor insignificant impacts would occur due to construction of two new boat ramps. With continued funding, the Corps of Engineers would maintain existing structures along streambanks and construct new bank stabilization structures with donated easements from landowners and specific congressional appropriations.

Water Quality

Analysis. There would be no impact on water quality from proposed recreational river management actions. Septic contamination from increased residential development may be alleviated by improved planning and proposed conservation management of floodplain areas.

Conclusion. No impact on water quality would be expected.

Air Quality

Analysis. Impacts would be the same as alternative 1. There would be no effect on air quality from proposed actions.

Conclusion. There would be no effect on air quality.

Noise

Analysis. Impacts would be the same as alternative 1. If noise from recreational use significantly increased, appropriate monitoring and mitigation actions would address the problem. No impacts from noise would be expected over the long term.

Conclusion. No significant impacts from noise would be expected.

IMPACTS ON CULTURAL RESOURCES

General

Analysis and Conclusion. Cooperative efforts among agencies and local citizens to identify and protect resources would benefit cultural resources. However, if additional funding and personnel were unavailable to carry out proposals in this alternative, resources might be adversely affected.

Historic Resources

Analysis. Use of incentives, shared expertise, directed visitor use, and resource monitoring would be beneficial to these resources. Development of resource-sensitive local zoning or land use plans would also help to protect historic resources, including cultural landscapes. However, demographic trends would continue to reduce the rural population and diminish occupancy and use of historic structures. Unless specific funding was targeted and set aside for these purposes it would be likely that resources would suffer because of available personnel and funding.

Conclusion. Generally historic resources would benefit from added community and agency attention, but unless funding was available, historic resources would suffer.

Prehistoric Resources

Analysis. Continuing private stewardship, inventory and monitoring, use of incentives, development of resource-sensitive zoning or land use plans, educating visitors, and managing visitor use would help to protect prehistoric resources and reduce looting, vandalism, or inappropriate development.

Because selected sites would be interpreted to visitors, they would require a higher level of stabilization and monitoring. If funding and staff were available to administer programs outlined in this alternatives, the costs and possible adverse effects of focused visitor use would be outweighed by the benefits of increased public understanding and support for preservation of archeological resources. Local communities would also benefit through increased understanding of the resources.

Conclusion. This alternative would help to protect prehistoric resources, and interpretation of selected sites would be beneficial. However, if funding and staff were lacking, resources could be adversely impacted.

Ethnographic Resources

Analysis. Coordinated agency programs and continued consultation with ethnographic groups would help to prevent inadvertent damage to sites and would encourage continuation of traditional activities.

Conclusion. Ethnographic resources would benefit.

IMPACTS ON VISITOR USE AND INTERPRETATION

Interpretation

Analysis. The construction of the two boat ramps would be designed (size of ramp, size of parking lot, location, etc.) to redistribute existing use, rather than to provide for additional riverine use. However, if a bike trail was constructed, this would be an addition to existing trail opportunities, so there could be a small increase in land-based visitor use that could be significant at the local (Ponca area) level, although probably not significant at the regional level. Without baseline information on visitor use, it is difficult to project future visitor impacts. Site-specific environmental compliance, including determinations of visitor use, would be done if construction was initiated.

Conclusion. Under this alternative, water-based visitor use would remain the same, while land-based use could increase slightly, for a small net visitor use increase.

Visitor Activities

Analysis. Types and levels of recreational use would not change significantly over present conditions. River management would promote river-based activities consistent with the river's natural resource values. Some visitor activities currently taking place could be regulated or controlled if they impair those values. There would be an increase in the amount of interpretive programs both on and off the river.

Conclusion. The quality of river experiences would not change significantly for current visitors, as recreational uses consistent with river values would continue. Visitors would benefit from the opportunity to attend, participate in, and learn from interpretive programs.

Visitor Use Management

Analysis. If land-based visitor use increased slightly, as would be anticipated, there could be a need for additional visitor use management. Although no water-based increase in visitor use would be anticipated, monitoring levels of use at boat ramps would be needed to determine if this was a valid prediction.

Conclusion. Implementation of this alternative could require an increase in visitor use management tasks within the MNRR.

IMPACTS ON SOCIOECONOMIC RESOURCES

Recreational River Staff Payroll and Other Expenditures

Analysis. Under this alternative, the regional economy would benefit to the extent that outside monies are used to fund payroll, operations, and construction associated with the national river. Neither the level, type, nor funding source of such expenditures can be projected. No significant increases in management staff are proposed, nor are any major developments proposed. The amount of salary spent locally would vary with the individual employee.

Conclusion. Under this alternative, there would be an unknown, but probably minimal, benefit on the regional economy.

Land Use, Property Owners, and Regional Population

Analysis. Under this alternative, land use would be most affected by county zoning actions and/or tax incentives. Voluntary agreements with the National Park Service or wildlife habitat easements with the Corps of Engineers may also be used. Neither the relative nor actual amount of land to be protected through any of these means can be projected. The form or value of such incentives cannot be projected. The net effect of the use of these techniques would be to stabilize, and neither increase or decrease, the intensity of use of the land.

Developed land in the vicinity of the river is generally assessed based on current use. All other land uses are generally assessed based on agricultural rates. The current practice is not to give tax breaks for preserving natural environments (such as cottonwood forests) or other nonproductive uses, although such incentives could be used. This means that land values and property taxes would not be significantly affected. Limiting land use results in at least a perceived loss of freedom and a reduced potential for economic gain. When this is accomplished through purchase of a conservation easement (as opposed to zoning or donation of voluntary conservation agreement), the property owner is paid for the resulting decrease in the value of the land.

Some property owners may be displaced by acquisitions of lands. This should not be a significant problem since all of the fee purchases would be from willing sellers. The emphasis in this alternative on

non-acquisition techniques would likely result in very little fee acquisition, property owner displacement, or land use changes.

Conclusion. Under this alternative, there would be minimal adverse local impact on land use, property owners, and regional population.

County Expenses and Revenue

Analysis. Under this alternative, there might be a small increase in recreation and dispersed residential and other private development. This would increase both property tax revenues and demand for services. Overnight use might increase slightly. The counties might potentially implement lodging taxes. To the extent that the counties choose to levy such taxes, revenue would increase with increased overnight use.

Small increases in visitor use and dispersed residential and other private development would result in increased maintenance cost for roads and parks and more demand for law enforcement and other emergency services.

The county tax base may increase as some agricultural land was converted to residential and other private development. The resulting increase in tax revenue would at least partially offset the increased services required to support these land uses.

The cost of purchasing conservation easements and land in fee title might be funded by federal, state, or county government or by some nongovernmental organization. Although the actual amount to be purchased in fee title cannot be projected, it is expected to be very little. Land purchased by the government would be removed from the county tax base. When the government purchases land, the need for services decreases. The Payments In Lieu of Taxes Act, as amended, allows for partial compensation to county governments for land purchased by the federal government. During the first five years after purchase, the authorized payment is $.75 per acre plus 1% of the fair market value at time of purchase, not to exceed annual tax payments at time of purchase. After five years the authorized payment is reduced to a flat rate of $.75 per acre. During the first five years federal payment in lieu of taxes might approximately equal previous county tax revenue on grassland. After five years counties might lose the difference between $.75 per acre and the previous tax rate.

Conclusion. Under this alternative, there would be an unknown, but probably minor, net effect on county expenses and revenues. The greatest potential for impact would result if the counties have direct financial participation in the management of the recreational river.

Employment

Analysis. Under this alternative, some employment options would be decreased if land acquisition results in larger holdings. Other employment options would increase with increased development and with management and operation of the recreational river and with increased demand for services.

Conclusion. Under this alternative, there would be an unknown, but probably minor, increase in employment opportunities.

CUMULATIVE IMPACTS

Analysis. For an analysis of other ongoing projects that are considered in this cumulative analysis, see page 115.

Alternative 2 proposes construction of two new boat ramps and a bike trail, but does not preclude additional development, if consistent with the objectives of the MNRR. There are no design plans, cost-share sponsors, or funding for such development, and site-specific environmental compliance would be done when and if such construction occurred. However, if this alternative was fully implemented, the result would likely be a small localized increase in land-based visitor use in the vicinity of the proposed bike trail. Boat ramp development would have location and construction constraints that should preclude impacting the least tern and piping plover by increasing water-based visitor use.

Cumulative impacts on cultural resources would be the same as described under alternative 1. However, due to programs proposed under this alternatives, the cumulative impacts would be less than under alternative 1.

Conclusion. Implementation of alternative 2, when considered cumulatively with other ongoing projects, would result in localized increases in land-based recreational use within the MNRR.

UNAVOIDABLE ADVERSE EFFECTS

Some increased use, some continued conversion of agricultural land to residential and other private development, and land purchased by the government might have an adverse impact on the county government. Whether this would actually occur cannot be predicted. Preservation of the river environs in a more natural state may be viewed as a beneficial effect of such impacts.

THE RELATIONSHIP BETWEEN SHORT-TERM USES AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The primary short- and long-term use of the project area would be agricultural. Long-term productivity would be affected if agricultural land is converted to residential and other private developments. The long-term ability of the area to maintain both the current quality of lifestyle and to support the current visitor experience should significantly increase.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible commitments of resources are those that cannot be reversed, except perhaps in the extreme long-term.

Irretrievable commitments of resources are those that are lost for a period of time — a resource is devoted to a use that simultaneously precludes other uses. This plan is not predicted to significantly preclude any such uses.

ALTERNATIVE 3: RECREATIONAL EMPHASIS

IMPACTS ON NATURAL RESOURCES

Geology, Physiography, and Paleontology

Analysis. Alteration of geologic processes or features, physiography, or paleontologic resources are not expected. There are no major earthmoving or blasting activities proposed that would impact geologic processes or features or cause substantial alteration of the topography. Minor facility development would not impact the above resources. Prior to any facility development, paleontologic assessment would be done, and facilities would be relocated to avoid any scientifically important paleontologic resources should they be discovered.

Conclusion. There would be no expected impacts on geologic processes or features, physiography, or paleontologic resources.

Mineral Resources

Analysis. Impacts would be the same as described under alternatives 1.

Conclusion. No new impacts would be anticipated.

Prime and Unique Farmland

Analysis. Impacts would be the same as described under alternative 2.

Conclusion. No impact on prime and unique farmland would result from recreational river related programs.

Soils

Analysis. Impact on soil would be the same as described under alternatives 1. No new source of impact is expected.

Conclusion. Existing impacts would continue as described under alternative 1.

Vegetation

Analysis. Cooperative management and conservation programs would generally provide more means of protection of remnants of native vegetation than alternative 1. Benefits from active restoration would be less likely than from alternative 2.

Conclusion. Trends of declining native vegetation would probably be stabilized, but active improvement of native vegetation from restoration projects would be less likely than from alternative 2.

Fish and Wildlife

Analysis. Fish and wildlife management would remain focused on sport hunting and fishing, with a low priority given to nongame species. Habitat would be actively restored or increased as under alternative 2. Modified riverflow management would benefit fish populations by reducing impact on spawning due to fluctuating water level.

Conclusion. Fish and wildlife populations and habitat conditions would be protected with more emphasis on sport hunting and fishing.

Threatened or Endangered Species

Analysis. The focus of the increased recreational opportunities in this alternative would be land-based, rather than water-based, which would avoid the three most sensitive threatened and endangered species in the MNRR, the least tern, the piping plover, and the pallid sturgeon. However, there would also be two boat ramps in this alternative (similar to the preferred alternative), but future construction would have constraints to avoid impacts on threatened and endangered species. In addition, site-specific compliance would be done when and if any construction was done.

Conclusion: Anticipated management actions and construction would have no adverse effect on threatened or endangered species.

Wetlands, Floodplains, and Streambanks

Analysis. No new impacts on wetlands or floodplains would result from proposed actions. As also described under alternative 2, impacts on floodplains from development might be lessened by increased awareness of conservation measures, improved planning, and potentially by easement purchase. Benefits of generalized protection and restoration of wetlands by changes in riverflow management and conservation programs would be the same as under alternative 1.

Impacts on streambanks would be the same as alternative 1, with certain exceptions. More cabins, summer homes, and trailers may be located along the river. This might increase the demand for streambank protection. Landowners would provide wildlife habitat easements to the Corps of Engineers, so that construction of added streambank protection structures would be possible. In its own work, and in permitting private applications, the Corps of Engineers would encourage, but not demand, the use of bioremediation techniques for streambank protection.

Conclusion. Wetland and floodplain protection would generally be improved. There would be continued maintenance of existing structures along streambanks. Increasing the number of summer homes and cabins along the river might increase the demand for streambank protection. New structures would probably be built by the Corps of Engineers on donated wildlife habitat easements offered by landowners. The preservation of the natural appearance of the river would be positively enhanced through such actions.

Water Quality

Analysis. Effects on water quality would be the same as under alternative 2.

Conclusion. No impact on water quality is expected.

Air Quality

Analysis. Impacts would be the same as alternative 1. There would be no effect on air quality from proposed actions.

Conclusion. There would be no effect on air quality.

Noise

Analysis. Recreational traffic could significantly increase above existing sparse use. Because most traffic is motorized, noise would increase proportionately with boating traffic. Fishing boat motors, as commonly used on the river, are not excessively loud, compared to high performance water ski boats and personal watercraft (jet skis). Personal watercraft are not permitted on the MNRR. With the introduction of field rangers, this type of watercraft will be regulated. Noise conflicts would be possible, but unlikely in the near future given sparse shoreline development, low existing base level of recreational use, long reach of river to disperse traffic, and general unsuitability for water skiing.

Conclusion. Impact from boat motor noise is not expected.

IMPACTS ON CULTURAL RESOURCES

General

Analysis and Conclusion. Most of the impacts on cultural resources described in alternative 2 apply to this alternative as well. Under this alternative, resources would benefit from greater interpretation and preservation information if staffing and funding were available to adequately meet program needs.

Historic Resources

Analysis and Conclusion. New development and increases in recreational use could adversely impact resources, but this impact largely would be mitigated from added community and agency attention.

Prehistoric Resources

Analysis. Because recreational uses might increase moderately under this alternative, and new development would be allowed, archeological resources would require more intensive management to prevent adverse impacts.

Conclusion. If funding and staffing were available to implement programs, more intensive management would help to prevent most adverse impacts on prehistoric resources.

Ethnographic Resources

Analysis and Conclusion. Impacts would be the same as described under alternative 2.

IMPACTS ON VISITOR USE AND INTERPRETATION

Interpretation

Analysis. The amount of interpretive programming would increase over current conditions. Emphasis on all of the recreational river's primary interpretive themes would allow visitors to learn about the natural and cultural resources and history.

Conclusion. An increase in the amount of recreational activities and interpretive programming would result in increased visitor enjoyment and understanding of the river's values.

Visitor Activities

Analysis. Recreational use of the river would continue and additional activities could be provided for visitors. This alternative plans to add more land-based recreational facilities, such as two additional campgrounds and additional trails, over and above the two boat ramps and bike trail proposed under the preferred alternative. The amount of recreational use on and off the river would increased moderately.

Conclusion. The addition of more land-based recreational facilities would increase the land-based visitor use and could be significant at the regional level if implemented. There would be no increase in water-based visitor use, because the boat ramps would be designed to redistribute existing visitor use. Additional site-specific visitor use monitoring should be conducted in conjunction with construction, if cost-share sponsors were interested in such construction, and if such construction moved forward. Visitor use would be monitored to manage visitor use so that the values for which the MNRR was designated would not be adversely affected.

Visitor Use Management

Analysis. Implementation of this alternative should result in an increase in land-based visitor use; therefore additional visitor use management activities would also be anticipated. The level of visitor use management would be greater than in the previous two alternatives, if all of the planned construction was implemented. Although no increase in river-based visitor use is anticipated, monitoring of boat ramps would be necessary to verify this conclusion. Site-specific environmental compliance would be needed when, and if, any construction occurred.

Conclusion: Land-based visitor use management methods, such as increased law enforcement, visitor education, and monitoring of land-based and river-based visitor use would be necessary with the implementation of this alternative.

]IMPACTS ON SOCIOECONOMIC RESOURCES

Recreational River Staff Payroll and Other Expenditures

Analysis. This alternative would have the same type of effects as were described for alternative 2. The regional economy would be impacted the same amount and for the same reasons.

Conclusion. Under this alternative, there would be an unknown, but probably no more than modest, benefit to the regional economy.

Land Use, Property Owners, and Regional Population

Analysis. This alternative would have the same type of effects as were described for alternative 2. Land use, property owners, and the regional population would be impacted the same amount and for the same reasons.

Conclusion. Under this alternative, there would be a potentially minor adverse local impact on land use, property owners, and regional population.

County Expenses and Revenue

Analysis. This alternative would have the same type of effects as were described under alternative 2. The counties' expenses and revenues would be impacted the same amount and for the same reasons.

Conclusion. Under this alternative, there would be an unknown, but probably minor, net effect on county expenses and revenues. The greatest potential for impact would result if the counties had direct financial participation in the management of the recreational river.

Employment

Analysis. This alternative would have the same type of effects as were described for alternative 2. Employment would be impacted the same amount and for the same reasons.

Conclusion. Under this alternative, there would be an unknown, but probably minor, increase in employment opportunities.

CUMULATIVE IMPACTS

Analysis. See page 115 for an analysis of which ongoing projects would be considered in the cumulative analysis.

Alternative 3 proposes two additional campgrounds, two additional boat ramps, as well as several bike trails. There are no designs, cost-share sponsors, or funds for these actions yet; however, if all of these actions were to occur, there would be an increase in land-based visitor use in the vicinity of such construction. Site-specific environmental compliance would be done when, and if, construction occurred. Construction constraints (such as avoiding eagle trees, avoiding tern and plover nesting islands, avoiding wetlands, etc.) would minimize or eliminate additional impacts.

Conclusion. The increase in land-based recreational use, in conjunction with the localized increase in traffic, economics, and land-based recreational use from the Vermillion bridge, would cumulatively result in a greater increase in land-based recreational use within the MNRR.

Cumulative impacts on cultural resources described for alternative 2 would also be applicable to this alternative.

UNAVOIDABLE ADVERSE EFFECTS

Increased use, continued conversion of agricultural land to residential and other private development, and land purchased by the government might have a net negative impact on the county government.

THE RELATIONSHIP BETWEEN SHORT-TERM USES AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The primary short- and long-term use of the project area would be agricultural. Long-term productivity would be affected if agricultural land is converted to residential and other private developments. The long-term ability of the area to maintain both the current quality of lifestyle and to support the current visitor experience should not be significantly decreased.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible commitments of resources are those that cannot be reversed, except perhaps in the extreme long-term.

Irretrievable commitments of resources are those that are lost for a period of time — a resource is devoted to a use that simultaneously precludes other uses. This plan is not predicted to significantly preclude any such uses.

COMPLIANCE

NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act of 1969 declared a federal policy to preserve important historic, cultural, and natural aspects of our national heritage and required federal agencies to use a systematic, interdisciplinary approach that would ensure the integrated use of the natural and social sciences in planning and in decision making. This *Final General Management Plan / Environmental Impact Statement* (GMP/EIS) was prepared pursuant to the act and its implementing regulations and guidelines. A notice of intent to prepare an environmental impact statement was published in the *Federal Register* in July 1992. A *Federal Register* notice was published announcing the availability of this document, and public meetings held during the public comment period. Following public review of this draft plan, the National Park Service and the Corps of Engineers addressed public comments and developed a final environmental impact statement. Each agency will provide a record of decision.

SECTION 7 OF THE ENDANGERED SPECIES ACT

The Endangered Species Act requires all federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by a federal agency does not jeopardize the continued existence of listed species or critical habitat.

The National Park Service, as primary lead, requested a list of threatened and endangered species in a letter dated December 23, 1994, initiating informal consultation on the GMP/EIS. The U.S. Fish and Wildlife Service responded on January 23, 1995, with a list of six endangered and two threatened species which could occur within the project area. An informational list of category 1 and 2 species was also attached. On March 10, 1997, the National Park Service requested an updated species list, since the original list was only valid for 90 days. The U.S. Fish and Wildlife Service replied on March 17, 1997, that the original list was still accurate and would remain valid for another 90 days. Each listed species and the potential impacts of the GMP/EIS are discussed, and it was concluded that the general implementation of the GMP/EIS, with the conditions discussed, will have no affect on federally listed species. Concurrence of the U.S. Fish and Wildlife Service on this determination will be requested prior to finalization of this document and implementation of any site-specific actions. Site-specific compliance of construction activities will also contain a review of endangered species impacts.

It is NPS policy to provide protection for federal candidate species and any state-listed species. Consultation with the Nebraska Game and Parks Commission and the South Dakota Department of Game, Fish, and Parks concerning these species has been initiated. Lists of species were obtained from the Nebraska Game and Parks Commission and the South Dakota Department of Game, Fish and Parks. These species' locations were also entered into the GIS database.

FISH AND WILDLIFE COORDINATION ACT

This act requires federal agencies to consult with the U.S. Fish and Wildlife Service and with parallel state agencies whenever water resource development plans result in alteration of a body of water. The secretary of the interior is authorized to assist and cooperate with federal agencies to provide that wildlife conservation receives equal consideration and is coordinated with other features of water-resource development programs.

It is not anticipated that this *General Management Plan / Environmental Impact Statement* will alter a body of water, which in this case would be the Missouri River, so this act does not apply. However, reconnecting chutes and backwaters is consistent with this plan, are not specifically planned at this time, and would most likely require a cost-share sponsor. If done, these alterations would be to benefit fish and wildlife, so would be consistent with the Fish and Wildlife Coordination Act. The U.S. Fish and Wildlife Service had a representative on the planning team, and much of the planning process focused on wildlife conservation.

FEDERAL WATER POLLUTION CONTROL ACT (CLEAN WATER ACT OF 1972)

This act includes section 404 of the Clean Water Act, section 10 of the Rivers and Harbors Act of 1899, and the 1987 Federal Water Quality Act. The act establishes federal regulation of the nation's waters and contains provisions designed to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The act requires that the states set and enforce water quality standards to meet EPA minimum guidelines. It establishes effluent limitations for point sources of pollution, requires permits for point source discharge of pollutants and discharge of dredged or fill material, and emphasizes onsite biological monitoring. The Corps of Engineers issues permits for work affecting navigable water and wetlands of the United States, and (with the states) issues joint permits for work affecting wetlands and navigable waters. Waters of the United States are defined as all navigable waters (all interstate waters, including interstate wetlands, intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds) for which use, degradation, or destruction could affect interstate or foreign commerce.

The Storm Water Rule (Clean Water Act) requires a National Pollution Discharge Elimination System (NPDES) permit on certain categories of storm water discharge. Road reconstruction that involves clearing and grading activities on more than five acres would require an NPDES permit.

The GMP/EIS, in its programmatic form, is in compliance with this act because site-specific construction activities occurring in (or near) waters of the U.S. will require site-specific review. Construction of the bike trail may need NPDES compliance, and construction of the boat ramps will need section 404 compliance.

EXECUTIVE ORDER 11988, "FLOODPLAIN MANAGEMENT" AND EXECUTIVE ORDER 11990, "PROTECTION OF WETLANDS"

The recreational river includes extensive floodplains and wetlands, and NPS and Corps activities are subject to executive orders protecting these areas. Wetland information was collected from the U.S. Fish and Wildlife Service National Wetland Inventory and entered into the GIS database. Areas prone to flooding were mapped with data provided by the Nebraska Game and Parks Commission in consultation with COE and NPS hydrologists. Ordinary high water was interpreted from 1:24000 scale color aerial photography taken in October 1991.

The GMP/EIS recommends that new construction be outside the 100-year floodplain or sufficiently floodproofed (one foot above the 100-year elevation). However, federal roads, foot trails and associated daytime parking areas, boat ramps, and picnic areas are excepted from compliance with Executive Order 11988, "Floodplain Management," under NPS and Corps final implementation procedures as outlined in Special Directive 93-4, "Floodplain Management Guideline." Warning signs and an emergency flood response plan would be developed for dealing with all flood-prone areas under the proposed action. No other construction is proposed by the National Park Service that might adversely

affect floodplain or wetland values or do not increase flood flow obstruction. Policies were developed to protect floodplains and wetlands and the data were used in the analysis of alternatives. Any proposed future actions would include recommendations that would not adversely impact floodplains or wetlands. A Statement of Findings would be prepared for implementing the executive orders. The section 404 compliance on site-specific construction, if needed, allows for at least a 1:1 replacement ratio for impacted wetlands, which supports the no net loss of wetlands executive order.

Under executive order 11988 "Floodplain Management," federal agencies are required to avoid, to the extent possible, the long-and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid the direct or indirect support of new construction in floodplains wherever there is a practical alternative.

Under executive order 11990 "Protection of Wetlands," federal agencies are required to avoid to the extent possible, the long and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practical alternative.

CLEAN AIR ACT

The Clean Air Act requires all federal facilities to comply with federal, state, and local air pollution control laws and regulations.

Under the Clean Air Act conformity requirements, federal actions must conform to all applicable state implementation plan requirements and purposes, and these actions must not cause or contribute to any violations. Conformity regulations published in late 1993 addressed only those areas that are not in attainment. The GMP/EIS is in compliance with this act.

EXECUTIVE ORDER 12898, "ENVIRONMENTAL JUSTICE"

The National Park Service and the Corps are required to assess the effects of any federal action on low-income or minority populations. The effects of any such action must not disproportionately affect these populations. None of the alternatives in this plan would result in significant direct or indirect negative effects on any low-income populations in the region. The GMP/EIS is in compliance with this executive order.

PRIME AND UNIQUE FARMLANDS

Federal agencies are required to analyze the impacts of federal actions on agricultural land. This policy was developed to minimize the effect of federal programs in converting prime, unique, or locally important farmland to nonagricultural uses. According to the Soil Conservation Service (1971), prime and unique farmlands are located all along the recreational river. The programmatic GMP/EIS does not include plans for construction in prime farmland. As site-specific construction occurs, a determination of effects, if any, on prime and unique farmlands will be made.

CULTURAL RESOURCES COMPLIANCE

The National Park Service, as the primary lead agency, has consulted with the federal Advisory Council on Historic Preservation and with the Nebraska and South Dakota state historic preservation officers regarding this *General Management Plan* through newsletters, task directive review, and drafts of alternative proposals. Guidance for management of cultural resources is also provided by the *NPS Management Policies*, the *Cultural Resources Management Guideline* (NPS-28), the Advisory Council on Historic Preservation's implementing regulations regarding "Protection of Historic Properties," and the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.*

Federal agencies are mandated by presidential memorandum to respect the rights of sovereign tribal governments. This memorandum requires that agencies assess the impact of federal government plans on tribal trust resources and assure that tribal government rights and concerns are considered during the development of these plans, programs, and activities.

NATIONAL HISTORIC PRESERVATION ACT OF 1966

Section 106 of the National Historic Preservation Act of 1966, as amended, requires that any federal agency that proposes an undertaking must consider the effect of that undertaking on national register properties and national register eligible properties and must allow the advisory council on historic preservation and the state historic preservation office an opportunity to comment. Section 110 of this act requires federal agencies to survey and evaluate all cultural resources on land under their jurisdiction and provides for consultation with Indian groups in planning and management activities that affect them.

The 1993 amendments to the National Historic Preservation Act provide means whereby information about the character, location, or ownership of archeological sites, historic properties, and ethnographic sites, including shrines and other religious places, might be withheld from public disclosure. This provision is especially important in cases where disclosure could risk harm to the resource or impede the use of a traditional religious site by practitioners.

The National Historic Preservation Act also recognizes the importance of traditional human (ethnographic) resources, recommending that ways be found to preserve and encourage continuation of the traditional prehistoric, historic, ethnic, and folk cultural traditions that are a living expression of our American heritage. The National Park Service must meet the requirements of regulations (36 CFR 800) and the programmatic agreement among the National Conference of State Historic Preservation Officers, the Advisory Council on Historic Preservation, and the National Park Service.

THE ANTIQUITIES ACT OF 1906

The Antiquities Act of 1906 provides for protection of historic, prehistoric, and scientific features on federal land, and requires penalties for unauthorized destruction or appropriation of antiquities.

ARCHEOLOGICAL RESOURCES PROTECTION ACT OF 1979

The Archeological Resources Protection Act defines archeological resources, requires federal permits, sets penalties, provides for preservation of artifacts and records and for confidentiality of archeological site locations and encourages cooperation with other parties to improve protection.

AMERICAN INDIAN RELIGIOUS FREEDOM ACT OF 1978

The American Indian Religious Freedom Act declares that the policy of the United States is to protect and preserve for American Indians their inherent right of freedom to believe, express and exercise the traditional religions, including but not limited to access to sites, use and possession of scared objects, and the freedom to worship through ceremonial and traditional rites.

NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT OF 1990

The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) assigns ownership or control of Native American human remains, funerary objects, sacred objects and objects of cultural patrimony; establishes criminal penalties for trafficking in remains or objects obtained in violation of the act; and provides for inventory of Native American remains and associated funerary objects and identification of their cultural and geographical affiliations.

Consultation and Coordination

PLANNING FOR THE NATIONAL RECREATIONAL RIVER

INTRODUCTION

Planning documents previously completed and approved for the recreational river include a management plan (HCRS 1980), final environmental impact statement (COE 1980), *General Design Memorandum* (COE 1980), amendments to the *General Design Memorandum* (COE 1986, 1988), and two biological assessments (COE 1979, 1992). These documents were completed to provide direction for management of the riverway, as well as fulfilling related regulatory compliance requirements. The current planning effort has been undertaken to update and revise these earlier documents.

SCOPING PROCESS

Scoping meetings in the study area were held in Niobrara, Newcastle, Omaha, and Lincoln in Nebraska and Wagner, Yankton, and Vermillion in South Dakota during the spring of 1992. These scoping meetings showed there was local concern about the advantages and disadvantages of recreational development or increases in recreational use; high bank erosion and the continuation of the program of streambank protection; a wide range of supportive and nonsupportive comment on the preservation of endangered species, and a concern over the possibility of any change in National Park Service use of limited condemnation authority. It was apparent from the scoping meetings that these issues would need to be addressed in the planning process.

SUMMARY OF PUBLIC INVOLVEMENT

This *General Management Plan / Environmental Impact Statement* was written and prepared jointly by the National Park Service and the Corps of Engineers, and in consultation with other federal, state, and local cooperating agencies, as well as private landowners/county representatives.

In addition to the spring 1992 scoping meetings, newsletters were mailed to the public on several occasions. A mailing list of nearly 1,000 people was developed from contacts in the local community and statewide.

The series of scoping meetings for all five planning projects in northern Nebraska and southern South Dakota held in 1992 were summarized in an August 1992 newsletter. A second newsletter in November 1993 included a planning update. It also described legislative mandates for the river, proposed purpose statements for the river, and listed the "outstandingly remarkable values" as significance statements. Then it offered the planning team proposals for "desired futures" for the Missouri National Recreational River and included a mailback form for the public to use in commenting on the newsletter content. These comments were summarized and made available to the planning team for their use in making further revisions to planning concepts for the river.

A series of possible management alternatives were proposed in a newsletter to the public in November, 1994. It proposed five alternatives for public comment. They were: Natural River Processes, Primitive River Experience, Recreation Emphasis, Historic Highway, and "No Action" (Continuation of Existing Conditions). Also proposed were four leadership options: National Park Service (or Fish and Wildlife Service) as lead agency, U. S. Army Corps of Engineers as the lead agency, delegating the responsibility to the two states through a cooperative agreement, and establishing an interstate board of

county governments that would function under a cooperative agreement. A March 1995 news release summarized the public's views of these alternatives.

Public review of the five management alternatives and four leadership options caused the planning team to rethink the range of alternatives and managers and to propose the three alternatives presented in this plan.

There was a 60-day public review period on this draft. During the review period written comments were accepted. In addition, several public meetings were scheduled in the vicinity of the river and nearby urban centers seeking public input. Announcements of these meetings were made through newspaper and radio media.

A final plan incorporates substantive comments received during the final public review. Those people who provide written comments and public officials and agencies automatically receive a copy of the final plan. Subsequent to publishing the final plan, there will be a 30-day no-action period, followed by the issuance of a record of decision documenting the final decisions.

CO-LEAD AGENCIES

U.S. Army Corps of Engineers

The U. S. Army Corps of Engineers regulates the Missouri River through a series of dams and reservoirs. It also provides streambank protection work and administers section 404 of the Clean Water Act. In conjunction with the construction of the dams and reservoirs in this area, the Corps of Engineers has acquired and manages land for both dam and recreational purposes immediately below Gavins Point Dam.

The Corps of Engineers has jurisdiction by law on the Missouri River, operates the 59-mile Missouri National Recreation River cooperatively with the National Park Service (acting for the secretary of the interior), and agreed to be a co-lead agency for this recreational river GMP.

National Park Service

The National Park Service has been designated by the secretary of the interior as the administrator of the 59-mile Missouri National Recreational River.

The National Park Service administers the Lewis and Clark National Historic Trail through an office in Omaha, Nebraska. A comprehensive plan for management and use of the trail was completed in January 1982. The Lewis and Clark National Historic Trail can be accommodated as a water-based trail in this segment, using the recreational development proposed in the Recreational River Management Plan.

COOPERATING AGENCIES

Several federal, state, or local governments and agencies that have jurisdiction by law or special expertise were asked to participate as a cooperating agency. The following have agreed to be cooperating agencies for this *General Management Plan.*

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) has responsibilities for trust resources such as migratory birds and wetlands and for administering the Endangered Species Act. Consultation and coordination with the USFWS is covered in the "Compliance" section.

Lewis and Clark Natural Resources District (Nebraska)

As political subdivisions in the state of Nebraska, natural resource districts (NRDs) are local agencies directed by an elected board. They have state authority to facilitate and administer natural resource projects and programs on a local level. The Lewis and Clark NRD provides a wide variety of services in Cedar, Dixon, and Knox Counties in Nebraska. These services include flood control, rural water supply, and cost-share programs with individual property owners. They also provide a variety of administrative activities, including sponsorship of Section 32 streambank protection demonstration work done by the Corps of Engineers.

Nebraska Game and Parks Commission

The Nebraska Game and Parks Commission owns and manages Ponca State Park and leases and manages other recreational land and facilities. State parks, by law, have significant scenic, scientific, or historic statewide values and development potential and sufficient land that a representative portion can be retained in a natural or relatively undisturbed state.

Nebraska State Historic Preservation Office

The Nebraska State Historic Preservation Office has reviewed planning documents and has contributed information on the cultural resources of the region.

South Dakota Department of Game, Fish, and Parks

The South Dakota Department of Game, Fish, and Parks maintains minor recreational facilities and manages wildlife areas adjacent to the river.

Planning and Development District III (Yankton, South Dakota)

Planning and Development District III is a voluntary association of city and county governments. Financed by membership dues, direct government grants, and service fees, the district routinely works on a wide range of issues, including economic development, community development, recreation, transportation, and long-range planning.

South Dakota State Historic Preservation Office

The South Dakota Historic Preservation Office has reviewed planning documents and has contributed information on the cultural resources of the region.

Advisory Council on Historic Preservation

To ensure that general management plan proposals that might affect properties eligible for the National Register of Historic Places comply with provisions of section 106 of the National Historic Preservation Act, a copy of the task directive was sent to the ACHP for review and comment. Newsletters describing alternative proposals for the plan were also forwarded to the council who reviewed and commented on the *Draft General Management Plan.*

County Governments

Zoning is a power of state and local governments. The Wild and Scenic Rivers Act encourages federal agencies to work with local land use planning agencies by issuing guidelines for local and state governments for consideration in protecting river corridors. These guidelines are not binding on local governments, nor can the federal government force the local governments to adopt them.

Yankton County has been zoned in the past, but currently is not zoned. Union and Clay Counties in South Dakota have had zoning ordinances in place for quite a few years. In Nebraska, Cedar, and Dixon Counties all currently lack zoning ordinances. All the Nebraska and South Dakota Counties have appointed representatives to the planning team. Each county has the opportunity to enact laws and regulations that can serve to implement different aspects of the plan.

LIST OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS WHO RECEIVED COPIES OF THE ENVIRONMENTAL IMPACT STATEMENT

Federal Agencies
Advisory Council on Historic Preservation
Bureau of Indian Affairs
Bureau of Land Management
Environmental Protection Agency
Federal Highway Administration
Natural Resource Conservation Service
U.S. Fish and Wildlife Service
U.S. Forest Service
U.S. Geological Survey

Nebraska Agencies
Board of Education, Lands & Funds
Department of Economic Development
Department of Environmental Quality
Department of Roads
Department of Water Resources
Game and Parks Commission
Governor's Office
Lewis & Clark Natural Resource District
Natural Resources Commission
Northeast Nebraska Resource Conservation & Development
Rural Development Commission
State Recreation Trails Commission
State Historical Society
State Office of Policy Research

South Dakota Agencies
Department of Environmental & Natural Resources
Department of Game, Fish & Parks
Department of Transportation
Governor's Office
North Central Resource Conservation & Development
State Historical Society

Nebraska U.S. Congressional Delegation
Senator Charles Hagel
Senator Robert Kerrey
Representative William Barrett
Representative Douglas Bereuter
Representative Lee Terry

South Dakota U.S. Congressional Delegation
Senator Thomas Daschle
Senator Tim Johnson
Representative John Thune

Nebraska State Legislative Delegation
Senator Merton Dierks
Senator Robert L. Dickey
Senator L. Patrick Engel

South Dakota State Legislative Delegation
Senator Roland Chicoine
Representative Kenneth Albers
Representative Mike Broderick
Representative Caitlin Collier
Representative Bernie Hunhoff
Representative Garry Moore
Representative Donald Munson
Representative John Reedy
Representative Gary Sokolow

Tribal
Nebraska Indian Intertribal Development Corporation
Omaha Tribal Council
Ponca Tribe of Nebraska
Santee Sioux
Winnebago Tribe of Nebraska
Yankton Sioux

County and Local Governments
Cedar County Commission
City of Crofton
City of Elk Point
City of Hartington
City of North Sioux City
City of Ponca
City of Yankton
City of Vermillion
Clay County Commission
Dixon County Board of Supervisors
Union County Commission
Yankton County Commission

Organizations
American Rivers
Conservation Fund
East River Group Sierra Club
Friends of the River
Hartington Public Schools

Land Trust Alliance
Lewis & Clark Spirit Mound Trust
Loess Hills Audubon Society
Missouri River Bank Stabilization Association
Missouri River Basin Association
National Audubon Society
National Highway 20 Association
National Park Foundation
National Parks & Conservation Association
Nature Conservancy
Nebraska Association of Resources Districts
Nebraska Audubon Council
Nebraska Highway 14 Association
Newcastle-Vermillion Bridge Committee
Ponca Historical Society
Ponca Public Schools
Sierra Club-Nebraska Chapter
Spirit Mound Trust
University of Minnesota Cooperative Park Studies Unit
Vermillion Chamber of Commerce
Vermillion Development Corporation
Vermillion Public Schools
Yankton Chamber of Commerce
Yankton Public Schools

Libraries
Bloomfield Public Library
Creighton University
Eastern Township Library
O'Neill Public Library
Gregory Public Library
Hartington Library
Lincoln Township Library
Lynch Public Library
Niobrara Public Library
Neligh Public Library
Newcastle Public School Library
Norfolk Public Library
Ponca Public Library
Sioux City Public Library
South Dakota State University
Stewart Township Library
Tyndall Library & Community Center
University of Nebraska Lincoln
University of Nebraska Omaha
University of South Dakota
Verdigre Public Library
Vermillion Library
Wagner Public Library
Wayne Public Library
Wayne State College
Wynot Public School Library
Yankton Community Library

Magazines and Newspapers
Omaha World Herald
Norfolk Daily News
Nebraska Journal Leader
Sioux City Journal
Yankton Press & Dakotan

Businesses and Individuals
A list of business and individual recipients is maintained by the O'Neill office of the National Park Service.

Written Comments and Responses

The following governmental agencies, organization, and individuals sent written comments on the draft document. The letters with substantive comments and responses by the National Park Service are shown on pages 147-239. Please note that addresses have been erased from individuals' letters.

Congressman Doug Bereuter
1st District, Nebraska
U.S. Environmental Protection Agency
U.S. Department of the Interior
Fish and Wildlife Service
State of Nebraska
Natural Resources Commission
Game and Parks Commission
Lewis and Clark Natural Resources District
Cedar County Board of Commissioners
Dixon County Board of Supervisors
City of Yankton
Siouxland Interstate Metropolitan Planning Council
Missouri River Bank Stabilization Association
The Wildlife Society, South Dakota Chapter
American Rivers
Sierra Club, Living River Subgroup
Jan Wasson
Harold and Joyce Hoesing
Edward Sibley
Annie Lamprecht
Bonnie Hageman
Steve Husen
Bank of Dixon County

Burt Lunn
Terrence Brady
Arlene Heine
Betty Curry, Dixon County Planning Committee
Darrel Curry, Missouri River Bank Stabilization Association
James Holy
Jeaneth Pinkelman
Green Island Farms, Inc.
Tom Moser
Rebecca Wahl
Arthur Rickett
Gleen and Velma Wathhorn
Cy F. Pinkelman
Jim Peterson
Jack Williams
Marlan Rolfes
Dean Hyde
John Davidson
Larry Swanson
Gary Heine
Gary Pinkelman
Robert Ryken

DOUG BEREUTER
3RD DISTRICT, NEBRASKA

2184 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-3601
(202) 225-4806

DISTRICT OFFICE
1045 K STREET
SYRACUSE, NE 68446
(402) 436-1556

102 A BROADWAY
FAIRMONT, NE 68328
(402) 721-0858

Congress of the United States
House of Representatives

COMMITTEE ON INTERNATIONAL RELATIONS
VICE CHAIRMAN
SUBCOMMITTEE
ASIA AND THE PACIFIC
SUBCOMMITTEE
INTERNATIONAL ECONOMIC POLICY AND TRADE

COMMITTEE ON BANKING AND FINANCIAL SERVICES
SUBCOMMITTEE
HOUSING AND COMMUNITY OPPORTUNITY
SUBCOMMITTEE
FINANCIAL INSTITUTIONS AND CONSUMER CREDIT
SUBCOMMITTEE
DOMESTIC AND INTERNATIONAL MONETARY POLICY

October 16, 1998

RECEIVED
NOV - 2 1998
LIBRARY, MISSOURI
NSR

Mr. William Schenk
Director
Midwest Regional Office
1709 Jackson St
Omaha, Nebraska 68102-2513

Dear Mr. Schenk:

Thank you for providing me with a copy of the Draft General Management Plan and Environmental Impact Statement for the Missouri National Recreation River. I would like to take this opportunity to express my comments and concerns regarding the proposals included in the management plan. I hope that you will consider my views in reaching your decision on the proposed management plan.

1 I find much in the document with which I agree and believe to be very positive. However, I do strongly disagree with the National Park Service (NPS) choice of alternative 2 instead of alternative 3. In my opinion, the distinction between Wild, Scenic and Recreation Rivers should be maintained after designation as well as used as a criteria in designation as a "National River." Consequently, I believe that part of the initial reason for designating the river as a "recreation river" was to enhance the recreation experience along what I have sometimes referred to as "Nebraska's northern coast." Of course, I stand ready to help obtain monies for increased recreation access points as well as to assist in increasing visitor service facilities. With the addition of two new Missouri River bridges at Niobrara, Nebraska, and Vermillion, South Dakota, as well as a replacement bridge south of Yankton, South Dakota, this area stands on the threshold of additional recreation developments. Therefore, the Missouri Recreation River above and below Lewis and Clark Lake can be an integral part of such developments.

2 Although I was not in Congress when the original designation of this stretch of the Missouri National Recreation River (MNRR) was made, I have worked with the Department of Defense and the Department of Interior (DOI) on matters related to this recreation river for nearly 20 years. As you may recall, the Heritage Conservation and Recreation Service was the original agency designated to manage this river for the Department of Interior. The DOI signed a memorandum of agreement (MOA) with the U.S. Army Corps of Engineers on each agency's responsibilities. At that time it was agreed that any appropriations for the $20 million authorized in the legislation designating the MNRR would be sought through the Corps' budget. Subsequently, in the 1986 Energy and Water Act, the idea of cost share was adopted by the Congress for many projects and programs of assistance to state and local political subdivisions

147

1. The first three paragraphs on page 10 of the draft plan explain how a general management plan/environmental impact statement (GMP/EIS) is written under the provisions of law.

   Section 2 (b) of the Wild and Scenic Rivers Act (WSRA), PL 90-542, as amended, explains what classification a river will receive based on the level of development existing **at the time of river designation**. A subsequent general management plan sets management directions, goals, and guidelines that adhere to core intents in the WSRA.

   Section 2. (b) of the Wild and Scenic Rivers Act

   A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in Section 1, subsection (b) of this Act. Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, and administered as one of the following:

   (1) Wild river areas -- Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

   (2) Scenic river areas -- Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

   (3) Recreational river areas -- Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

2. Although cost-sharing recreational development was not originally planned for new construction within the Missouri National Recreational River (MNRR), cost sharing was included in the 1985 Supplemental Appropriations Act (PL 99-88), which provided funding for the Myron Grove boat access site. Cost sharing was included in accordance with PL 99-662 for boat access and recreational development at Yankton's Riverside Park. Therefore, unless Congress directs the Corps of Engineers (COE) to do otherwise, the COE will require a cost-share sponsor for recreational development within MNRR for projects on their lead.

funded through the Corps budget. Even though the MNRR was a previously designated river, the Corps has interpreted this legislation to require a local cost share for implementation. I have never agreed with that decision. Why is this issue not addressed directly in the management plan and how does the National Park Service and its partner, the U.S. Army Corps of Engineers, plan to address the current MOA?

2

3

Very little mention was made of coordination with the one political subdivision in Nebraska which has jurisdiction for the entire length of the Nebraska portion of the 78-mile stretch of the Missouri National Recreation River (i.e., the Lewis and Clark Natural Resources District). What level of coordination has been made with the Lewis and Clark Natural Resources District (NRD)? What role, if any, does the NPS envision the Lewis & Clark NRD playing in management and development of resources along the river?

4

Construction of the mainstem dams on the Missouri River and subsequent management of the river have greatly affected the sediment and erosion process on the river. Above the dams sediment has accreted and below the dams where sediment level is greatly reduced from historic levels, bank and river bottom erosion has accelerated. One of the original purposes behind designation of this stretch of the river was to help find a way that bank stabilization measures could be undertaken to protect the property of adjacent landowners. I am pleased to note that the plan provides that: "Landowners would provide wildlife habitat easements to the Corps of Engineers, so that added construction of streambank protection structures would be possible."

I was particularly interested in some of the ideas suggested as possible additions to public lands and facilities both along the river and on islands within the banks of the river. Therefore, I look forward to discussing some of these concepts in more detail with you and your staff.

Thank you again for the opportunity to review and comment upon this proposed management plan for the Missouri National Recreation River between Gavins Point Dam and Ponca, Nebraska.

Best wishes.

DOUG BEREUTER
Member of Congress

DB/jb

c: Colonel Robert D. Volz

The National Park Service (NPS) also endorses the concept of cost sharing, believing with COE that such policy ensures strong local support for any proposed undertaking.

3. As noted on page 24 of the draft plan and presented as appendix C, there is a functioning cooperative agreement between the NPS and COE, the document reflecting circumstances of 1980. As noted on p. 33, upon signing the record of decision for this GMP/EIS the cooperative agreement could be, if needed, revised to reflect current policies and authorities and be consistent with the alternative selected by the planning process.

4. The Lewis and Clark Natural Resources District (NRD) manager was an active member of the planning team that forged this GMP.

   Regarding the NRD's future role, they are among the organizations referenced on pages 33 and 47 that river managers would seek to consult and engage on prospective management issues. On page 33 "The National Park Service would work with local landowners and governments on appropriate land uses within the boundary. . . ." And on page 47, "The National Park Service would work with counties, landowners, and others on land development and protection issues within the boundary. . . . The National Park Service would seek to protect land through local partnerships and cooperative agreements."

   Already, the NPS and Lewis and Clark NRD are exploring possible cooperative projects. See the response to Lewis and Clark NRD's letter.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

RECEIVED

MAY 1999

NSR

Mr. Paul Hendren
Niobrara/Missouri National Scenic Riverways
Post Office Box 591
O'Neill, NE 68763-0591

Dear Mr. Hendren:

RE: Draft Environmental Impact Statement (EIS) for the General *Management Plan* - Missouri National Recreational River

In accordance with our responsibilities under Section 309 of the Clean Air Act, and our authorities under the National Environmental Policy Act, we have reviewed the Draft *EIS for the* Missouri National Recreational River. In this review we have concluded that we have no objections to your Management Plan as proposed, but would like to take this opportunity to communicate EPA's views on bank stabilization in general. EPA is concerned that individual bank stabilization activities have been occurring on the unchannelized river *reaches without a full* understanding of the cumulative effects such activities have on fish and wildlife diversity, viability and habitat, overall bank erosion and sediment transport, *aesthetic values, and* recreational opportunities within each unchannelized reach. That concern has been communicated to the Army Corps of Engineers (Corps) in the context of *EPA's responsibility* to review Clean Water Act Section 404 permits requested for such activities. While we appreciate the emphasis on non-traditional habitat-friendly bank *stabilization technology in this* EIS Missouri National Recreational River), we recommend that bank stabilization for this project be limited to the protection of existing structures pending *the completion of a comprehensive* study of the cumulative effects of bank stabilization activities. The Corps has recently stated its intention to complete both a cumulative *effects study and an EIS for* bank stabilization on the Upper Missouri River from Fort Peck to Sioux City. That EIS should provide a basis with which to identify preferred bank stabilization *alternatives and limitations* based on the findings from the cumulative effects study.

5

RECYCLE

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5. The COE and NPS do not support a moratorium on bank stabilization but will take cumulative impacts into account when permitting individual projects on a case-by-case basis. As information from the ongoing section 33 cumulative impact study is available, relevant information will be considered in future decisions regarding bank stabilization.

Thank you for the opportunity to comment. If you have any questions please do not hesitate to contact me at (913) 551-7148.

Sincerely,

Joseph Cothern
Acting NEPA Program Manager

cc: Elaine Suriano
Office of Federal Activities

United States Department of the Interior
FISH AND WILDLIFE SERVICE
LAKE ANDES NATIONAL WILDLIFE REFUGE COMPLEX
38672 291st Street
LAKE ANDES, SOUTH DAKOTA 57356-6838
605-487-7603
FAX 605-487-7604

October 1, 1998

RECEIVED

Superintendent
Niobrara/Missouri National Scenic Riverways
P.O. Box 591
O'Neill, NE 68763-0591

Superintendent:

I read through the draft general management plan, environmental impact statement for the Missouri River National Recreational River located in Yankton, Clay and Union Counties in South Dakota.

There was only one discrepancy regarding a piece of property owned in fee title by the U.S. Fish and Wildlife Service. The two pull out maps in the document (copy attached) identify a piece of property as a wetland easement. *It is not. Both maps should be changed to read:* U.S. Fish and Wildlife Service, Waterfowl Production Area. If you want to call it by name, it is the Collar Waterfowl Production Area. I have enclosed a map of the property for your information.

6

I also recognized the fact that you had left out the recreational/interpretive opportunities provided by the Gavins Point National Fish Hatchery which is also a U.S. Fish and Wildlife Service owned facility. I contacted the Hatchery Manager, Herb Bollig, to let him know he needs to comment on the draft.

When dealing with the information regarding the U. S. Fish and Wildlife Service, there are three distinct segments that should be involved: the Ecological Services Office in Pierre which deals with the regulatory aspect of our job and the information regarding endangered species; the Gavins Point National Fish Hatchery; and units within the National Wildlife Refuge System. That is the segment I represent.

If you have any questions or need clarification, please contact me at 605-487-7603, Monday through Friday, 8:00am to 4:30pm.

Sincerely,

Sylvia R. Pelizza
Refuge Manager

6. This change was made.

RECEIVED
OCT 16 1998
NIOBRARA/MISSOURI NSR

South Dakota
Department of Education and Cultural Affairs
Office of History

South Dakota State Historical Society
Cultural Heritage Center
900 Governors Drive
Pierre, SD 57501-2217
(605) 773-3458 FAX (605) 773-6041

October 8, 1998

Received
Superintendent — Init/date
Admin Mgr
Admin Ass
Mngt Asst
Rec Planner
Rec Planner
Rsrc Spec
File

SUPERINTENDENT
NIOBRARA/MISSOURI NATIONAL SCENIC RIVERWAYS
PO BOX 591
O'NEILL NE 68763-0591

SECTION 106 PROJECT CONSULTATION - TECHNICAL ADVICE
Project: 980922002F- Missouri National Recreational River Envir. Impact Statement
Location: Multiple Counties
(NPS)

Dear Mr./Ms. Superintendent:

Thank you for the copy of the Draft General Management Plan Environmental Impact Statement for the Missouri National Recreational River (MNRR). The SD SHPO would like to provide comment on the potential impacts of the above referenced project pursuant to Section 106 of the National Historic Preservation Act of 1966 (as amended).

The SD SHPO concurs with the National Park Service in opting for Alternative #2 as the Preferred Alternative. In comparing all three alternatives, Alternative #2 appears to afford the highest level of inventory, evaluation, monitoring and protection of our important, non-renewable cultural resources within the MNRR. Likewise, Alternative #2 also appears to provide the best overall management strategy by restricting and/or minimizing development, both private and federal, as well as maintaining visitor use to lower, manageable levels. In summary, Alternative #2 will provide the best approach to maintaining and preserving all of the unique resources of the MNRR. The SD SHPO looks forward to working with the National Park Service to identify, evaluate, interpret and protect the cultural resources within the MNRR.

Should you require any additional information, please do not hesitate to contact Bruce Penner, at 773-6004. Your concern for the non-renewable cultural heritage of our state is appreciated.

Sincerely,

Jay D. Vogt
State Historic Preservation Officer

Bruce R. Penner

Bruce R. Penner
Review and Compliance Coordinator

STATE OF NEBRASKA

E. Benjamin Nelson
Governor

NATURAL RESOURCES COMMISSION
Dayle Williamson
Director
301 Centennial Mall South
PO Box 94876
Lincoln, Nebraska 68509-4876
Phone (402) 471-2081
Fax (402) 471-3132

November 9, 1998

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NIOBRARA/MISSOURI
NSR

Mr. Paul L. Hedren, Superintendent
National Park Service
Niobrara/Missouri NSR
P.O. Box 591
O'Neill, Nebraska 68763

Dear Paul:

We have reviewed the "Draft General Management Plan and Environmental Impact Statement" for the Missouri National Recreation River and submit the following comments for your consideration:

(1) We concur with selection of Alternative 2 (Resource Protection/Recreation) as the preferred alternative. This alternative and its specified primary goals are consistent with Public Law 95-625 which designated this recreational river reach, the Recreational River Management Plan and the 1980 Cooperative Agreement.

7 (2) The selected alternative provides for limited recreational development along the river reach. We support inclusion of recreation development due to the great potential for recreational use and enjoyment there. However, we are not sure the landowners and residents along the river reach support such development at this time. Therefore, we suggest that local interests be directly involved with the planning, approval, and ultimate development of any public recreation facilities in the future.

8 (3) On page 48 the draft management plan states that the National Park Service and the Corps would jointly host annual or semi-annual public meetings in lieu of recreating the MNRR Advisory Group. We strongly question this approach as occasional public meetings would likely result in inconsistent participation by local subdivisions of government and other interest groups along the river reach. Ongoing and consistent participation by local interests will be needed to best protect and preserve the resources along the river and determine desired recreation projects. Reference to a "Recreational River Advisory Group" is included in Public Law 95-625. Utilization of a public advisory group would also better meet the 5th goal of the preferred alternative as listed on page 47. The Missouri River Bank Stabilization Association has clearly demonstrated that local representatives on both sides of the river can effectively work together on issues along this reach of the Missouri River.

9 (4) Page 79 - the Western Prairie Fringed Orchid is also presently found in Otoe County, Nebraska (Dieken Prairie near Unadilla).

(5) The section on Cultural Resources (pages 86-91) is well written and very informative.

(6) Page 130 - Alternative 3, in regard to County Expenses and Revenue, would be expected to have the same or similar effect on county tax revenue as listed for Alternative 2 on page 124.

We appreciate the opportunity to review the Draft General Management Plan. Please contact Tom Pesek or me if you have any questions regarding our comments.

Sincerely,

Dayle Williamson

Dayle E. Williamson
Director of Natural Resources

DEW:TFP:mh
cc: Vince Kramper

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7. The matter of local involvement is addressed often in the plan. On page 13, under the "Administration" section, the first sentence reads, "Local, state, and federal agencies, community groups, advocate organizations, and individuals act in cooperation to protect and enhance the resources."

   On pages 34 and 47, both the NPS and COE offer additional affirmations that they intend to seek help from and continue conferring with local governments, organizations, and landowners in managing the recreational river and its land development issues. The GMP was written identifying the need for local involvement. Please see also responses 2 and 4 above.

8. The pattern for successful periodic public information-sharing gatherings already exists in COE's well-attended annual interagency meetings, the nearest one to the MNRR occurring at the Gavins Point Dam headquarters each spring. The COE and NPS propose MNRR meetings of this sort. River managers already regularly attend county commission meetings, the annual meeting of the Missouri River Bank Stabilization Association (MRBSA), and meetings with environmental groups and other interested parties, invariably to report or consult on river management issues. As stated in response 7 above, working with local residents, groups, and governments to achieve the goals set forth in this GMP is envisioned as the principal pattern for success.

   Any "major federal action," such as new construction, would require that the NPS or COE comply with the National Environmental Policy Act (NEPA) before construction. This process requires public notification and involvement. At a minimum, the MNRR GMP/EIS mailing list could be used for informing the public regarding NEPA compliance activities within the MNRR, so interested citizens could attend meetings or provide written comments regarding a proposed project, its impacts, and its alternatives. In addition, both NPS and COE will attend meetings discussing MNRR concerns and issues at the request of any local group or agency.

   Regarding the MNRR Advisory Group established under Public Law 95-625, that group's purpose was chiefly planning and in large measure they shepherded creation of the 1980 *General Management Plan* being superceded by the current document. The Advisory Group's charter expired in 1989.

9. Otoe County has been added to the list on page 79.

Nebraska Game and Parks Commission
2200 N. 33rd St. / P.O. Box 30370 / Lincoln, NE 68503-0370
Phone: 402-471-0641 / Fax: 402-471-5528 / http://www.ngpc.state.ne.us/

RECEIVED

December 15, 1998

Paul L. Hedren, Superintendent
National Park Service
Niobrara/Missouri National Scenic Riverways
P. O. Box 591
O'Neill, NE 68763

Dear Mr. Hedren:

The Nebraska Game and Parks Commission would like to thank you for the opportunity to review the General Management Plan (GMP) and Environmental Impact Statement for the 59-mile Missouri River corridor from Gavins Point Dam downstream to Ponca State Park. This is a unique section of river and one of the few remaining unchannelized and undammed reaches left on the Missouri River.

Of the three management alternatives presented, our agency would agree the benefits of alternatives two and three outweigh those in alternative one. Alternatives two and three have many similar characteristics, and in fact compliment each other in many instances throughout the GMP. However, alternative three appears to be more proactive in meeting and facilitating our constituents and Missouri River visitors anticipated needs, enjoyment, and understanding of values for this section of the river.

The **State Comprehensive Outdoor Recreation Plan (SCORP)**, cited in your draft report, was developed by the Nebraska Game and Parks Commission and identified the fact that eastern Nebraska is extremely short on water-based recreation, and area where a high percentage of citizens reside. When South Dakota and Iowa residents, within short driving distance, are added to Nebraska's numbers, the demand for outdoor *recreation on the Missouri River becomes even greater.*

A second plan, entitled **Focusing on the Future** (July 1996), is our Commission's stewardship doctrine, a plan for Nebraska's fish, wildlife, and parkland resources. This plan lists the Missouri River, adjacent to Nebraska, as one of our principal focal points and deals with the recreational values and resource management of the river.

The goal of the Missouri River section in this plan is to **"Restore, protect, and maintain the diversity of historic Missouri River habitats, resources and ecosystem functions in order that present and future generations may enjoy consumptive and non-consumptive outdoor recreational opportunities."** Five objectives were

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identified to meet this goal: (1) To restore terrestrial and aquatic floodplain habitat types, including old oxbows, chutes, side channels, backwater, wetland areas and other shallow water habitats. (2) Restore flows that reflect the natural hydrograph of the Missouri River. (3) Educate the public on the advantages of reduced navigation in the summer and early fall to the natural hydrograph as well as the summer recreational benefits on the river. (4) Double the number of total recreational use days. (5) Investigate and manage native fish, wildlife, and furbearers on a sustainable basis. A copy of the Missouri River section of this plan has been enclosed for your reference.

In summary, the 59-mile segment of Missouri River from Gavins Point Dam to Ponca State Park is extremely important to Nebraskans as well as citizens from our neighboring states. Alternative three of the Missouri River GMP provides our agency a less confining opportunity to share this section of river in accord with established plans such as **SCORP** and **Focusing on the Future.** Alternative three also affords us more latitude to meet our goals of resource protection and recreational enhancement while helping to diversify local economies and contribute to and help maintain the Good Life here in Nebraska.

Thank you again for your thoughtful consideration.

Sincerely

Rex Amack

Rex Amack
Director

RA/sg

Enclosure:

CC: E. Benjamin Nelson, Governor
Mike Johanns, Governor-Elect
Bob Kerry, Senator
Charles Hagel, Senator
Douglas Bereuter, Congressman, District 1
Jon Christensen, Congressman, District 2
William Barrett, Congressman, District 3
Lee Terry, Congressman-Elect, District 2
Chief, Environ. Analysis Branch, Planning Division, COE
Director, Nebraska Natural Resource Commission
Director, Nebraska State Historical Society
Manager, Lewis & Clark Natural Resource District

LEWIS & CLARK
Natural Resources District

608 N. Robinson
PO Box 518
Hartington, NE 68739
Phone (402) 254-6758
Fax (402) 254-6759

December 10, 1998

RECEIVED
DEC 1998
NBR

Paul Hedren
National Park Service
Niobrara/Missouri NSR
PO Box 591
O'Neill, NE 68763

Dear Paul

The Lewis & Clark NRD in Hartington has reviewed the draft General Management Plan for the Missouri National Recreational River and has some opinions to offer on its content. We have generally been supportive of the Recreational River Concept since its inception and continue that attitude. We hope you will consider these comments as constructive and incorporate them in the final version.

The District continues to emphasize the importance of local input. It is essential to seek concurrence from local partners when developing plan objectives as part of the two agencies' decision making process. This issue was raised during the planning meetings, addressed by letter (Lynn Peterson 3/24/97), but still not included yet. We believe "conferring" individually with local groups suggests a one-way communication whereas mutual concurrence would be much more effective (p 34 & p 48). Some means needs to be developed to include and coordinate local interests. We like what Paul Hedren suggested November 24, 1998 when he said he "envisions ad hoc committees to do this." We would like this included in the plan.

10

We believe an advisory group would be the best solution, but was told that is wasn't authorized. Please explain how that was deleted from PL95-625. We ask at least that you add the following sentence on both pages 34 and 48. "These groups will be approached as partners for concurrence on management proposals and carrying out the plan objectives." Both Paul Hedren (NPS) and Rebecca Latka (C of E), told us on November 12, 1998 that this change would be acceptable.

11

The NRD would be willing to assist the NPS with Conservation Easement efforts along the river. At present, we hold some perpetual easements for maintenance of Bank Protection measures at selected locations but they likely would not fit the purposes specified in the plan. Because of limited staff and financial resources we would need assistance on title search, legal documentation, and easement violation enforcement, but certainly wish to discuss procedures that would facilitate the process. Preliminary discussion with Paul Hedron indicated NPS could provide legal assistance on conservation easements to the District. We'd like that assurance in some cooperative agreement form before we could proceed. We feel easements are the best tool available here, but caution needs to be expressed. Many landowners will be willing to donate easements with the intention that it qualifies them under "federal interest" for potential bank protection, but it's not likely that such assurances can be uniformly realized by all.

12

Recycled Paper

10. NPS and COE believe "conferring" to mean two-way communication. The matter of committees and general and specific communication and consultation are further discussed in response 7. Also see response 8.

11. Regarding the MNRR Advisory Group, see the concluding paragraph to response 8.

12. Before commencing any long-term cooperative undertaking with individuals or organizations, a legal instrument firming all expectations and understandings would be drawn and signed by the involved parties.

The comments on "Streambank Protection" (p 39 & 50) could stand revision to strengthen the fact that stabilization is necessary and important. This is noted on page 9, however the comments made elsewhere are not always relative to Missouri River conditions. It is naive for example to think that "vegetative means" and "bioengineering techniques" would be effective deterrents to forces of a river this size. The use of rock stabilization in portions of the River benefit wildlife habitat as well as agricultural land, and this fact should be noted.. We do concur emphatically with the need for continued maintenance of activities and facilities by the Federal agencies. 13

For costs reasons as well as community acceptance, the preferred alternative would appear to be the most practical. The physical and environmental impact of emphasized recreation may not be in the best long term interests of those who admire and enjoy the Missouri River as it is, but the NRD could accept alternative three as well. Ultimately the success of the Recreation River Plan will depend on how well the NPS relates with local interests. We hope they do it well.

Sincerely,

Tom Moser
General Manager

cc: Rep Bereuter
Darrel Curry
Jim Petersen
Allen Heine

13. In fact, the second paragraph of p. 39 opens with, "When bioengineering techniques are **not** feasible nor practicable, erosion control techniques (including the use of rocks for streambank protection) would be permitted. . . ." The use of bioengineering on the banks of the Missouri River, especially this far north, has not been tested for long-term durability. While the success of various techniques varies, COE and NPS intend to keep all stabilization options open, including hard structures, environmentally sensitive options, and the use of sloughing easements.

Board of Commissioners
Cedar County
Hartington, NE 68739

Marlen Kraemer, Chairman
District #2

George (Gus) Pick, Vice-Chairman
District #3

Dwain Heimes, Chairman
District #1

December 16, 1998

Paul Hedren
National Park Service
Niobrara/Missouri NSR
P.O. Box 591
O'Neill, NE 68763

Dear Paul:

The Cedar County Board of Commissioners has reviewed information presented by the National Park Service regarding the draft of the General Management Plan for the Missouri National Recreational River. The County Board has also been in attendance to some of the Public Hearings in respect to the Recreational River Concept, and on the most part has been supportive.

14 This Board however has some concerns regarding the Project that needs to be made known at this time. The main concern comes to retaining local control, we feel that once Cedar County gets into place, an operating County wide Zoning Plan, the Zoning Commissioner will have Total Control regarding new construction in Cedar County and the area adjacent to the Scenic River Project. This County Board has hopes of getting Zoning into complete operation within the next 24 months.

15 This Board is also concerned with the economic factor that may be placed on the Taxpayers of Cedar County. The additional tax burden will be generated by the necessity of road development and maintenance as well as the additional law enforcement that may be required to handle the added traffic and people. Although we feel this added traffic may also add valuation and revenue to the County it may not be sufficient to offset the added expense to the current residents of Cedar County. With this thought we would like the cooperation of the National Park Service to assist in funding or in obtaining additional funding to defray the additional expense that may occur.

14. Zoning is a state issue and the federal government has no authority to write or enforce zoning codes. When a county implements zoning protections they alone carry the responsibility for enforcing them. In the spirit of cooperation the NPS desires to be included in reviews of draft zoning plans so that issues related to the MNRR can be effectively addressed. On pages 36-37 are recommendations offered by this general management plan to counties on zoning and new construction inside the MNRR boundary.

15. The NPS and COE invite organizations and local governments with interests in the MNRR to make proposals for cooperative projects. Each agency will review the proposals as they relate to their respective missions and for consistency with the law. Pending receipt of operational funding, NPS and COE envision cost-sharing opportunities in many matters of visitor education and protection and resources management.

Board of Commissioners
Cedar County
Hartington, NE 68739

Marlen Krasmer, Chairman
District #2

George (Gus) Pick, Vice-Chairman
District #3

Dwain Heimes, Chairman
District #1

Regarding our previous discussions held on the Cedar County boat docks and recreation facilities, which are located within the Scenic River Project. This Board is requesting the National Park Service to attempt to incorporate into the plan, some type of arrangement to provide assistance to Cedar County for the existing recreation facilities, along with the consolidation of Goat Island into the National Park System, as you have stated Goat Island appears to be Federal Lands.

Sincerely,

Dwain Heimes

Dwain Heimes
Chairman, Cedar County Board of Commissioners

Cc: Rep Bereuter
Senator Kerry
Senator Hagel

Diane Mohr Clerk

DIXON COUNTY CLERK
P.O. BOX 546
PONCA, NEBRASKA 68770

Phone 402-755-2208

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1998

December 8, 1998

Paul Hedren Superintendent
Niobrara/Missouri National Scenic Riverways
PO Box 591
O'Neill, NE 68763

Dear Mr. Hedren:

We, the Dixon County Board of Supervisors, are pleased to have the opportunity to comment on the Missouri National Recreation River Draft General Management Plan and Environment Statement.

We recommend that there be continued stress placed on the original designation of this stretch of the river, as a "recreation river", pursuant to Public Law 95-625, enacted November 11, 1978.

160

16 We recommend that the severely eroding sites be identified and cost estimates be included in the Plan, and that high bank stabilization be a priority in the Plan and such stabilization work be included in the Corps of Engineers' budget, as stated in Public Law 95-625. The flow-way is now 60% wider than when Gavins Point Dam was completed. A wide shallow river is not in keeping with the plan for a National Recreation River.

We recommend that more access sites be provided for recreational purposes and that the natural beauty and integrity of the river be protected. Eagle roost areas, wildlife habitats, and game production areas in the wooded sites are irreplaceable.

The economic benefits to Dixon County will be greatly increased with continued bank stabilization. After the Section 32 projects were completed, the erosion rate dropped from an estimated 160 acres per year to 80 acres per year on this 59 mile reach. Since that time, the high releases of recent years has, once again, accelerated the erosion rate, resulting in a tax loss to Dixon County.

We recommend that "Alternative 3" of the Draft General Management Plan and Environment Statement be selected as it is closer to the intent of the law passed by Congress.

Sincerely,

Russell Fleury, Chairman
Dixon County Board of Supervisors

cc: Senator Robert Kerry
Senator Chuck Hagel
Congressman Doug Bereuter
William Schenk, Director NPS

16. During the winter of 1998-99, the COE initiated scoping under section 33 authority for an environmental impact statement (EIS) on the effects of bank stabilization along the Missouri River from Fort Peck Dam, Montana, to the commencement of the channelized river near Ponca State Park, Nebraska. The NPS is participating in this EIS, focusing on its 39-mile management district below Fort Randall Dam and this 59-mile district below Gavins Point Dam. The section 33 EIS will identify specific areas potentially needing bank stabilization protection and will address alternatives and the environmental consequences inherent in such an undertaking. The public, including the MRBSA, was asked to provide a list of priority bank stabilization sites. With this EIS requirement underway NPS, COE, MRBSA, and other cooperators are poised and willing to conceive a new bank stabilization program for the 59-Mile MNRR involving updated cost projections for critical bank stabilization work and easement acquisition necessary to establish a mandated federal interest. This program will then be commended to Congress for funding and implementation through procedures outlined in the current or revised cooperative agreement between the NPS and COE.

City of Yankton

410-416 Walnut
P.O. Box 176
Yankton, South Dakota 57078-0176
Phone (605) 668-5200

December 17, 1998

Mr. Paul Hedren
Superintendent
United States Department of Interior
National Park Service
Niobrara/Missouri National Scenic Riverways
P.O. Box 591
O'Neill, NE 68763

Dear Mr. Hedren:

The Board of City Commissioners of the City of Yankton met and discussed the Draft General Management Plan/Environmental Impact Statement for the Missouri National Recreational River. After consideration of the three options contained within the plan, the City supports the preferred option which would be future use of the river combining the environmental and recreational interests.

We would also like to express our interest in cooperating with the National Park Service (NPS) with regard to the Lewis & Clark Bicentennial Celebration. The next meeting of the Yankton Lewis & Clark Bicentennial Committee will be January 13, 1999. I suggest that you contact Roger Pierce, our Director of Parks and Recreation who also serves on that committee for more information about getting on that agenda.

As your plans for establishing a NPS field office in Yankton progress, please contact us. We would be happy to provide assistance with that effort.

If you have any further questions, please feel free to contact me.

Sincerely,

Eric Swanson
City Manager

cc: Roger Pierce, Director of Parks and Recreation

EQUAL OPPORTUNITY EMPLOYER

SIOUXLAND INTERSTATE METROPOLITAN PLANNING COUNCIL
is Action
507 - 7TH STREET, SUITE 401
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TELEPHONE (712) 279-6286
FAX (712) 279-6920
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December 15, 1998

Mr. Paul L. Hedren, Supt.
National Park Service
P.O. Box 591
O'Neill, NE 68763

Subject: Draft General Management Plan/EIS
Missouri National Recreation River

Dear Mr. Hedren:

We have reviewed the subject document (plan) and recognize that it contains good and interesting information. The alternatives presented are somewhat difficult to compare because there are no specific recommendations included.

We favor an increased emphasis on recreation and, therefore, favor Alternative Three. We note that this 59-mile stretch was designated as a "National *Recreation* River".

17 We believe that this plan should include specific site recommendations on bank protection improvements. Such recommendations would be predicated on an updated bank erosion study. This study should update the earlier work on bank erosion rates completed by the Corps of Engineers and SIMPCO. These earlier studies allowed the selection of high priority bank protection areas for the 1978 plan.

The plan should contain specific recommended recreational improvements and scenic easements.

The costs of bank protection, recreational improvements, and scenic easements should also be included.

18 The plan should include an updated Memorandum of Agreement with the Corps of Engineers.

19 We do not believe the selected plan should restore spring floods in any event. The purpose of the plan was not to change the flows of the Missouri River. The flows and related issues are being

17. See response 16.

18. See response 3.

19. This plan does not endorse "restoring spring floods" and this language is not in the document. The plan does not affect water releases from Gavins Point Dam. On page 15, third paragraph in the **U.S. Army Corps of Engineers** section, it is written, "While flow releases from the dam are outside the scope of this *Draft GMP/EIS*, as administrator of the MNRR, the National Park Service favors an alternative that would protect and enhance the values for which the MNRR was included in the national wild and scenic rivers system. In reaching a decision on the *Master Water Control Manual* update, the Corps would need to balance the needs of the MNRR with other needs of the Missouri River basin."

19 addressed through the Corps of Engineers Review and Update Study of the Master Water Control Manual. We oppose any large changes in flows that would increase the threat of floods or hamper drainage of agricultural areas during the spring planting period.

20 We believe that a closer working relationship with local groups is warranted. SIMPCO has performed a number of high quality studies that relate to this section of the river and could be included in the plan.

Sincerely,

Don Meisner, Director

cc: US Senator Tom Daschle
US Senator J. Robert Kerrey
US Senator Tim Johnson
US Senator Chuck Hagel
US Representative Doug Bereuter
US Representative Bill Barrett
US Representative John Thune
US Representative Elect Lee Terry

Rec river NPS 98-12

20. See responses 4 and 15.

Missouri River Bank Stabilization Ass'n
NEWCASTLE, NEBRASKA 68757

December 12, 1998

United States Department of the Interior
National Park Service
Niobrara/Missouri National Scenic Riverways
P. O. Box 591
O'Neill, Nebraska 68763
Attention: Paul L. Hedren, Superintendent

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NIOBRARA/MISSOURI NSR

Dear Sir,

Your office has released the final draft general management plan/environmental impact statement for the Missouri National Recreational River for public review and comment. Your plan as released contains three alternatives; according to your statements at one or more of the public meetings, the first alternative, herein identified as Alternative One, is not viable. (You may recall that when a vote was taken by the planning team, the county representatives unanimously favored Alternative One.) As a practical matter, then, only Alternatives Two and Three are to be given serious consideration. 21

Of the two, the Missouri River Bank Stabilization Association favors Alternative Three, the Recreational River alternative. It is the belief of the Association that Alternative Three best reflects the needs and desires of the membership. That membership, as you likely know, consists of farmers, landowners, hunters, fishermen and others interested in protecting and preserving the segment of the Missouri subject to your plan.

This segment of the Missouri, while still largely reflective of the truly wild Missouri, does in fact display a number of features indicative of the encroachment of civilization. Isolated areas of "development" in the form of trailers, cabins, a campground or two, a boat club, some sporadic activity by "outfitters", "spot" bank stabilization and extensive farming operations along the river, underscores the fact that this is no longer a natural, wild river. Its altered character would seem to qualify it best for Alternative Three. Indeed, its very categorization as a "Recreational River" suggests adoption of

21. As explained on page 24, NEPA requires a "no action" alternative as a baseline for the environmental analysis of impacts of proposed federal actions. This requirement was repeatedly explained at planning and public information meetings.

Alternative Three.

At the outset we should emphasize the difference between bank stabilization and channelization. The latter seeks to force the river into a narrow, self-scouring "ditch". On the Missouri channelization is characteristically used to facilitate navigation. Bank stabilization is a means of erosion reduction. It seeks to set limits (the "high banks") within which the river can wander at will. It may or may not be at the water's edge. It should be as unobtrusive as possible. Some extant stabilization work, done about twenty-two years ago, is now so overgrown it is now not noticeable to a casual observer, if at all.

It has been obvious to the county representatives since the day the planning team began its work that National Park Service members of the team have, for the most part, been hostile to the inclusion of bank stabilization as a part of this plan. Despite specific language in the authorizing legislation, bank stabilization has been given short shrift. It was heartening to hear your repeated assertions at the Vermillion and Yankton meetings that bank stabilization was definitely "in there" (in the plan) and was to be given even more prominence and importance as a result of the clamor for such at the public meetings.

22 If indeed you have stressed (or will stress) the need for bank protection and actually specify sites in need thereof in your revised plan, it would seem only fair to publicize these specifics prior to sending the plan on for further consideration. This is especially significant in light of the National Park Services' bias against bank protection. Note, here, two things: first, (again), the Association favors bank stabilization, not channelization; second, we ask only for "high bank" protection, where needed, as needed.

Here it should be emphasized that bank stabilization can and should be an indispensable tool in protecting and preserving the river. Just one of the true tragedies resulting from the

22. See response 16.

MRBSA P.3

neglect and delay (of the National Park Service) in dealing with erosion problems has been the total destruction of the magnificent stand of "old growth" cottonwoods at or near Mile 779R.

The view that bank stabilization is repugnant to the concept of a recreational river ignores a salient characteristic of today's river: it no longer floods in the segment covered by this plan. While erosion persists relentlessly, because of the absence of flooding no restoration ("build-back") ever occurs. Landowners thus have an almost 100% chance of losing their land; they have little or no chance of regaining any of it. It would be manifestly unfair to ignore the need for stabilization in any plan whose aim is to preserve and protect this segment of the river.

We need not remind you that landowners are willing to help achieve the aims of this project. A number of them have volunteered to provide easements which would facilitate and enhance the objectives of the plan.

23 Your preferred alternative calls for, among other things, management so as to restore "...,the natural function of the river". The annual flooding along the pre-dam river was a "natural function". It appears that Alternative Two embraces the concept of a return to the "spring flood" espoused by some environmental groups. (Summary, Alternative Two, p 63.) If in fact that be contemplated, it is, without adequate bank protection, irresponsible, at best. "Criminal" is likely a more accurate description. This proposal, absent bank stabilization, should sound the death knell for Alternative Two.

With respect to the lack of public access to the "Rec River" in its lower reaches, on the South Dakota side, the Association agrees that an additional access point in that area is desirable. Such access should insure a usable, all-weather launching ramp, suitable for both power boats and canoes. Right bank access is adequate, and the ramps and docks are for the most part quite

23. See response 19.

good.

24 We also noticed the failure to specify precise boundries and precisely what being included in the boundary entails. This should be clearly outlined to inform landowners along this stretch of the river.

It is the consensus of the Association that the National Park Service, after "dragging out" the completion of this plan, used extremely poor judgement in choosing the holiday season to "rush" into public meetings. Especially so, since these "public" meetings were not advertised in the local papers on the Nebraska side of the river; notably the Hartington paper and the Nebraska Journal/Leader, Ponca.

The Missouri River Bank Stabilization Association, comprising of a substantial number of members in both Nebraska and South Dakota, recommends Alternative Three.

Sincerely,

J. M. Peterson

J. M. Peterson
President
Missouri River Bank Stabilization Association

Copies sent to:
Senator Hagel
Senator Kerrey
Senator Daschel
Senator Johnson
Congressman Bereuter
Congessman Thune
William Schenk Dir. NPS

24. On page 44 is additional information on the matter of private lands inside the boundary.

Precise boundary information has long existed in the NPS O'Neill office. A generalized boundary is depicted in the plan. At all public meetings from the commencement of the planning to the present, larger maps showing the proposed boundary in greater detail were available for public review and comment. Following signing of the Record of Decision, official boundary maps will be forwarded to Congress, notice of availability published in the *Federal Register*, and copies thereafter circulated to local public repositories.

THE WILDLIFE SOCIETY
South Dakota Chapter
P.O. Box 48
Madison, South Dakota 57042
605 256-2974

December 16, 1998

Paul L. Hedren, Superintendent
National Park Service
Niobrara/Missouri National Scenic Riverways
O'Neill, Nebraska 68763

Dear Mr. Hedren:

On behalf of The South Dakota Chapter of the Wildlife Society, I am writing in support of the Preferred Alternative described in the Draft General Management Plan and Environmental Impact Statement for the Missouri National Recreational River. The South Dakota Chapter is a private, nonprofit organization composed of over 200 professional biologists, managers, research scientists, educators, and administrators that have dedicated a large portion of their lives in an effort to conserve, protect and enhance the natural resources of South Dakota.

We are deeply concerned about the decline of many native Missouri River species and the Preferred Alternative appears to offer the best opportunity for the National Park Service to play a role in correcting these trends. The South Dakota Chapter realizes that while this segment of the Missouri River is a very small part of the entire system, it does support a disproportionant number of species in need of management actions to check the precipitous declines that have occurred. The Preferred Alternative appears to move in that direction and our Chapter supports that effort. We also acknowledge other agencies and individuals will need to play significant roles with the National Park Service to avert further declines in the resources along this reach of the Missouri River.

Sincerely,

Thomas R. Tornow, President
SD Chapter of the Wildlife Society

American Rivers

RECEIVED

December 17, 1998

Paul Hedren, Superintendent
Missouri National Recreational River
PO Box 591
O'Neill, Nebraska 68763

Dear Superintendent Hedren:

Thank you for the opportunity to comment for the record on the Draft General Management Plan and Environmental Impact Statement for the Missouri National Recreational River.

American Rivers, working jointly with the Missouri River Coalition, is leading a five-year campaign to restore portions of the Missouri River to their natural condition – a condition that Lewis and Clark would recognize. Our vision for the Missouri includes securing river management priorities that support healthy fish and wildlife populations, provide a full range of recreational opportunities and improve the quality of life in riverside communities.

The Missouri River Coalition includes forty groups from all seven states in the Missouri River Basin representing conservation, recreation and Tribal interests.

Preferred Alternative

American Rivers strongly supports the preferred alternative (Resource Protection/Recreation) identified in the draft plan. The Missouri National Recreational River, as suggested in the legislative history of the reach, still provides one of the last vestiges of the natural Missouri River before it was dammed and channelized. The 59-mile segment now maintains some of the best remaining habitat for the endangered interior least tern and the threatened piping plover, and holds promise as the best place for natural reproduction of the endangered pallid sturgeon between the Yellowstone River in Montana and Ponca State Park.

Considering the dramatic alterations wrought on the Missouri in the last fifty years, and the considerable amount of habitat destroyed as a result, the recreational river must be managed to protect its unique features: sandbars, backwaters, eroding banks, snags and cottonwood forests. These features provide numerous species of concern with proper foraging, nesting and resting habitat conditions.

As suggested in the preferred alternative, such a stretch of river also provides tremendous educational opportunities. People from across the nation can experience the historic Missouri

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(202) 347-7550 • (202) 347-9240 FAX • www.amrivers.org

here, learning about the river's storied past and understanding more clearly the recreational river's role in the overall health of the Missouri River system. We urge you to take full advantage of these opportunities by drawing visitors to the area and subsequently educating these visitors on the history of the Missouri River and the benefits provided by the Missouri National Recreational River.

Additionally, we support the preferred alternative because it ensures continued opportunities to enjoy high-quality hunting, fishing, boating, camping and wildlife observation. Because of its meandering nature, the Missouri National Recreational River is one of the few places left on the Missouri that affords safe canoeing and sandbar camping possibilities. To the extent possible, recreation opportunities should be maximized under the preferred alternative to allow people to experience the natural Missouri and to ensure communities like Vermillion, South Dakota and Ponca, Nebraska reap the economic benefits.

Comments from Sierra Club – Living River Group

The Living River Group of the South Dakota Sierra Club is an active and important member of the Missouri River Coalition. We affirm their comments on the draft plan and urge you to carefully consider their concerns and ideas.

Improving recreational access for non-motorized craft, developing a Missouri River Canoe Trail and enhancing recreational opportunities along the recreational river through hiking and biking trails and scenic overlooks are simple ways to engage people more directly in enjoying the recreational river without posing undue harm to its resources. To the extent practicable, management actions taken under the preferred alternative should encourage improvements in water quality.

Bank Stabilization

American Rivers' strongest concerns about the Missouri National Recreational River center around continued and increased stabilization of its banks. Like the Missouri's Garrison Reach in North Dakota, the recreational river's unique natural resources are threatened by an aggressive campaign to stabilize eroding banks. While emergency situations and the potential loss of historic properties may warrant stabilization in some cases, improper floodplain development and land use do not.

25 American Rivers urges the National Park Service to support a moratorium on further bank stabilization projects until the U.S. Army Corps of Engineers can complete a proper cumulative impacts study of bank stabilization on the Missouri River from Ft. Peck Dam to Ponca. Only with such data can reasoned and accurate decisions be made regarding how a bank stabilization project may impact endangered or threatened species, natural habitat or the recreational opportunities provided by the Missouri River in this area.

26 When bank stabilization is warranted, environmentally sensitive methods should prevail over the use of riprap and other hard structures. The continued stabilization of the segment's banks with riprap ensures a slow progression toward channelization like the river below Sioux City.

25. See responses 5 and 16.

26. See response 13. Neither the NPS nor COE support progressive channelization as cha. ıcterized but acknowledge the legislative authority to address isolated erosion problem areas. If and when new federally partnered bank stabilization occurs on the banks of the MNRR, the appropriate and required environmental compliance laws will be followed and the results used to determine the validity and consequences of the proposed project. Meanwhile, Endangered Species Act and NEPA compliance are undertaken on a case-by-case basis as part of the section 404 permitting process required of any private or public bank stabilization project.

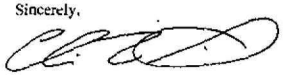
Ultimately, such changes on the recreational river will be in violation of the segment's designation legislation, the Endangered Species Act, the National Environmental Policy Act and other controlling statutes. The very unique natural resources that the recreational river was designated to protect will surely be lost with hardened banks, as will the economic and social benefits of recreation.

Conclusion

In conclusion, American Rivers supports the Park Service's preferred alternative and requests its full and swift implementation. We urge consideration of the Living River Group's ideas regarding enhanced recreational access. Further bank stabilization along the recreational river should not proceed until the Corps completes a full cumulative impacts study of bank stabilization on the upper Missouri River.

If you have any questions regarding our comments, please contact me in Nebraska at 402-730-5593.

Sincerely,



Chad B. Smith
Missouri River Regional Representative
American Rivers
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csmith@amrivers.org

Living River Subgroup (Vermillion, South Dakota)
East River Group
Sierra Club
500 South Churchill Avenue
Sioux Falls, SD 57103

December 16, 1998

Paul L. Hedren, Superintendent
Niobrara/Missouri National Scenic Waterways
P.O. Box 591
O'Neill, Nebraska 68763

Dear Superintendent Hedren,

Enclosed are complete comments that describe in detail the recommendations of the Sierra Club for modifications of Alternative 2 (Preferred Alternative) of the Draft General Management Plan and Environmental Impact Statement for the Missouri National Recreational River (59-mile segment, Gavins Point Dam to Ponca State Park). These comments were developed by a local group of Sierra Club members (Living River) and represent a more complete explanation of the cards that were sent to you by hundreds of local citizens.

In general, we applaud the National Park Service for their Draft Plan which clearly demonstrates a commitment towards protection of this pristine segment of the Missouri River. In particular, our views are most closely aligned with those outlined in Alternative 2 (Preferred Alternative). The comments that are outlined in the enclosed document are suggestions for modifications or additions to Alternative 2 that we feel strengthen that section. In our opinion, Alternative 1 (Continuation of Existing Conditions) is totally unacceptable and will lead to eventual destruction of many of the natural aspects of the River that must be preserved. In contrast, Alternative 3 goes too far in recreational and public development with many long-term negative consequences for the health of the River.

Overall, it is our opinion that this special section of the Missouri River must be more carefully managed for natural bank stabilization and monitored to maintain high water quality. Efforts for natural development of the shoreline should be greatly expanded and efforts to harden or fix the shoreline artificially should be discouraged. While we are sympathetic to concerns of local landowners regarding erosion, we believe that the option that is best for the protection of the integrity of the river is a natural land corridor which allows the river to meander at will. Therefore, the long range erosion control strategy should be acquisition of land from willing sellers, with interim measures that are as few and as natural as possible.

27 All existing species of plants and animals must be encouraged to thrive, and a much larger "greenbelt" should be developed than is outlined in Alternative 2. As outlined, the proposed greenbelt is insufficient to offer much protection or freedom of movement for wildlife, and a wider greenbelt would enhance the scenic and recreational characteristics of the River.

28 Noise pollution can be greatly reduced by encouraging a "reduced wake" policy and prohibiting powerboating, waterskiing, and use of personal motorized water craft ("jet-skis"). Further noise

27. As described on page 35 the "green area" concept is limited generally to the confines of the boundary. For this plan to recognize enough land to encourage plant and animals to "thrive" goes far beyond the scope of the Wild and Scenic River Act and provisions for designating boundaries. NPS and COE believe that they have identified and drawn boundaries sufficient to protect the outstandingly remarkable resources inherent in this river designation.

28. The National Park Service recently promulgated a regulation prohibiting personal watercraft on national park system waters, except where expressly permitted. Personal watercraft are not permitted on the MNRR. Noise is a problem on certain segments of the recreational river, and balancing desires for solitude with general recreational boating is a recognized management issue.

reductions can be achieved by discouraging future road development along the River and minimizing development of scenic overlooks for automobile traffic.

Although protection of the natural environment should be of the highest priority, we also feel strongly that recreational opportunities should be further developed that have minimum impact on the natural environment. Education of the public is necessary for future protection of the River, and the best approach for increasing public awareness is to provide ample opportunities to experience the River. Our recommendations for recreational use go beyond those of Alternative 2 but have much less negative impact than in Alternative 3. Specifically, more access points for nonmotorized craft are needed, while access for motorized craft appears ample. We recommend that the entire 59-mile stretch of the River be designated a Canoe Trail and that more hiking/cycling trails be developed on both sides of the River. Further development of campsites will support these low impact recreational activities.

We are excited about the future for the Missouri River that is provided by this National Park Service Draft and look forward to working with you in its implementation.

Living River Subgroup (Vermillion, South Dakota)
East River Group
Sierra Club
(Signatures are attached on the following page)

COMMENTS	RESPONSES
We the undersigned represent Living River, a local subgroup of the East River Group of the Sierra Club. On behalf of hundreds of local citizens, we developed and support this cover letter and supporting documents. John L. Williams Morton Blake Jerry W. Wilson Norma C. Wilson Nancy Loacher Cindy Kilkeby Nancy Carlson Elizabeth A. Fallon Karen Mahood Dorothy Newhouse Steven Stirk Keane Edward V. Davidson Barbara E. Goodman	

Missouri National Recreational River - 59 Mile Stretch
Comments to the Draft General Management Plan/Environmental Impact Statement - Preferred Alternative

The following comments to the Draft General Management Plan and Environmental Impact Statement for the Missouri River are respectfully submitted to the National Park Service on behalf of the Sierra Club - Living River group, Vermillion, South Dakota. The Living River group is made up of individuals from the East River Group Sierra Club, who, after meeting over a period of 15 months to review the draft management plan for the 59-mile stretch, propose the following additions to the preferred alternative. The Group notes efforts of the National Park Service that are outlined in the management plan to preserve and restore the 59-mile segment of the Missouri River and is generally supportive of the preferred alternative activities directed toward that end

Day to Day, Onsite Management

An important purpose of the NPS Management Plan is to protect the River for scenic and recreational purposes. The Army Corp of Engineers has formally acknowledged that recreation is a purpose for which it will manage the flow of the River, including releases from the five mainstem dams. The NPS Management Plan and the Corps' Master Manual Revisions are being developed simultaneously. Yet surprisingly, the two agencies are not coordinating their planning efforts.

We protest.

Failure of the two agencies to plan together toward the common goal is unacceptable, and flies in the face of a clearly stated purpose of Congress. Coordination of the planning efforts has the clear potential to make each agency effort more successful, yet the two treat each other as if they were independent Balkan states rather than closely related agencies of the same popularly elected government

Going further, we can add an awareness that neither the NPS nor the Corps of Engineers is talking to the U.S. Fish and Wildlife Service, despite the fact that the latter agency has a clear legally mandated role to play in both planning efforts,

In October of 1998, five avid canoeists from the Leavenworth, Kansas, area decided that a fall canoe cruise of the 59-mile stretch would be just the thing. What they did not know was that getting to the River is a daunting chore, requiring almost total reliance on local canoeists who have developed obscure and private points of ingress and egress. After hours and hours of "arranging," the small party was able to identify a public (unmarked) ingress, and a private and remote egress. Camping sites were equally difficult to locate.

This experience highlights the fact that the 59-Mile stretch is exceedingly difficult for canoeists on the Nebraska side, and very nearly inaccessible on the South Dakota side. What access is available clearly contemplates only the needs of power boaters. Secluded camping is practically out of the question. If Lewis and Clark were to arrive today, they would not be able to approach the River!

29. This presumption is erroneous. The COE is a co-lead with the NPS on this GMP/EIS and agency representatives have participated in all facets of its creation. Moreover, the team responsible for writing the *Master Water Control Manual* EIS has had review and input into the development of this GMP. The GMP is consistent with the current operating manual and results from this document will be considered when preparing the updated *Master Water Control Manual* EIS.

    Too, the U.S. Fish and Wildlife Service (USFWS) actively participated on the planning team and provided a section 7 opinion under the Threatened and Endangered Species Act for impacts on known threatened and endangered species occurring within the project area. During the implementation of this plan, the NPS and COE will continue to consult and work with the USFWS in the normal course of business.

29 and also has a wonderful capacity to advise on fish and wildlife enhancement measures

Recreation and Access

Additional access along the river should be limited to non-motorized water craft. Motorized craft have adequate access, and it is currently difficult for non-motorized craft to use the river. In addition, several hiking/cycling trails are needed along the river. Very few long distance trails exist in this part of the country, and the Park Service has an obligation to provide this type of experience. Campsites should be located at frequent intervals so that a multi-day trip could occur.

Missouri River Canoe Trail

The primary goal for the development of the Canoe Trail of the Missouri River is to provide canoeists an opportunity to fully experience pristine sections of the River to the greatest extent possible while minimizing the negative environmental impact. For the maximum benefit of canoeists, the Canoe Trail should be developed and maintained so that participants can achieve a high degree of personal solitude and experience the maximum possible interactions with the natural environment of these two sections of the Missouri River. The Trail should provide participants with opportunities for exposure to important natural, historical, and cultural sites along the river in a scenic and safe setting.

Preservation of the River in its most pristine form is a primary goal. It is important, however, that the public have reasonable access to the River. For present and future generations to protect the river, they must have adequate opportunities for experiences on and education about the River.

To achieve this goal, several actions are recommended:

1. The Missouri River Canoe Trail would encompass the entire 59-mile segment of the Missouri River, and restrictions would apply to the entire width of the river for this section.

2. Scenic Passages should be marked on the river and on an accompanying map that is available to the public. These Scenic Passages should pass through areas of the river with the least amount of visual and noise distractions. For example, if several channels of varying depth are present across a section of the River, the Scenic Passages should pass through those areas with the maximum opportunity for observation of relatively undisturbed natural landscapes and wildlife habitats. Some Scenic Passages should be designed to pass through or run adjacent to backwater areas, wildlife sanctuaries, sand bars and islands, notable geological formations, and historical and cultural sites of interest.

3. The problems associated with noise pollution should be given much great consideration. To

increase the quality of the personal experience for canoeists and for the protection of wildlife habitats, noise pollution should be minimized.

4 A "reduced-wake" rule for all motorized craft should be required for the entire length and width of the 59-mile segment. Speed should be reduced to reasonable and proportionate limits in order to avoid excessive wake and noise pollution. Reducing wake also increases the safety for canoeists. It should be recognized that in virtually all other sections of the Missouri River in South Dakota, Nebraska, and Iowa power boating is relatively unrestricted. The 59-mile segment is the only opportunity to provide a place for other types of boating — canoes, kayaks, and small craft for fishing and hunting.

5 Motorized "jet-ski" type craft should be totally prohibited from the 59-mile section of the Missouri River

6. Access for motorized craft (boat ramps, docks, etc.) should be limited to existing locations. Access for motorized craft is currently adequate and exists in those areas that are most appropriate for motorized boat traffic. Limiting access for these craft will protect other regions of the river from heavy motorized boat traffic, helping preserve the pristine nature of this section of the river, and reducing noise pollution for non-motorized craft and for wildlife in the area.

7. Two additional access points should be developed on the South Dakota side exclusively for non-motorized craft (between Yankton and Myron Grove and across from Ponca State Park). Beach or dock entry into areas with minimal current is recommended. Boat ramps for trailers should not be available at these sites. All access points should include adequate parking and trash disposal facilities.

8 Campsites for individuals and groups should be located near most of the access points on both sides of the River. These could be primitive in nature or developed sites. The number of campsites is adequate on the Nebraska side, but two should be added on the South Dakota side between Clay County Park and at a point across from Ponca State Park.

9. A reasonable number of designated primitive campsites for canoeists should be available on the Canoe Trail on both sides of the river and on islands in the river. To increase the wilderness experience for canoeists, these sites should not be easily accessible by roads. The number of sites should be large enough so that in most cases all canoe parties can easily find a site for camping. Sites should be spaced far enough apart from each other to maximize the experience of solitude for each party and reduce the impact of sites on the environment. Development of an adequate number of sites should discourage camping in other areas and thus reduce the negative impact on other non-designated areas of the river. Each primitive site should contain a fixed heavy metal grill and an open

latrine. Campers would be expected to carry out all non-combustible trash for disposal after leaving the River.

10. Some campsites and points of interest along the Canoe Trail should be associated with hiking trails. Development of marked hiking trails will encourage use of the designated hiking trails and thus reduce the potential negative impact on the environment of large scale off-trail hiking that might occur otherwise.

11. A guide to the Canoe Trail should be available for visitors. This guide would clearly describe the nature of the Trail, and a map would show the exact route, access points, areas of public and *private land, campsites, hiking trails,* and areas of special interest. In addition, rules and regulations for the trail could be included. Allowing people this type of access is necessary to help educate them as to the value of *this complicated and rich resource.*

Hiking and Biking Trails; Scenic Overlooks

Preservation of the river in its most pristine form is a primary goal. It is important, however, that the public have reasonable access to the river. To protect the river for present and future *generations,* people must have adequate educational opportunities and accompanying experiences on the river.

1 At least three land-based, multiple-use hiking trails should be available for public use on each side of the river within reasonable driving distance from population centers. Hiking trails should be designed to promote the many positive features of the Missouri River and its immediate environment, including flora and fauna, geology, historical and cultural features. When possible, the trails should be several miles in length and some of the trails should be near camping facilities.

2. The hiking trails should also be suitable for trail-type bicycles. The trails should be relatively undeveloped for preservation of the wilderness experience of the participants and to reduce the impact on the environment. Horses should not be permitted on these trails because of the harsh impact that they have on trail maintenance and the impact on the trail due to erosion.

3. Because the impact of noise and visual pollution is deleterious to the overall outdoor experience, roads near the river should be minimized.

4 *Scenic overlooks for automobile traffic should be developed on both sides of the river to increase* the numbers of people who can experience the attributes of the river. However, these overlooks *should only be developed adjacent to boat access points and the roads to these scenic overlooks* should not run along the river except as needed to reach the scenic overlook.

5 A guide to the Multi-use Trails *should be available. This guide would clearly describe the nature*

of the Trails and a map would show the exact route, access points, areas of public and private lands, campsites, and areas of special cultural, archeological and historical interest. In addition, rules and regulations for the trail would be included.

Water Quality

30

The NPS Draft Plan appears thoroughly prepared to accept the status quo where water quality is concerned. If the River is to be protected and restored, and if the River is to be a viable recreation resource, close attention must be paid to issues of water quality.

Along the 59-Mile stretch there are major pollution outfalls. In addition, the rapid concentration in the animal industries promises the potential of the development of major new outfalls. Contaminated runoff from farm fields is recognized as a major contributor to waters which flow in the 59-Mile stretch.

Water Quality Standards for the Missouri River and tributaries exclude many key contaminants, such as sediments, and the State of South Dakota is presently the subject of litigation involving claims of the inadequacy of the Standards. It is clear that the NPS assumes a position that water quality is beyond its jurisdiction. We challenge this assertion on its face and urge the NPS to develop, as Missouri River custodian, an active plan for advocating and asserting water quality.

What should be the components of the Plan? First, aggressive and comprehensive monitoring, especially below known outfalls and tributaries. Second, regular publication of water quality information. Third, appearance before Nebraska and South Dakota water quality agencies when new or revised NPDES permits are up for consideration, when Water Quality Standards are subject to triennial review, and when plans are under development for addressing nonpoint source pollution. Finally, the NPS should ask the States of Nebraska and South Dakota to declare the 59-mile stretch an Outstanding Natural Resource Water (ONWR) as provided for in the Clean Water Act.

Protecting the Remaining Shore

In 1944 federal legislation authorized development of the Missouri River. In addition to the great mainstem dams, the law also required channelization of the navigation channel from Ponca, Nebraska, south to the River's mouth. This meant that the lower River would have a "hard," or fixed shore, solidified with rock, dikes, levees and so forth.

North of Ponca nearly all of the River's natural shoreline was submerged beneath the vast reservoirs that formed behind the dams. As a result, we are left with just a small reserve of natural river shoreline. And, indeed, that remaining shoreline is not altogether natural, since it is subject to the dam's releases, which in

30. NPS's policy on water quality is stated on p. 106: "*NPS Management Policies* state the National Park Service will seek to perpetuate surface and groundwater as integral components of aquatic and terrestrial ecosystems. The National Park Service will seek to restore, maintain, or *enhance* water quality consistent with the Clean Water Act" (emphasis added). Additionally the WSRA states that, "The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing *condition to protect the water quality of such rivers* and to fulfill other vital national conservation purposes." (emphasis added).

The NPS's Water Resource Division has collected historical water quality data. Following the signing of the Record of Decision and the appropriation of operational funds, water quality monitoring will begin.

turn are governed by concerns for navigation rather than protection of the resource.

Where is that remaining shoreline? There remain 80 miles of free-flowing Missouri River between Garrison Dam and Lake Oahe Some Shore remains in the 39-mile segment from the headwaters of Lewis & Clark Lake up to the Fort Randall dam. Additional shore can be found in the segment from Gavins Point Dam, 59 miles downstream to Ponca State Park, Nebraska. This is a precious small remaining bit of shore. Regrettably, it too is being subjected to destructive development, and is at risk of disappearing.

The development that is destroying the remaining natural shore is carried out under a variety of titles: "rip-rapping," bank stabilization, revetments, jetties and so forth. Whatever the activity, the result is the same

An unprecedented level of development is threatening the public's ownership values in these last free-flowing stretches On the Garrison reach, over 50% of the banks have already been stabilized with revetments, jetties, and rock rip-rap, much of it carried out at public expense.

In the Bismarck-Mandan stretch, seven major housing developments have been approved recently, with at least two more on the way. In Southport, North Dakota, for example, a project of 80 houses and 70 townhouses are under construction. In the South Dakota stretches, haphazard housing developments of every possible type hug the shore, each one demanding that it be protected from the natural River.

Stabilization of river banks in order to protect shoreline housing developments does not eliminate erosion, but only shifts the loss to other places downstream. The water still has the same energy to pick up and transport sediment. This means new and continued requests for assistance from impacted landowners downstream. This is being done despite the bad economics. Stabilization projects cannot support cost-benefit analysis, and public funds expended here are wasted

Effects of Stabilization Projects

We are losing the last remnants of river that look something like the river visited by Lewis & Clark, also the route taken by the famous mountain men and voyageurs, and known to millennia of native peoples. In this sense, these wild stretches are an important part of our social, cultural, economic and political history.

We are losing the natural River. Historically, the Missouri has always moved around and eroded its banks To complain about this feature is to complain about the natural River itself. Before the dams, as a result of annual flooding, most of the land now being farmed or developed could not be used.

Bank stabilization has a serious detrimental effect on the fish and wildlife resource. Natural banks provide a unique river habitat in which fish rest and spawn. They are key to the free-flowing River's function

as temporary home to vast populations of migratory waterfowl, including geese, ducks and heron. They support important feeding and nesting grounds for the Bald Eagle. Most natural stretches are prime sports fisheries, such as the famous walleye fishery in the Garrison Stretch.

Additionally, bank stabilization will restrict the surface area of the River, increase the velocity of the current, deepen the River channels, degrade the riverbed, inhibit the formation of sandbars, reduce the number of braided channels and eliminate backwaters.

Recreation has come to be an important economic and social fact on the free-flowing stretches, and bank stabilization threatens the viability of this emerging resource. The Garrison reach alone generates over $20 million of water-based recreation annually, second in North Dakota only to Lake Sakakawea. The 59-

mile stretch below Gavins Point Dam is a major destination for canoeists, boaters, birdwatchers, hunters and fishers

Ultimately, the effect of bank stabilization cannot be evaluated by looking at individual impacts. The real impact is cumulative. We risk channelizing the River one housing project at a time. The final effect would be a river like that below Sioux City — a channel from which people are cut off, and in which nature cannot function. A river that is no longer a river.

Greenbelt and Biological Diversity

That the River is home to a list of important endangered and threatened species of wildlife is another concern. In addition to the tern, plover and pallid sturgeon, two minnows will be added soon. Most unbiased observers recognize that the list of threatened species could be much longer. The natural River, with the refuge provided by natural shores, is an important part of recovery for some of these species.

A green-belt is as near a natural and truly effective remedy as there can be as a measure protecting both the eroding banks and the threatened and endaangered species. To accomplish that purpose, a continuous greenbelt, or as continuous as possible, would be necessary, and it should be of sufficient width to fully protect both bank stabilization and animal and plant species.

Summary

The Living River group is generally supportive of the management goals outlined in the preferred alternative of the draft management plan. However, we believe that it is imperative that the NPS take the additional steps outlined in this proposal in order to restore, protect and preserve the unique features of the 59-mile segment for present and future generations.

COMMENTS

Dear Superintendent Hedren,

I would like to urge you to make the following changes in Missouri National Recreational River General Management Plan:

1) The Corp's "day to day onsite management" outlined in the plan must end. The National Park Service needs to take sole jurisdiction of the 59-mile designation and its Corp facilities.

2) Limit additional access to nonmotorized water craft. Motorized craft have adequate access.

3) A hiking and riding trail is needed along the river. Very few long distance trails exist in this part of the country. Campsites should be located at frequent intervals, allowing for multi-day trips.

4) Because of the noise and pollution associated with them, the Park Service should ban the use of personal water craft. They do not belong on this natural and free-flowing stretch of the river.

5) To protect and enhance the River, the river should be designated an Outstanding Natural Resource Water under the Clean Water Act.

6) Protecting the remaining shore, when necessary, should be as natural as possible.

Sincerely,

Jan Wasson

RESPONSES

(Note: As noted in the preceding letter from the Living Rivers Subgroup, East River Group of the Sierra Club, the Sierra Club organized a massive response to the NPS during the public review of this draft GMP/EIS. The tarecard response echoed the same general comments as the preceding letter.

In sum, 779 cards were received from 40 different states. Included in the tally were 214 from South Dakota and 224 from Nebraska. Among the communities in the proximity of the MNRR, 10 were postmarked from Yankton, 162 from Vermillion, 42 from Sioux Falls, 24 from Sioux City, 9 from northeastern Nebraska, 95 from Omaha, and 56 from Lincoln.)

COMMENT FORM

RECEIVED

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and
Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. **Please print.**

31 Whatever Alternative is chosen, Bank protection should have the highest priority. Alternative 1 is our first choice, but we are told this is not an option. Why is it in the Plan? Alternative 3 would come next. Many people and communities benefit from the construction of the Dams. The landowners along the river are paying a big price for those benefits. They are not asking for the river to be channelized. Just rock to protect the high bank where the river is cutting. Buying the land and letting it erode doesn't solve the problem - no one can predict how much will erode. It is not a natural river as in Lewis & Clark time - it is a controlled river. Before the Dams you may lose land one year and get some back in a few years. That will not happen now - the river gets wider and wider.

32 The recommendation to use "natural streambank protection" where possible was made by someone who has not seen the Missouri river in action! Afew years after rock is in place willows, etc. will be growing on it. That is much better habitat for wildlife than a steep eroding bank. The Dams have caused this problem - the Government should protect the high banks. Plenty of other things get funded without regard to cost.

Name: Harold & Joyce Hoesing

Address: _____

_____

_____

Turn your comments in to a National Park Service representative or mail to:

Superintendent, Niobrara/Missouri National Scenic Riverways, P.O. Box 591, O'Neill, Nebraska 68763

THIS FORM IS VOLUNTARY. THANK YOU FOR YOUR COMMENTS.

31. See response 21.

32. See response 13. In fact, the NPS routinely participates with others in the COE's annual bank stabilization inspection trips and is quite familiar with the different demonstration projects in place along the recreational river.

RECEIVED
1998
NIOBRARA/MISSOURI
NSR

December 1, 1998

Mr. Paul Hedron, Superintendent
Niobrara/Misssouri National Scenic Riverways
P.O. Box 591
O'Neill, NE 68763

Dear Mr Hedron:

May I urge upon you the following serious concern that has bothered me for years?

This concern is the mismanagement of the Missouri River by the United States Corps of Engineers.

I have been familiar with the Missouri by boating, fishing, water skiing, and picnicking on it for many years. What the Corps has done to the river has been to destroy its beauty and scenic attributes for a set of goals that are illogical, financially disastrous, and completely unsupportable from an environmental standpoint. I base this conclusion on the disastrous effects of the bank stabilization process from Sioux City to Saint Louis. Nothing could have destroyed the natural river more than what the Corps did.

I realize that floods are serious, but if farmers would sell their land to the U.S. government, they would make a heck of a lot more money than to attempt to farm the lands bordering the river. Furthermore, we could enjoy the river without the runoff of pollutants from their fields or cattle and hog confinements.

I firmly believe that the National Park Service should take over the management of the fifty-nine mile stretch of the river and keep the Corps out of it completely.

Thank you for your consideration.

Very truly yours,

Edward M. Sibley
An old river rat.

NATIONAL PARK SERVICE —

THANK YOU FOR SENDING ME
THE GENERAL MANAGEMENT PLAN —
AND I WOULD LIKE TO RECIEVE
A COPY OF THE FINAL APPROVED PLAN
+ STATEMENT —

I OWN AND OPERATE
INDIAN HILLS ARCH ZONE + CABIN
AREA — AND I AGREE WITH THE
PLANS MENTIONED —

I do have ONE
COMMENT TO MAKE — CONCERNING
THE SMALL ONE PERSON WATER
CRAFT OR SKI-DOS — they NEVER
SLOW DOWN — AND I HAVE had
them plow through my SWIMMING
AREA with NO REGARD FOR ANYONE
SWIMMING — WE HAVE ALOT of PEOPLE
HERE WITH SMALL KIDS + ON
WEEKENDS THEY ARE IN THE WATER
(WITH PREPERVERS) AND THE SKI-DOS
JUST BARRELL RIGHT THRU —
thats ANNIE LAMPRECHT —

RECEIVED
1996
NPS

COMMENTS

Nov 21 1998

Superintendent
Missouri National Recreational River
P.O. Box 591
O'Neill, Ne. 68763

RECEIVED
1998 NOV 23 AM 9:56

Dear Sir:

I do not believe in changing the Missouri Bank Stabilization Program. We have to have protection of our Missouri River Bank.

33 Why are you having Public Meetings without notifying the Lay advisory group? They have every right to protect their land along the Missouri and all their Neighbors land too.

Sincerely,
Bonnie J. Hageman

RESPONSES

33. See response 8, third paragraph.

December 14, 1998

Sirs,

Enclosed are a few comments on the proposed "three alternatives" being considered by the National Park Service for the 59 mile stretch of river between Yankton, SD and Ponca, NE. As an avid canoeist, boater, and landowner along the river for the last 25 years, I feel somewhat qualified to make a few observations on the proposal

34 All the proposals seem to be preoccupied with "recreation"; apparently the Park Service feels more people need more and easier access to the river. Along this particular stretch of river (Ryan's Bend area) this goal has been more than met already. On any weekend during the summer this stretch of river is crowded with both large and small boats, including jet-skis and cabin cruisers; near collisions are common; probably due to the narrow channels, sand bars, etc. The scene has become more reminiscent of Lake Okoboji than any so called "wild and scenic river".

I personally have witnessed inebriated boaters on more than one occasion walking through marked plover and tern nesting sites, while casually throwing beer cans among these sites. During the fall, the competition between the hunters for the duck-hunting spots is almost comical; arguments and near fights are fairly common. In short, on this particular stretch of river any individual duck attempting to land would be committing suicide; actually they seldom even try it.

35 The proposed bike trail and overlooks seem like nice ideas on the surface; but would the Park Service or Corp be making arrangements for picking up the trash generated by this extra traffic? Already there has been a dramatic increase in the amount of trash along the back roads going through the corridor. Enclosed are some photos taken from the overlook at Ionia Cemetery; people are directed to this historic landmark by a sign on Highway 12 in Newcastle. Apparently they have it confused with the local dump. This site would look even worse if it had not recently been cleaned up by the locals. Currently my family picks trash up regularly along the stretch of road in this same area, and the job gets bigger monthly.

36 In short, I don't see how attracting people to "recreate" in this area with the attendant pollution, noise and crime can have anything but a detrimental impact on the river's ecosystem. Already the experience of a "quality natural, wild, and scenic setting" proposed in the "preferred alternative" has been seriously compromised. Once again, the goal to allow more access to the river has already been met.

I also feel a couple of comments on stabilization and erosion are in order. With millions of acres of cropland being paved over and developed yearly in the U.S. and lost forever, I would think the Federal Government might take the loss of tens of thousands of acres of valuable farm-ground along the river a little more seriously. I can assure you that our local government does; the potential for lost taxes and lower property values poses a serious threat to rural areas, local school systems, etc. The future lost revenues due to land being allowed to naturally slough into the river would far exceed the present "market value" of this land. To just pay market value; whatever

34. As explained on page 54, under the "Visitor Development and Access" section, facility development would not be extensive and such development would avoid significant resource areas. This GMP embraces the rationale that the two proposed river access developments, strategically located, would alleviate some of the crowding in places like Ryan's Bend.

35. Any such developments become an agency's burden to manage, whether individually or cooperatively. COE's policy is to cooperate by building, then turning operation and maintenance over to a cooperating group or agency.

36. See response 34. The NPS has not yet conducted visitor use studies to validate or reject assertions that quality experiences on the MNRR are already seriously compromised, but accepts the burden of managing people when visiting the unit. While many areas of the river are developed, there are still places where a quality natural setting can be experienced.

that is for farmground lost forever is an extremely simplistic approach to solving the problems; especially for an agency willing to spend millions of dollars to float heavy equipment up and down the river building up islands and sandbars for terns and plovers. Possibly in the foreseeable future farmland might also be a type of endangered species. Under the right conditions an acre of farmground might be more valuable than an acre of shopping-mall.

37 Perhaps the government could look into some cost share possibilities with the landowners along the river. Perhaps this coupled with low or no interest loans for bank stabilization might lessen the financial burden to both the landowner and the government. Surely there might be creative ways the government and landowners could work together to save this farmground that would be both esthetically and financially acceptable to both parties.

My greatest bank losses; with the exception of the recent "100 year runoff", are the result of the constant raising and lowering of the river by the Corps. These fluctuations with the attendant wave action are the biggest culprits. I would much prefer a rather sustained flow even if it's somewhat higher than these constant fluctuations.

I believe another major cause of erosion are the wakes caused by boats; especially large boats. I have actually observed boaters purposely causing banks to cave in by repeatedly driving their boats right next to the bank. Many lakes and rivers already have horsepower restrictions. How big does a boat motor on this type of river really need to be? In most situations, 25 or 50 h.p. is plenty to get up and down the river. High horsepower boats are really out of place on a river of this type; both from a safety and an environmental standpoint. On a quiet evening one can hear the whine of jetskis over a mile away; no wonder terns and plovers have trouble breeding with this racket going on. I urge the Park Service to implement some type of horsepower restrictions on this stretch of the river.

As a landowner and river enthusiast, I am very concerned with the rapid changes taking place on the river; the potential for abuse has never been greater. I hope the Corps. and Park Service will work closely with landowners, local government, and river organizations to preserve the natural and unique beauty of this stretch of river and at the same time reduce erosion and the loss of valuable agricultural lands, which can never be restored. After all, no one realized the value of a least tern or piping plover until they were almost extinct.

Sincerely,

Steve Husen

37. See responses 15.

RECEIVED

OCT 2[illegible] 1998

NSR

P.O. BOX 570
117 EAST THIRD
PHONE 402-755-2224
FAX 402-755-2226

BANK OF DIXON COUNTY

PONCA, NEBRASKA 68770

F. A. Kingsbury
Chairman

John F. Kingsbury
President and CEO

Richard D. Dohma
Sr Vice President
Operations

Monty L. Miller
Sr Vice President
Investments

Dana Olsen
Vice President
Compliance

Carlene Stark
Computer Operations

BRANCH LOCATION:
P.O. Box 97
412 Main Street
Wakefield, NE 68784
PHONE 402-287-2235
FAX 402-287-2242

October 26, 1998

Paul L. Hedren, Superintendent
Niobrara/Missouri National Scenic Riverways
National Park Service
P.O. Box 591
O'Neill, NE 68763

Dear Mr. Hedren:

I had hoped that I could attend one of the public meetings regarding the Missouri River but my schedule does not allow that. Thus, I want to take this means of commenting on the Missouri National Recreation River portion of the Missouri between Ponca State Park and Gavis Point Dam.

Clearly, only Option 3 presented in the Draft Management Plan addresses Congressional intent. Congress designated this a Recreational portion of the River. Any option that substantially limits Recreational Development in favor of other interests falls outside federal authorization. Many people in our area strongly favor suitable recreation development appropriate to the public enjoying this natural portion of river through increased public lands and access. The development of habitat lands, natural and native areas and increased bank stabilization can be incorporated.

This should not be an issue of which interests to develop or protect. Congress made that determination years ago. The management plan simply must do the best job possible of considering significant issues beyond recreation.

It is also important to mention that I do not agree whatsoever with the idea that *authorized funds somehow require local cost sharing.* The Missouri National Recreation River is a designated project of the federal government. It is not a project or program of assistance to state or local government. This must be recognized in the Final Plan.

Lastly, Legislation gave administrative responsibility to the National Park Service. Any agreement or Final Plan with the Corps of Engineers should call for funding to be obtained by the Department of Interior.

Also, as President of the Buffalo Bill Foundation I am working with Ponca State Park and the Nebraska Game & Parks Commission on various plans to further develop the Park. I believe you have talked Supt. Jeff Fields and I look forward to meeting and talking with you soon.

Sincerely,

John Kingsbury
President

"Changing to meet the challenges of the future."

PO BOX 570
117 EAST THIRD
PHONE 402-755-2224
FAX 402 755-2226

BANK OF DIXON COUNTY

PONCA, NEBRASKA 68770

F.A. Kingsbury
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President and CEO

Richard D. Dohrns
Sr Vice President
Operations

Monty L. Miller
Sr Vice President
Investments

Dana Olsen
Vice President
Compliance

Carlene Stark
Computer Operations

RECEIVED
NOV 1998
NRR

October 26, 1998

William Schenk, Director
Midwest Regional Office
National Park Service
1709 Jackson Street
Omaha, NE 68102-2513

Dear Director Schenk:

I had hoped that I could attend one of the public meetings regarding the Missouri River but my schedule does not allow that. Thus, I want to take this means of commenting on the Missouri National Recreation River portion of the Missouri between Ponca State Park and Gavis Point Dam.

38 Clearly, only Option 3 presented in the Draft Management Plan addresses Congressional intent. Congress designated this a Recreational portion of the River. Any option that substantially limits Recreational Development in favor of other interests falls outside federal authorization. Many people in our area strongly favor suitable recreation development appropriate to the public enjoying this natural portion of river through increased public lands and access. The development of habitat lands, natural and native areas and increased bank stabilization can be incorporated.

This should not be an issue of which interests to develop or protect. Congress made that determination years ago. The management plan simply must do the best job possible of considering significant issues beyond recreation.

39 It is also important to mention that I do not agree whatsoever with the idea that authorized funds somehow require local cost sharing. The Missouri National Recreation River is a designated project of the federal government. It is not a project or program of assistance to state or local government. This must be recognized in the Final Plan.

Legislation gave administrative responsibility to the National Park Service. Any agreement or Final Plan with the Corps of Engineers should call for funding to be obtained by the Department of Interior.

Finally, as president of the Better Ponca Foundation I am working with Ponca State Park and the Nebraska Game & Parks Commission on some significant new development ideas for the Park. When better defined we look forward to sharing the Park's potential with you.

Sincerely,

John Kingsbury
President

BRANCH LOCATION
P.O. Box 97
212 Main Street
Newcastle, NE 68757
PHONE 402-355-2235
FAX 402-355-2251

"Changing to meet the challenges of the future."

38. See response 1. The GMP does not limit or discourage recreation but balances it with preservation intents. The WSRA defines this management and protection standard: *". . . selected rivers of the Nation which, with their immediate environments, . . . shall be preserved in free-flowing condition, and . . . they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations"* [§ 1 (b) WSRA, PL 90-542, as amended] Federal authority is derived from the WSRA, the 1978 designating act, and laws and regulations governing units of the national park system.

39. See response 2. Local cost sharing is not applicable in all management matters, however.

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NOV 2 5 1998

NSR

November 25, 1998

Mr. Paul Hedren
Superintendent
Niobrara/Missouri National Scenic Riverways
P.O. Box 591
O'Neill, NE 68763

Dear Mr. Hedren:

I am writing to urge you to establish your jurisdiction over the Missouri River. Specifically, I think that you should protect the natural state of the River by:

1. Allowing flooding in certain areas. This will both improve habitat for fish and wildlife, while protecting cities from flooding. Even places like Boyer Chute, while useful, create very little, if any, still water.

2. Ban the use of jet skis and like personal watercraft.

3. Where barge traffic is required, take further steps to stabilize the bank in a more natural way.

4. Prevent further human encroachment, such as boat ramps and residential building, in scenic areas along the river.

Thank you for your time and consideration.

Sincerely,

Burt W. Lunn

S. Daschle
S. Johnson
C. Thune

COMMENT FORM

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. Please print.

Mr. Jeffers

40 Bank stabilization was only minimally mentioned in all of the alternatives considered. To the people that live and own land on the river it is essential that bank stabilization is a priority. In my community of 40 lots, at least 50,000 to 70,000 has been spent by residents, trying to save our land over the past four years. We were not aware of sponsorship agreements until last year, when we were told by our county, although having agreed to inspect and stabilize refused to do so, claiming the contract was illegal. Thousands of tax dollars are being lost due to land being taken by the river, not to mention loss of income and value to farmers. High banks and large old growth trees are part of the landscape where we live and as you mentioned in Vermillion, should be preserved. Families have invested their savings in homes and land along this riverfrontwith that they would be protected if bank erosion started to take it away, especially in the original project areas. Please put a top priority on bank stabilization in whichever alternative is implemented. Limit new growth but protect what is already there.

Name: Terrence W. Brady

Address: _____

_____

_____

Turn your comments in to a National Park Service representative or mail to:

Superintendent, Niobrara/Missouri National Scenic Riverways, P.O. Box 591, O'Neill, Nebraska 68763

THIS FORM IS VOLUNTARY. THANK YOU FOR YOUR COMMENTS.

40. Bank stabilization is repeatedly mentioned in the alternatives and clarified in these responses. But the urgency and legitimacy of stabilizing the banks of developed lots, questioned here, is perhaps the greatest challenge confronting river managers. For federally driven stabilization to occur on the MNRR, Congress mandated that a "federal interest" be established before using appropriated funding. At the public meetings in November and December 1998 "federal interest" was consistently defined as an easement acquisition of, say, development rights on farmland, or guaranteed perpetual mature tree stands along the riverbanks. It is much more challenging to envision a federal interest in a developed lot, however, especially one that invariably long ago lost its inherent natural integrity with the thinning or removal of trees, and the coming of recreation homes, cabins, trailers, roads, docks, and boats. Moreover, invariably developer/purchasers consummated their transactions well after post-dam river conditions were understood, and with free choice comes the jeopardy of life on the river.

COMMENT FORM

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and
Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. **Please print.**

We, the undersigned, would like to see additional bank stabilization done no matter which alternative is decided on. We would also like to see new projects started. After the alternative decision is made, you should work relentlessly to get some or all of the $21,000,000 that was originally allotted for bank stabilization released. Take that money and start putting the original project areas that have gone from bad to worse over the past two decades, back into good condition. Permits are already in place to do work, and the positive affect on the public would be almost immediate, not two years down the road. Whatever portion of the $21,000,000 that was used could be deducted from your allocated budget when it was determined, or left alone. It also makes fiscal sense to do these repairs because much rock is still part of these projects sites. You would also be protecting your original investment that has been let go for 20 years. Repairs and new project sites should be done using a barge. Track hoes and loaders destroy what you are trying to protect.

NAME	ADDRESS	PHONE NUMBER
Lydia P Brady		
Terence W. Brady		
Kumdi Ramakrishna		
Timothy Ramakrishna		
Norma C. Hill		
[illegible]		
Ryan Hanson		
Grason Hanson		
Bruce Brooks		
Harmony Chai		
Keith Loar		
Gaile Lowry		
Jay Hanson		
Peter Murphy		
Mary L. Jurkovich		

COMMENT FORM

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and
Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. **Please print.**

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NAME	ADDRESS	PHONE NUMBER
[illegible]		
Bob Kennedy		
Curt Lubben		
Cappy Lubben		
Jim Hawthorne		
Gralee Hawthorne		
Roy A Sopratt		

12-6-98

RECEIVED

DEC 1 1 1998

MISSOURI NSR

Mr Paul Hedren, Superintendent,

I attended the 11-25-98 meeting in Pukston SD and have since read through the draft of this plan. My biggest concern is condemnation of privately held land and that is not unrealistic to me since my deceased father-in-law lost 3,500 acres, the site of Gavins Point Dam. That enormous of a loss affects a family for generations. We own 8 acres east of the dam on the South Dakota side, where we live, and a 180 acre field further east on the Nebraska side.

41

I realize this issue is very complex and there are many valid, and sometimes conflicting, priorities. I believe the more governmental agencies involved, the more conflicts and "territorial" squabbles will result. Today, if I have a problem with neighbor 'A', he isn't likely to refer me to neighbor "B" who will explain that it's "C"'s regulations who will say he can't do anything until "D" provides the funding. That is exactly what I visualize with the "new neighbors" you describe. We can't even get basic road maintenance due to lack of funds at the county level and our teachers are paid so poorly it's a joke. We do not need more "interpretive centers" and studies of the "blowout penstemon." Washington (DC) is noted for sending desserts such as

41. The conditions permitting the condemnation of privately held land have been severely restricted. Public Law 95-625 establishing the recreational river declares, in part, " . . . no land or interests in land may be acquired without the consent of the owner: *Provided,* That not to exceed 5 per centum of the acreage within the designated river boundaries may be acquired in less than fee title without the consent of the owner, in such instance of the Secretary's determination that activities are occurring, or threatening to occur thereon which constitute serious damage or threat to the integrity of the river corridor, in accordance with the values for which this river was designated."

COMMENTS

these to hungry people. I believe this plan will foster that mentality and people resent their taxes increasing for these frills. Frankly, there's a big credibility problem as long as "alternative" one is presented as such when, in fact, it is NOT an alternative. This is deliberately misleading to the public. It's also unsettling that this plan is being resurrected after 20 years on the shelf. So much that could have been preserved is gone. Politics as usual.

42

The appendix on page 158 is a very subtle way of forcing zoning ordinances through the back door. Citizens in our area keep voting against zoning and they aren't likely to vote for it just to protect those of us who are fortunate (?) enough to own riverfront.

43

Appendix "F" is beyond ridiculous. The pictures of "negative" and "preferred" vegetation screening do not show the same houses or the same trees, shrubs, etc. It's like a "before" and "after" picture of 2 different people. Is it realistic to show a windowless house buried in jungle? Like - how did they get that house in there anyway without apparently disturbing a twig? These scenes show no walkways, let alone driveways.

44

RESPONSES

42. See response 21.

43. What is written on page 158, appendix A, is an explanation of section 6(a) of the WSRA. It is a limit placed by Congress in the law restricting land acquisition by the managing agency.

44. Appendix F only shows theoretical examples of appropriate and inappropriate screening of river front development.

or any cleared areas for any reasonable access. I doubt you have trees hanging over your roof and branches tapping at your windows as these scenes show.

If I lived by the city dump, I probably wouldn't mind a "corridor" view such as drawn. Do you really think anyone wants to live by the river if they can only get a glimpse standing sideways looking over their left shoulder at a 90 degree angle? I will not sacrifice my view for the public unless it's a different public than those who have for so long trespassed and littered around here. The public treats our beach area as if it is the city dump. I certainly would be interested to know exactly how the "studies" were done that conclude that more tourists and public access will not result in any increased problems of noise, crime, pollution. I say — yeah, right. I believe either alternative 2 or 3 will mean for me more dirty disposable diapers and broken beer bottles to clean up. And, no thanks, I don't want my taxes to "spiral" (your word) to pay for a ranger to help me clean up. Only people who own something really care for it. We'll be just another place that's "a good place to visit but I wouldn't want to live there." Sincerely,
Arlene Haine

December 5, 1998

Paul Hedren, Superintendent
Niobrara/Missouri National Scenic Riverways
PO Box 591
O'Neill, Nebraska 68763

RE: Missouri National Recreational River Draft General Management Plan and Environmental Impact Statement

Dear Sir,

We, the Dixon County Planning Committee, feel the Missouri Recreational River could be even more important to Dixon County with these improvements: (1) bank protection; (2) protection of sensitive areas; (3) preservation of natural features; (4) development of additional recreational resources; and (5) development of high value residential areas

We have been working with SIMPCO on a general comprehensive plan, including the "Rec" River. We have concluded our review of the Draft General Management Plan and Environmental Impact Statement and recommend that the plan include:

45

1. Updated high priority bank protection areas, with cost estimates;
2. Recreational facilities, with cost estimates;
3. The need to implement the purpose of the MNRR and not be constrained by current federal policies;
4. Timetables for completion of improvements; and
5. The necessary funding alternatives of recommended areas.

The Missouri National Recreational River is extremely important to Dixon County, Nebraska, not only as our northern boundary, but also for our economic growth. Therefore, we recommend "Alternative 3" with the above listed additions.

Sincerely,

Betty Curry, for
The Dixon County Planning Committee

Copies sent to:
Senator Bob Kerrey
Senator Chuck Hagel
Congressman Doug Bereuter
William Shenk, NPS Regional Director

45. See response 16.

Federal policy derives from legislation or congressional intent and agency functionaries are beholden to those policies until modified or superceded by Congress.

Donald E. Andersen, Mayor
City of Ponca

Tom Moser, Manager
Lewis & Clark NRD

Dale Anderson, Supervisor
Dixon County

Jerry Schroeder, Supervisor
Dixon County

John Book, Clerk
Village of Martinsburg

Bob Wegner, Board Chair
Village of Maskell

Darrell Curry, Supervisor
Dixon County

Larry Boswell
Village of Allen

Russell Fleury, Supervisor
Dixon County

Gretchen Dietrich
Village of Concord

James Hoesing, Supervisor
Dixon County

Dale Jackson
Dixon County

David Krusemark, Supervisor
Dixon County

Lowell Johnson
City of Wakefield

Dorothy Mattes, Supervisor
Dixon County

Elsie Lund
Village of Newcastle

Diane Mohr, Clerk
Dixon County

Leonard Marron, Board Chair
Village of Newcastle

COMMENTS

Donald E. Andersen, Mayor
City of Ponca

Dale Anderson, Supervisor
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Lewis & Clark NRD

Jerry Schroeder, Supervisor
Dixon County

Bob Wegner

Bob Wegner, Board Chair
Village of Maskell

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Village of Allen

Gretchen Dietrich
Village of Concord

Dale Jackson
Dixon County

Lowell Johnson
City of Wakefield

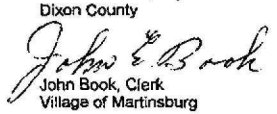
Elsie Lund
Village of Newcastle

Leonard Marron, Board Chair
Village of Newcastle

RESPONSES

Donald E. Andersen, Mayor
City of Ponca

Dale Anderson, Supervisor
Dixon County



John Book, Clerk
Village of Martinsburg

Darrell Curry, Supervisor
Dixon County

Russell Fleury, Supervisor
Dixon County

James Hoesing, Supervisor
Dixon County

David Krusemark, Supervisor
Dixon County

Dorothy Mattes, Supervisor
Dixon County

Diane Mohr, Clerk
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Tom Moser, Manager
Lewis & Clark NRD

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Dixon County

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Village of Allen

Gretchen Dietrich
Village of Concord

Dale Jackson
Dixon County

Lowell Johnson
City of Wakefield

Elsie Lund
Village of Newcastle

Leonard Marron, Board Chair
Village of Newcastle

COMMENTS

Donald E. Andersen, Mayor
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Village of Concord

Dale Jackson
Dixon County

Lowell Johnson
City of Wakefield

Elsie Lund
Elsie Lund
Village of Newcastle

Leonard Marron, Board Chair
Village of Newcastle

RESPONSES

December 16, 1998

RECEIVED
DEC 1998
NIOBRARA/MO. NAT'L SCENIC RIVERWAYS

Paul Hedren,Superintendent
Niobrara/Missouri National Scenic Riverways
P. O. Box 591
O'Neill, Nebraska 68763

Dear Sir,

In 1971, six farm couples who lived along the Missouri River, and shared the same concerns about land loss, started the Missouri River Bank Stabilization Association. Since South Dakota landowners were experiencing the same problems, they too were invited to join the Nebraska group. The Earl Rowland's and Betty and I, are charter members.

In 1978, Earl Rowland and I participated in the writing of Public Law 95-625, in Washington, D. C. This legislation designated this 59 mile stretch a National Recreational River. The intent of PL95-625, was to preserve the river in a some what natural state, provide high bank protection, where needed, scenic easements and additional access sites. Alternative 3 is closer to the original intention of the law.

Earl and I were appointed by then Secretary of the Interior, James Watt, to the Advisory group that wrote the original plan. Unfortunately, I was not to be included in the up-dating of the new plan, but after reconsideration, I was asked to join the planning team.

46

I have reviewed the plan and recommend that the plan include:
1. Identified severe erosion sites, with cost estimates;
2. High bank protection, as a priority;
3. A memorandum of agreement between the Corps of Engineers and the National Park Service;
4. Putting the Advisory group back into this plan, per PL95-

46. Please see responses 1, 3, 8, and 16. Access development is discussed on page 54 of the draft plan.

625, and consist of local people;
5. Stressing that this is a National Recreational River, not a "Scenic" or a "Wild and Scenic" river;
6. Scenic easements, with cost estimates; and
7. Access sites, with cost estimates.

46

I also recommend that the local landowners have more voice in the forming of this plan than special interest groups, who only have a *passing interest*.

Alternative 2 includes the restoring of the "spring floods", which would greatly increase bank erosion and degradation, therefore, I recommend Alternative 3.

Sincerely,

Darrel G. Curry
Vice President, Missouri River Bank Stabilization Association

Copies sent to:
Senator Hagel
Senator Kerrey
Senator Daschel
Senator Johnson
Congressman Bereuter
Congressman Thune
Congressman Barrett
Congressman Terry
William Schenk Dir. NPS

December 16, 1998

Paul L Hedren
Niobrara/Missouri
National Scenic Riverways
P.O. Box 591
O'Neill NE 68763

Dear Sir:

47 *In regard to your Scenic Riverways on the* Missouri River from Yankton to the Iowa border; if the Parks Service doesn't have a 'take line', boundary, on the River bank so you have jurisdiction, the whole process should be forgotten. If a person in a canoe can't get out on the river bank without being called a trespasser, the whole idea is flawed.

Any rip-rapping on the river bank only causes it to change direction and erode in some other spot. Most farmers have caused their own misfortune along the river by destroying the trees and giving the river a chance to cut the bank.

The best thing you can do for the river is nothing at all. The Corp of Engineers has already rip-rapped places to protect private property which will just cause more problems than leaving things to run their natural course. Keeping the Corp of Engineers from changing things along the bank is the only way to keep the river scenic.

Sincerely,

James Holy

JMH/slh

47. The Wild and Scenic Rivers Act was written to allow the inclusion of nationally significant rivers having adjacent landscapes that are largely private held. In the case of the MNRR the current landowner retains control of his or her land inside the boundary, unless willingly sold to the Federal government. The land inside the boundary is a geographical delineation of resources important to the river designation.

    State law does prohibit people from exiting rivers, except to portage around obvious obstacles. Access development is a recognized management issue.

Dec 17, 1998

RECEIVED

DEC 18 1998

NIOBRARA/MISSOURI

Dear Mr Nelson,

Concerning the "Missouri National Recreational River" general management plan along with environmental concerns.

If we heard so much about preserving the natural resources, so why do we insist on tampering & controling them? Yes farmers do need assistance with bank stabilization periodically. However this seems to be of very little importance in the management plans.

Commercialized recreational facilities are all around us, so please consider "Hands Off Policy" regarding this stretch of the Missouri River. Governmental control is detrimental to the agriculture community & if you are blind to the disastrous farm economy, Heaven help all of us. We may see food shortages in the not too distant future.

The fastest way to destroy our natural resources is for the government to commercialize it.

Respectfully
Jeanette Birkelman

RECEIVED

Mr. Paul Hedren
National Park Service
P O Box 391
O'Neill, Ne 68763

Dec 15, 1998

Dear Sir,

This letter is in refecence to the 11-24-98 meeting held at the Yankton Library We attended the meeting & were gratified to have the National Park Service become active in establishing relationship with the property owners along the Missouri River. We wish to express our interest in the bank stabilization effort

Our farm is at mile # 805 across from Yankton The land is now in the fourth generation of our family Through the years we have been aware of the value of trees along the river for stabilization & wildlife. While clearing brush for farming we left approx 30 rods of land along the river (much which now is gone) for our own interest in stabilization & wildlife The erosion was bad then but is much worse now since the high discharges in the last couple years We are very interested in keeping the trees which are left & will be willing to plant more if necessary

We would like to meet with you and do anything possible to establish interest in bank stabilization of the high bank along our land You spoke of being neighbors and that is what we want too We will work with you and ready to do our part as a good neighbor

We did receive a permit from the Corp in 1995 to begin our own stabilization. We have made arrangements to haul concrete as it is available and when we have time & can afford to do so.

We support 'Alternative 2' as we understand it . with high priority on bank stabilization We also support natural protection of wildlife One of the reasons we left trees is our love of the bald eagle & deer. We wish to keep them in our area We should all work together & compromise our interests instead of trying to defeat the others interest

We are the Nelsons

Marion & Eleanor Nelson
J Doug & Lynne Nelson
Green Island Farms, Inc

copies sent to
Senators Bob Kerrey & Chuck Hagel
Congressman Doug Bereuter
William Schenk, Director NPS

December 17, 1998

RECEIVED

DEC 1998

NIOBRARA/MISSOURI NSR

Superintendent, Niobrara/Missouri National
Scenic Riverways, P.O. Box 591
O'Neill, Nebraska 68763

Official comments from the Lewis & Clark NRD have been mailed to N.P.S. previously. I wish to express some personal viewpoints of my own.

48 I have been to three of the public meetings held to explain the plan and guaged public opinions. I was puzzled at each session why no public record was taken; neither for opinions expressed, nor explanations given. I assume that was deliberate to funnel official comments on to these or other written forms. That has a worry some affect in that none of the assurances given by National Parks Service are part of the record....All of this heightens a sense of mistrust among local interests toward NPS. There is a very real fear that neither the NPS or the US Corps of Engineers will implement a Rec. River Plan without procrastination, without jurisdictional disputes, nor without respect for practical, realistic, local input. As time foes by we'll learn how serious the Federal agencies are on this.

/s/ Tom Moser

48. The public meetings were chiefly held as information sessions allowing the NPS and COE to inform the public about what was happening, respond to questions, and clear any confusion. The best formal records are these written comments and letters. Certain topics like bank stabilization dominated the questioning at the public meetings and will be summarized in the Record of Decision, affirming responses provided herein.

COMMENT FORM

Sen Daschle
Sen Johnson
Cong. Thune

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. Please print.

Please protect our high bank areas. My lot at Pondarosa Acres, Vermillion, is home to many different bird species – some endangered and/or protected status – as well as one of the last stands of old growth (high bank and trees) along the Missouri.

I urge you to do all that is possible to save these precious areas of natural beauty.

Thank you,
Rebecca Wahl

RECEIVED
DEC 17 1998
NIOBRARA/MISSOURI NSR

Name: Rebecca G. WAHL

Address: _____

Turn your comments in to a National Park Service representative or mail to:

Superintendent, Niobrara/Missouri National Scenic Riverways, P.O. Box 591, O'Neill, Nebraska 68763

THIS FORM IS VOLUNTARY. THANK YOU FOR YOUR COMMENTS.

December 16, 1998

Paul Hedren, Superintendent
Niobrara/MissouriNational Scenic Riverways
P.O.Box 591
Oneill,Nebraska 68763

RECEIVED
DEC 17 1998
NIOBRARA/MISSOURI NSR

Dear Sir,

As a concerned citizen and landowner I appreciate the opportunity and would like to make a few comments on the Draft General Management Plan and Environmental Impact Statement for the Missouri National Recreational River.

I have attended three of the public meetings by the National Park Service and one by the U.S. Army Corps of Engineers. The Plan looks good and desireable on the surface but I see where landowners have some understandable fears. As a landowner I think bank stabilization should be a high or number one priority in this plan. This will get landowners to embrace this plan quicker than anything else. I would also think it would have to be a high priority of the National Park Service because of the practices talked about and alluded to in the draft plan such as landscaping with native plants and vegetation, preservation of historical, architectural,and archeological resources. This would also include any developement of visitor access and public access used for recreation as in boating, hiking trails, and bicycle trails etc. alluded to in the general draft plan. 49

In the general draft plan (#2&3) there are no concrete plans to implement bank stabilization to preserve the other practices implemented by the Corps of Engineers and the National Park Service, let alone preserving valuable farm land much of which has already been lost and more being eroded at present and future losses to be sure.

I think peoples and or landowners fears are they are concerned and fear the unknown as to what projects and practices will be implemented by or from this plan. Will it be used as a Vehicle to implement and carry out projects and practices against the landowners will. NRD projects are a good comparison where a landowner is displaced or permanently inconvenienced. 50

Sincerely,

Arthur Rickett

Arthur Rickett

49. See response 16 above.

50. The WSRA does not give managing agencies authority to effect programs on private land without the consent of landowners.

Ponca, Ne.
12-14-98

William Schenk.
Director
Midwest Regional Office.
1709 Jackson St.,
Omaha Ne. 68102-2513.
Dear Sir;
We as Dixon County Farmers are pleased to have the opportunity to comment on the Missouri National River draft management plan.
We recommend the stretch of the river as a recreational river.
51 We also recommend that the severely eroding sites be identified and cost estimates be included in the plan.
We recommend that bank stabilization be a high priority in the corps plan in public law 95-625.
The river is getting wider as it is eroding the banks away and we are getting a shallow river.
We recommend that more access sites be provided for recreational purposes.

Sincerely
Glen Watchorn
Velma Watchorn

51. See response 16 above.

RECEIVED

1998 December 13,1998

MISSOURI Hartington, NE.

Re: Missouri River Management Plan

Mr. Paul Hedren:

I am writing to express my grave concerns regarding the preferred and recreational emphasis management plans. I have attended two of the meetings and participated in the discussion of these plans. Each of the meetings were informative and educational, but I did notice that quite few concerns were raised that need to be addressed before the final version is approved. Many of the individuals who took the time to attend these meetings deserve to have their suggestions given serious consideration, if not implementation, and give support to your claim of wanting to be a good neighbor.

52 The biggest concern is about the lack of local input *before* the decisions are made regarding the local people and their land. I read through the plan on pages 33 - 44 (Actions Common to Both), 47 - 54 (Preferred Alternative), and 55 - 60 (Recreation Alternative). Unfortunately there is very little mention of working and/or compromising with the local residents. I could not find any mention of input from local landowners and citizens before and during the decision making process. Quite a few people believe they should be allowed to help in a decision affecting the their own land and lives.

53 The easements that will be used to acquire an interest in the property are presenting problems to many because of the lack of information. The only thing most of us have been told is that money for bank stabilization will only be provided if the easements are granted, however there is no guarantee that money will ever be appropriated for this construction. The property owners deserve to have some recourse should the easement be granted and satisfaction is not provided to the property owner. The vagueness about the easement contract is a cause for some concern.

I hope this next fear is extremely remote, but it is a possibility and therefore I am going to mention it. 54 The condemnation clause stands at 5% right now, but is there going to be some sort of guarantee that some future decision-making body cannot change this? The only reason I want to bring this to attention is that every administration has it's own agenda and the property owners need to have some measure of control over their fears and property.

With the overwhelming concern of bank stabilization, and the call to do something about it, some people have wondered how the NPS can expect to keep this area *Natural, Wild, & Scenic*? This question was asked at the meetings and I did not hear an answer. The

52. A summary of planning activity, including landowner involvement, appears on pages 139-140. Regarding future public involvement, see response 7.

53. Draft easement documents are available from the NPS O'Neill office. In application, terms and conditions may vary from case to case, individual to individual. As discussed at the public meetings in November and December, easement acquisition, whether of a development right or vegetative cover guarantee, is a critical step establishing a "federal interest" in a bank stabilization undertaking. Donated easements could well have a termination clause if, say, stabilization work is not undertaken in a timely manner. It is difficult to envision a termination clause in a purchased easement.

54. The only way the limitations on condemnation can be changed from the given 5% for easement of the total acres inside the boundary to some other term is by act of Congress and concurrence of the president.

55

bioengineering techniques outlined on page 39 have not proven to be successful in the past at controlling or stopping riverbank erosion and I sincerely doubt if they will prove to be any more effective in the future. Will stream-bank stabilization continue if the first attempt proves futile and what, *if any*, compensation is the property owner going to receive?

The *majority* of property owners along the river have taken care to do as little damage to the area as possible, not because someone told them to, but because we want to be able to enjoy nature's beauty and still be able to pass this legacy on to the future generation. A quite a few of us realize that nature is always changing and regarding the Missouri River we have always had to live with her, not fight her. It is the only way to keep this piece of creation the way it was meant to be. The Missouri was not meant to be a channeled valley the way it is seen between Ponca and Souix City and yet this is what will happen when man tries to control something as beautiful and powerful as the Missouri River. This is the most important reason why I believe the local land and property owners must be involved in the decision making process regarding the management of the Missouri River.

Sincerely:
Cy F. Pinkelman

cc

Rebecca Latka
William Shenk
Sen. Chuck Hagel
Sen. Bob Kerrey
Rep. Doug Bereuter

55. The continuation of a bank stabilization program is ultimately conditioned on congressional direction and support.

Superintendent Paul Hedren
Niobrara/Missouri National Scenic Riverways
P.O. Box 591
O'Neill, NE 68763-0591

Re. M.N.R.R. Draft Plan

Dear Paul,

This is written in no official capacity. Rather, I write as a life-long resident along the river, a hunter, boatman, and other user of the river. I also own a small parcel of land along the river in Vermillion area; by request, the C.O.E. has never placed any rock on or along my waterfront. My father was a lover of the Missouri; my great-grandfather homesteaded along the river northwest of Ponca; the Missouri has long since devoured his holdings. For nearly fifty years I have made a hobby of photographing the river, especially the segment here at issue. I have boated the Missouri from the head of navigation to the mouth; I have long held a federal Motorboat Operators License. As you know, I represented Clay County, SD, on the planning team which developed the plan now under consideration. Again, this is written in my personnel interest and not as the representative of any group or other entity.

Congress has designated the Ponca-Yankton reach of the Missouri as a Recreational River under the nation's Wild and Scenic Act. The apparent aim was to preserve and protect it as the sole remnant of the "wild" river lying downstream of the main stem dams. I favored and do favor the designation and its objective. This some fifty-nine mile reach of the river is a treasure truly deserving of protection and preservation. Most of those concerned with and about this reach would likely agree with those objectives. The problem is how best to effect the objective sought.

While this reach of river retains many of the characteristics of the truly wild Missouri, there are crucial differences. Perhaps the principal difference is that this reach no longer experiences the natural flooding which flower from (literally) the seasonal snowmelt on the plains and in the mountains. That flooding often overtopped the river's banks, and the water was sediment-laden as the Missouri went about its business of moving the Rocky Mountains of the Gulf of Mexico. It was indeed the "Muddy Mo." (Many of those concerned about the fate of today's river have no recollection of the truly muddy river, they think the often green water of today's river is its natural hue.)

The dams on the river not only prevent flooding in the areas immediately below the dams, but the dam-created lakes also act as immense settling basins for the sediments which formerly were transported on downstream. Thus, the waters discharged from the dams are relatively clear------and have vastly greater sediment carrying capacity because of this clarity. Erosion has thus been exacerbated: the river is hungry and has an empty belly.

In the days of the "June Rise," flooding, of course, eroded the banks that very erosion caused the cutting, wandering and channel charging which became the hallmark of the Missouri of old. Too often ignored, however, is the other aspect of that flooding build-back? The river rebuilt or restored lands along the river even as it cut lands elsewhere. Old channels were filled in, and successive years as annual inundation's built up adjacent lands, creating the floodplain. (The Vermillion airport lies on land so restored.) Today, erosion continues relentlessly by an even more voracious river. As the river no longer floods in this reach no build-back occurs. The riparian landowner is thus subject to a "double whammy": increased erosion and no build-back. Those who would cavalierly loose the river upon the riparian owners ignore the fact that whereas in pre-dam days those owners stood to lose their land they had a chance of regaining land previously lost. Stated somewhat differently, a fifty-fifty chance of losing or regaining land has been changed to a one hundred percent chance of loosing it with a zero prospect of any restoration. Riparian owners are not only in danger of losing their land, many are losing it. It's gone. Gone.

There is, as you know, a proposal to change the flow regimen so as to emulate the natural spring flooding. As I understand it, such flooding would not overtop the banks and therefore would not cause much, if any, build-back of the floodplain above the high banks. The erosion would not be offset. The

proponents of such a scheme point to an increase in the river sediment content as a benefit of such a "spring rise." Where would it come from? You know where it would come from!

Further complicating the problem is the continuing bottom degradation. It will likely continue in the reach of river here involved. The long-term effect of that is unknown, but the prospect is not favorable. (Below the mouth of the Platte the problem seems to be aggravation.) Perhaps when the river has devoured the extant flood plain, the river will provide the sediments the "spring flood" advocates desire by devouring its own bed.. Then what?

56 Your Preferred Alternative appears to favor renewal of the "spring flood." While such is not set forth in bold print, that possibility is suggested, if not endorsed, in the Preferred Alternative. On page 63 of the draft plan this alternative is said to provide for management "to restore---the natural function of the river." Such would constitute nothing less than the intentional destruction of the lands, even the lively hood, of the riparian owners. (I say "intentional destruction," the language of the street would likely use a less-deterred description.) Is there any doubt whatsoever why bank protection was the overwhelming topic at the four public hearings I attended? It is my understanding that it was also the issue at the Hartington hearing.

I believe that most of those concerned with preserving and protecting this reach of river truly do want to keep the foliage along the river, the bars, the beaches, the views of the bluffs and a myriad of other delightful aspects of this unchannelized reach. We do not want to see "Detroit rip-rap" or other trash along the banks or on the bars and island. Neither do we want to see development cheek-by-jowl on both sides of the river from Ponca to Yankton. Some additional access on the Dakota's shore in the lower part of the project is desirable. Contrary to some uninformed assertions, access in general is simply not a problem, witness, e.g. the fine ramp and park Brooky Bottom (right bank) and the Clay County Park (left bank). The statement to the effect that Lewis and Clark could not even get to the river today is ludicrous.

Opponents of bank stabilization, which some confuse with channelization, have an aversion to curbing the river's appetite for soil. Is this realistic given the existing nature of the river? Is not such opposition self-defeating? How can the resources sought to be protected really be protected if the river is not restrained? For example, the superb stand of old growth cottonwoods which were included within the boundaries of the project early in the process of setting boundaries, no longer exists. It is gone. The river slashed it away, tree by tree. Remnants of that treasure litter the river at and below Mile 779R. A modest investment in stabilization would have (and should have) prevented this loss. Acres of beautifully timbered shoreline have been and are being lost because of the opposition to bank protection. Sites currently under assault by the river include the veritable jungle at Mile 788L (West of the High Line Landing), the willow and cottonwood-clad tracts on the Nebraska side between the North Alabama Point and the bluffs at Mulberry Bend, the timbered right bank in the Elk Point Bend and all too many other areas.

57 Upon prospective destruction of a "Rec River" site, what provision does the plan make for saving it? Except for bluff lands included in the project every other site or feature of the "Rec River" is vulnerable to the ever-hungry river. Again, how will the sites be protected? Once the river eats its way to cropland, the traditional scenic view of the shoreline will be gone. Note, for example, the ravaged shoreline near mile 757R. It starkly demonstrates the sort of scenery, which will become all too common if no effort to contain the river is made.

A strong argument can be made for making bank stabilization a high priority of in the "Rec River" corridor. If those features of the river we seek to preserve are indeed to be preserved, some degree of bank stabilization must be provided. If there is to be another way to accomplish the purpose, please advise me as to how such can be done. I oppose channelization. What will work is stabilization of the high banks when needed and where needed. The Missouri can then wonder, as it will between the protected banks emulating to some degree the natural flow. In several places the bluffs already serve the same function by limiting the meandering. There are even now armored banks which the river is no longer attacking and which are so overgrown one would have to dig to find the rock used. (Near Mile 784L e.g.)

56. The plan does support the concept of mimicked natural flow, meaning measured rises, if possible, in the spring and summer, and reduced flows in the waning summer and fall. It is incorrect, however, to interpret this as an endorsement of seasonal flooding, And these are ideals only. The COE's *Master Water Control Manual*, an authority outside of the scope of this plan, sets conditions for water flows.

57. NPS and COE view bank stabilization as a site-specific matter. Restoration of lost land is highly improbable.

COMMENTS

Bank protection should be as unobtrusive as possible, of course, and used only when necessary. The C.O.E.can and has developed a variety of techniques to accomplish this. No one has more expertise in coping with the Missouri and the Corps should be actively engaged in the effort to make this effort to preserve and protect this segment of the Missouri.

If I may be of assistance to you in seeking a resolution of the various problems involved here, please feel free to call on me.

With Warm Regards,

J.M. Peterson

RESPONSES

December 14, 1998

Paul L. Hedren, Superintendent
Niobrara/Missouri National Scenic Waterways
P.O. Box 591
O'Neill, Nebraska 68763

Dear Superintendent Hedren,

This letter is in response to the request for public comments on the NPS Draft Management Plan and Environmental Impact Statement. I was pleased to review the Draft and the three alternatives, and after an era with no real plan or management, I find it quite refreshing to see that the National Park Service intends to move forward in developing a strategy to protect our valuable scenic resource. My comments focus on this fact:

As a National Recreational River under the National Wild and Scenic Rivers Act, this 59-mile section of the Missouri River is a national treasure and thus much more than merely a local resource.

In an age when natural areas and wildlife are in constant threat from the many irreversible stresses of our expanding civilization, we must give increasingly greater emphasis to protection of the natural aspects of the few remaining preserves so that future generations can appreciate these environments. We have a moral obligation to prevent a gradual chiseling away of these natural areas. While preserving the natural state as much as possible, we must also educate the public so that in the future they will recognize the need to preserve our natural heritage.

Therefore, Alternative 2 (Preferred Alternative) is clearly the most desirable option. In general, I agree with this plan, but I feel some modifications are needed.

58 First, extensive use of artificial methods for bank stabilization is a losing strategy in the long run and should be minimized. Areas that are stabilized with rock or other artificial methods are expensive to implement and maintain, and the power of the River is just transferred downstream to another site. I encourage the use of natural methods as much as possible or purchase of bank lands to permit the River to shift naturally. The solution is not really in bank stabilization but in the chronic reduction of flow rates by the Army Corps of Engineers and in the realization that the Missouri River is contained in soft, sandy soil which is impossible to control in the long term without changing the scenic and recreational characteristics of the River.

We may be able to stabilize the bank for a while, but eventually in the long-term the River will win unless we decide to scrap the idea of preserving a Scenic Recreational River and artificially stabilize the entire 59-mile segment. Moreover, artificial bank stabilization usually protects the bank of a few landowners at great public expense. It appears that the greater public interest—that of preserving the 59-mile stretch as a national scenic and recreational treasure—is not met by extensive artificial bank stabilization. The River does not belong to a few landowners but to the general public.

59 Second, no mention is made of water quality control in the proposals. Preservation of flora and fauna is dependent on both land and water quality. In today's world the River is affected by an ever growing number of sources of potential pollution from towns, farms, and industries. This section of the River should be designated as an Outstanding Natural Resource Water under the Clean Water Act.

58. See response 13.

59. Water quality matters are discussed and evaluated on pp. 106, 111, 121, and 127. Also see response 30.

Frequent monitoring of the water should take place at a number of sites along the 59-mile segment. *Perhaps science classes and the University of South Dakota could assist in this effort to keep costs* down—a strategy that would also increase public awareness. We should have an idea whether pollution is from sources upstream in the Missouri, from tributaries along the 59-mile segment, or from adjacent property.

60 Third, I strongly encourage expansion of the narrow "greenbelt" that is proposed for the banks of the River. It is questionable whether the intermittent and narrow greenbelt that is proposed will be sufficient for protection or expansion of animal and plant species because their movement and growth will be severely limited. A larger continuous area will serve to protect the environment's species, maximize the experience for River users, and allow for shifting of the River without artificial bank stabilization.

61 Fourth, the Plan should aggressively deal with the developing problem of noise pollution on the Scenic Recreational River. Personal motorized watercraft ("jet skis") should be banned in this segment of the River, and power boating and water-skiing should be prohibited. These recreational activities are permitted in virtually every other segment of the River in South Dakota, Nebraska, and Iowa. Therefore, waterways for these activities exist nearby and are accessible. Intuitively, I think that it is obvious that a large volume of noisy traffic on the River negatively impacts on the behavior of animals for a considerable distance and conflicts with the many positive natural characteristics that the River offers canoeists, hikers, and other outdoor enthusiasts.

62 Fifth, whereas Alternative 2 proposes development of two more access points for boats and a cycling trail on the Nebraska side of the River, I feel that these developments will not accommodate the real recreational or educational needs of the public. It is vital that we increase the opportunities for the public to experience the many natural, historical, and cultural characteristics that this section of the River can offer, and these needs are not met by Alternative 2. As we approach the Lewis and Clark bicentennial, we can expect an increased demand for recreational river use. Accomodations for recreation are insufficient in Alternative 2.

In contrast, I think that Alternative 3 (Recreational Emphasis) is excessive and amounts to overdevelopment. Proceeding with Alternative 3 will, in fact, be disruptive to the maintenance of the natural environment and counterproductive for recreational users who want to experience the many existing natural elements of the River.

Specifically, I encourage development of recreational activities that encourage use of the River, but only those activities that are associated with minimal disturbance of the natural state and of other users. Specifically, recreational use of the River for canoeing, hiking, cycling, and low-impact camping should be expanded while also accomodating the needs of hunters and fishermen. A canoe trail should be developed that encompasses the entire width and length of the river, and more access points should be made available for nonmotorized craft on the South Dakota side. A system of primitive hiking/cycling trails should be developed on both sides of the River, especially near population centers. These trails should be maintained regularly but kept as natural as possible. Because of the severe impact, horses should be prohibited from the trails.

Whereas existing campsites may be adequate on the Nebraska side, camping facilities are minimal on the South Dakota side, and a multiday trip on the River is difficult. Moreover, a canoe trail should accomodate boaters, with designated sites for primitive camping on islands and banks of the River. Development of these sites will reduce trespassing on private lands and tend to discourage camping in other areas, which will contribute to stress reduction for flora and fauna.

The idea of River access for car visitors is superficially appealing, but we must be careful that overdevelopment of scenic overlooks and roads to the River can have a serious impact on the River that may be irreversible. Development of a scenic highway that runs along the Missouri River should be discouraged, even if most of the road is kept visually away from the River. Quiet and isolation are important characteristics for recreational users of the River, and increases in car traffic or excessive development of scenic overlooks for this traffic could result in noise and visual disturbances for the recreational users of the Scenic Recreational River. A few scenic overlooks should be developed, but

60. See response 27.

61. See response 28.

62. The concept in the preferred alternative is to balance the need of resource protection while providing for the needs of recreation. While this GMP sets parameters for management, subsequent implementation plans will be developed to accomplish specific projects. See also response 34.

development should be restricted to boating access points and areas that are already developed for public use.

I look forward to a more active role of the National Park Service in the implementation of their plan for the Missouri River as a part of the National Wild and Scenic Rivers Act. If you have any questions or if I can assist you in the future please contact me.

Sincerely,

Jack Williams

December 17, 1998

Mr Paul Hedren
National Park Service
Niobrara/Missouri NSR
P O Box 591
O'Neil, NE 68763

RE Missouri River Draft Management Plan Review

Dear Paul:

I have reviewed the "Draft General Management Plan and Environmental Impact Statement" and I have the following concerns and recommendations on its contents

63 | 1 | The "Recreational Advisory Group" replaced with an annual or simi-annual meeting (page 48 of the plan) should be reinstated on a permanent basis. In the past, this group added valuable input in the planning and implementing of projects on this reach of the Missouri River. This advisory group must play a key role in the project for effective participation of local government and other interest groups (like the Missouri *River Bank Stabilization Association.*).

64 | 2 | Streambank protection and maintenance must have high priority to protect and preserve the natural resources along this river stretch and address the big problems landowners face with regard to bank erosion. The word "might" (page 50) suggests very low emphasis on streambank protection and should be changed. *All would agree that this is* high priority and the backbone for protecting our natural resources along this reach of the river in the future.

If the above concerns are addressed I would favor your proposed "Alternative 2" for the final management plan

Ultimately a large part of the success of the recreational river plan will depend on how well the NPS relates with local interests We hope they do it well!

Sincerely,

Marlan Rolfes

Marlan Rolfes

63. See response 8, third paragraph.

64. See responses 16 and 26.

December 17, 1998

Superintendent - National Park Service
P.O. Box 591
O'Neill, Nebraska 68763

Subject: Missouri River Scenic River, National Recreational Category - Fort Randall Dam To Niobrara, Nebraska

Dear Superintendent:

As an affected landowner adjacent to the Missouri River within the boundary of subject, scenic river, I express very strong feelings about the following points:

65 1) The federal government (National Park Service) should not take into ownership a continuous strip of land adjacent to each side of the subject scenic river! This statement is without regard to any discontinuity as a result of Indian lands adjacent to the subject scenic river exempt from provisions of this act.

66 2) The federal government (National Park Service) should not take into ownership ANY land by condemnation; therefore, it should only purchase land from willing sellers!

67 3) The federal government (National Park Service) should not take into ownership any hunting, fishing or trapping rights, or the right to trespass for those purposes, on any of land taken into federal ownership!

68 4) The federal government (National Park Service) should NOT take into ownership any accretion rights that are in private ownership at the present time!

69 5) The federal government (National Park Service) should not take into ownership any mineral rights, or the right to trespass for acquisition of any such minerals, that are in private ownership at the present time!

Sincerely,

Dean A. Hyde, PE

Dean A. Hyde, PE

cc. US Senator Tom Daschle
US Senator Tim Johnson
US Representative John Thune

65. Neither NPS nor COE has a vision or authority for the massive fee ownership characterized here. As described in the previous responses, however, easement acquisition is imperative for successful federal participation in bank stabilization and certain resource protection. And fee ownership may be imperative for access development.

66. See response 41.

67. Hunting, trapping, and fishing are regulated by states on nonfederally owned lands. The WSRA expressly permits hunting and fishing on federal lands administered as part of the MNRR, while trapping is not permitted. See pages 38.

68. State, not federal law, determines the ownership of accretion land.

69. Mineral ownership is also determined by state, not federal law.

17 December 1998

Paul Hedren
Superintendent
Niobrara/Missouri National Scenic Riverways
National Park Service
P.O. Box 591
O'Neill, Nebraska 68763

Re: **59-Mile Stretch, Missouri River Management Plan**

Dear Superintendent Hedren:

This is my response to the proposed NPS Management Plan for the 59-Mile Stretch of the Missouri River, which I have reviewed in detail. Overall, it is my opinion that you and your staff are to be commended for a great effort at inaugurating this significant undertaking. In the comments below I attempt to describe certain features of the Recreational River Plan which I believe merit more detailed concern.

My analysis of the 59-Mile segment is guided by the words provided by Congress in it's definition of a recreational river: **"PROTECT AND RESTORE."** In addition, the organic legislation of the National Park Service charges it with the obligation to protect our "national heritage." Clearly, Congress would not have set-aside the 59-Mile Stretch for **protection and restoration**, nor would it have placed this section under the charge of the NPS, had it not intended that management be in the nature of a trust for the benefit of all citizens of the United States. Thus, the Management Plan needs to express the terms of a trust, containing the higest obligation to protect and restore.

70 Before the 59-Mile Stretch can be restored it must be protected, which requires that we identify the immediate threat to it's integrity. There is a broad consensus that the overriding threat is that of channelization of the stretch, a process which proceeds under the euphemism "bank stabilization." Channelization appears to be proceeding piecemeal. Typically the process is that under the publicly-financed protection provided by the upstream dams, housing developers move into the floodplain. When normal fluctuations in the flow cause portions of the bank to erode, these land developers cry out for hardening of the bank near their property. Section-by-section, the threat is that this process leads, inevitably, to channelization, repeating the process which led to the sterile channel downstream from Sioux City.

70. Again, the 1978 law designating the MNRR gives authority for certain bank stabilization, but this should not be construed to mean channelization or start-to-finish armoring within the Gavins Point to Ponca reach. Every effort will be made to ensure that any federally sponsored stabilization is consistent with and advances the intent of the WSRA by including resource protection and enhancement.

The National Park Service has been provided with the full scientific description of the destructive effects of this piecemeal channelization on river functions, river life and river use. Fish species, including some endangered and threatened, are deprived of habitat, and the overall riparian zone is deprived of it's ability to function; to serve it's essential role in the ecosystem. Visitors to the River are deprived of a picture of the natural river, finding instead only an engineered lifeless channel. Clearly, if this process is allowed to continue, the notion of river protection is a farce, being played only for the benefit and profit of a few private land developers.

A second immediate threat to the protection of the river is the continuing destruction of fish and wildlife habitat. The river of Lewis & Clark, the history of the Voyage of Discovery, is associated with the extraordinary abundance and diversity of wildlife which the River once sheltered. Take that away, and the River's principal role in our national heritage is lost. I urge that the Plan contain more aggressive and specific plans for developing real wildlife habitat. This will require positive cooperation with the U.S. Fish and Wildlife Service as well as state game agencies. 71

For this plan to have a chance, I think that NPS must re-think it's normal processes, and become an advocate for the River. Many important decisions involving the River will be made in other jurisdictions. Typically, an agency such as NPS simply says: "It's not under our control." What I urge is that you speak for the River, even when that takes you into other jurisdictions. Be the Riverkeeper.

How would such an advocacy role work? Take the example of a hypothetical NPDES permit being considered for issuance by the South Dakota DENR, under the Clean Water Act. As advocate for the River you can appear and make suggestions, describing the impacts that the permit might have on the 59-Mile stretch. DENR is in a position to include conditions in the permit which assure it's compatibility with the recreational river, and I am sure would be pleased to have the input. There are numerous opportunities for this type of positive intervention as spokespersons for the River, and the role is entirely consistent with that of trustee, which is what NPS now is.

There is much to be done, and the opportunities are great. Thank you for this opportunity to participate.

Sincerely,

John H. Davidson

71. Resource management issues are particularly discussed on pp. 38-41. As noted on page 41, a specific resource management plan will be prepared by the NPS following completion of this GMP.

COMMENT FORM

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and
Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. Please print.

RECEIVED
JUL 1998
NIOBRARA/MISSOURI
NSR

Mr. Paul Hedren
National Park Service
Niobrara/Missouri NSR
PO Box 591
O'Neill, Nebraska 68763

Dear Mr. Hedren:

72 I am not a land owner along the Missouri River, just an avid hunter and fisherman who uses the river extensively. My major concern is, what changes can we expect in these areas if one of these plans is put into effect? "We", and I speak for a lot of other duck hunters, have heard rumbles that we will no longer be able to hunt out of "box" blinds any longer, that we will be forced to hunt out of boat blinds. A "box blind" is a wooden blind that we leave on the sandbar during the hunting season and then remove it at the end of the season. If we are forced to hunt out of boat blinds, this will seriously handicap us, because it will severely limit the number of decoys that we can use. Plus with everyone leaving from the same boat landing at the same time in the morning in the dark, will create a dangerous and volitile situation.

My comment and request is, please let us use our box blinds and decoy spreads as we have in the past. I personaly guarantee you that our crew will not leave a trace and I will assure you that I will do all in my power to make sure that no one else in our area at least doesn't either.

Name: _____
Sincerely yours,
Address: Larry L. Swanson
Larry L. Swanson
_____
_____

Turn your comments in to a National Park Service representative or mail to:

Superintendent, Niobrara/Missouri National Scenic Riverways, P.O. Box 591, O'Neill, Nebraska 68763

THIS FORM IS VOLUNTARY. THANK YOU FOR YOUR COMMENTS.

72. As noted in response 67, hunting is expressly permitted within designated wild and scenic river boundaries on lands that are or may be federally owned. Therein, respective state regulations apply in matters such as blinds.

December 7, 1998

Mr. Paul Hedren
National Park Service
Niobrara/Missouri NSR
PO Box 591
O'Neill, Nebraska 68763

RECEIVED
DEC 9 - 1998
NSR

Dear Paul,

I have reviewed the "Draft General Management Plan and Environmental Impact Statement" and I have some *concerns and opinions* on its contents.

73 I am very concerned that the "Recreational Advisory Group" is being replaced with an annual or semi-annual meeting (page 48 of the plan.) In the past, this group added valuable input in the planning and implementing of projects on this reach of the Missouri River. This input will be lost. The approach in alternatives #2 and #3 with occasional public meetings, *does not allow for effective* participation of local government and other interest groups (like the Missouri River Bank Stabalization Association.) This advisory group *must play a key role in the project.*

74 As to streambank protection, alternatives #2 and #3 do little to address the big problems landowners face with regard to bank erosion. Such statements as "the use of natural streambank protection or bioengineering techniques are recommended" (page 39) are a joke. They have not worked in the past. Another statement (on page 50) "essential streambank erosion *control might* be allowed on a case-by-case basis for protection of residences, other important structures, and lands adjacent to high bank." The word "might" puts very *low emphasis on streambank protection.* Where is the support for the section 33 programs in alternatives 2 and 3? All would agree that this is a high priority, and the backbone for *protecting our natural resources* along this reach of the river in the past.

Ultimately, the success of the recreational river plan will depend on how well the NPS relates with local interests. We hope they do it well!

HEINE FARMS
Gary J. Heine

73. See response 8.

74. See responses 13 and 16.

(Seven additional letters identical to this were received by the NPS during the public review period. All originated in Nebraska, with one from Hartington, two from Fordyce, three from St. Helena, and one unsigned and otherwise unidentifiable except for a generic Nebraska postmark.)

COMMENT FORM

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and
Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. Please print.

December 7, 1998

75 As a land owner along the 59 mile stretch of river between Gavins Point Dam and Ponca, I am very concerned about the National Park Service's proposal. It appears to me that they have not included any local representation by land owners, advisory groups and local governing bodies. I attended one of the local meetings at Yankton, SD. I came away with the feeling that I am going to lose control of my own property and not being able to do anything about it once National Parks has control of it. Just to note their plans for bank stabilization has not worked in the past and I can not see how it could possibly work any better in the future as they stated in their report on page 39.

I am very much against the NPS proposal without local land owners, advisory groups and local governing bodies having a voice and representation in this proposal. These groups have dealt with the river and have every right to be able to be a part of its future.

RECEIVED
DEC 1998
NSR

HEINE FARMS
Name: Gary J. Heine
Gary J. Heine

Address: _____

Turn your comments in to a National Park Service representative or mail to:

Superintendent, Niobrara/Missouri National Scenic Riverways, P.O. Box 591, O'Neill, Nebraska 68763

THIS FORM IS VOLUNTARY. THANK YOU FOR YOUR COMMENTS.

75. See responses 7, 50, and 52.

COMMENT FORM

RECEIVED
DEC - 8 1998
NRR

MISSOURI NATIONAL RECREATIONAL RIVER
Draft General Management Plan and Environmental Impact Statement

Please share your thoughts on our array of alternatives in the draft plan, and any other interest or issue concerning you about the recreational river. Please print.

Attn: Paul Hedren

I have attended the information meetings you offered.
I see the public can best be served by letting the river as is, or as in option I.

The navigable river is at most 200 yards wide.
Every boat going up the river creates a wake, and erodes the banks more. More people means more boats,
I see no reason to have any more government here.
The Corps, the NRD, and the Parks are all fighting for the authority to control the river, but willing give nothing in return.
your past actions (compared to what you promised to do) speak for themselves.

Name: Doug Anderson

Address: _____

_____

_____

Turn your comments in to a National Park Service representative or mail to:

Superintendent, Niobrara/Missouri National Scenic Riverways, P.O. Box 591, O'Neill, Nebraska 68763

THIS FORM IS VOLUNTARY. THANK YOU FOR YOUR COMMENTS.

ROBERT L. RYKEN
Attorney at Law

December 15, 1998

VIA EXPRESS MAIL

Mr. Paul L. Hedren
Superintendent
National Park Service
Niobrara/Missouri National Scenic
Riverways
P.O. Box 591
O'Neill, NB 68763

Re: Draft General Management Plan And
Environmental Impact Statement for
Missouri National Recreational River

Dear Mr Hedren.

I was pleased to meet you and hear your presentation at your public meeting in Yankton on November 24, 1998, at which time I first received a copy of the above described document (which I will refer to for convenience as the "Plan"). Since you stated that public comment will be closed on December 18, 1998, I have acted with as much haste as possible to prepare the following comments which I ask that the National Park Service ("NPS") and the U.S. Army Corps of Engineers ("COE") consider in preparing a final plan and report on this project.

My Family As Interested Parties.

First, I should introduce who I am and the other interests I represent. I am one of the fourth generation of my family who have been continuous owners since the beginning of this century of our family farm located on the South Dakota side of the Missouri River south and west of Gayville, Yankton County, in the big bend roughly between river miles 795 and 797. As a co-trustee together with my brothers and sisters, Marvin L. Ryken, Jr., Dr Mary Ann Ryken Wilcox, Linda K. Merkwan and Sam K. Ryken, of the Marvin L. Ryken Big Timber Trust, we own farm and timber land in this location including somewhat less than one mile of river front. My comments are made on behalf of all the trustees of our family trust. My comments are also made on behalf of my mother, Gladys

E. Ryken, who also owns adjacent farm land, some portion of which appears to be included in the boundaries for the Missouri National Recreational River ("MNRR").

Our soon-to-be centenary farm was originally assembled by my great-grandfather, Samuel Van Osdel, who purchased four adjoining farms on the banks of the Missouri River totalling over 800 acres including 500 acres of prime agricultural land. Having at various times in his youth owned and operated a steamboat on the Missouri and Cheyenne Rivers and a portable sawmill in the Black Hills and elsewhere in South Dakota, a heavily wooded farm on the banks of the great Missouri River was the ideal location for my great-grandfather. The remnants of an old steam engine that once powered the sawmill on the farm are still located at the main building site. I personally remember that the sawmill remained in use until the late 1950's to saw building lumber from large cottonwood logs harvested from the farm's timber stock.

When Samuel Van Osdel died, my grandmother, Pearl E. Van Osdel Ryken and my grandfather, Lawrence J. Ryken, acquired the Samuel Van Osdel farm They actively farmed until my grandfather's death in 1963. My grandfather was an avid sportsman in and around the farm and river and was well known by his contemporaries as a fisher of big catfish from the deep pools of the Missouri. As a young boy, I remember him returning home with many channel catfish much heavier and taller than I was.

When my grandfather died, my father, Marvin L. Ryken, Sr. and my mother, Gladys E. Ryken acquired the farm. By this time, high bank erosion had cut over 400 acres away from the original Samuel Van Osdel farm, actually cutting the remaining farm into several separate pieces now found on the Missouri. Under our parents, my brothers, sisters and I quite literally grew up on the banks of the Missouri River.

With my father's death in 1994, the riparian portions of the farm were left in a family trust for the benefit of my brothers and sisters and I. The object of our family agreement is to continue to maintain long term family ownership. Since 1994, my family has expended considerable time, money and work to visually improve the farm, including: removal of old mobile homes/RVs from immediate high river bank areas; removal of accumulated farm debris and machinery; demolition of delapidated farm buildings; rebuilding fences to ensure privacy of river access; and planting new trees and controlling noxious weeds. In addition to our farming activities, our family regularly uses the timber and river bank areas for recreation Just this past Thanksgiving, over 25 family members from Indiana, California, Minnesota, Washington, Nebraska and Illinois gathered in a fall family reunion at our cabins on the river. I know I speak for my mother, brothers and sisters when I tell you that we are fully aware of the unique natural qualities which our family farm represents. The surface and banks of the river, the sunset at any time of year, the solitude of wooded meadows, the shared space with amazing wildlife all represent spiritual corners in the dimensions of whom we are and have been as a family for four generations. At the same time, the challenges of growing up and having earned a living on this land and the continuing burdens of owning it make us keenly aware of how hard-won our rights are and continue to be. To still be here after four generations is no small thing

in and of itself. As the Plan suggests, our family is a significant part of the cultural landscape of the river, and we hold the river and our land very dear to our hearts. You will therefore understand if we examine and comment on your proposal in a rigorous fashion.

Context of Plan: Insufficient Notice of Resurrected Planning Effort

First, given the languorous history of implementation of MNRR, I believe that NPS timing of closing public comment on December 18, 1998 and going to a final plan 60 days thereafter places an unfair comment burden on parties, such as my family, who will actually be impacted by the Plan, who desire to make meaningful review and comment on the Plan, but who have not been given reasonable notice that NPS was finally going to act on this matter. The original MNRR legislation dates from 1978. Although I have attended and registered at various "river meetings" in the two decades since, I was not included on NPS' mailing list apparently notified by *1992 and 1993 newsletters. No other* co-owner of our family farm (including my mother who has been listed as addressee on Yankton County tax rolls) has received such a notice, either. Yet an additional five years passed after the Plan referenced "scoping" meetings before issuance of this Plan in *September, 1998, and I am not aware of any notices given regarding the resumption of* planning under MNRR between 1993 and the Plan issuance. After 15 years of signalling to property owners that no NPS action was likely, I believe that NPS was under an obligation to give reasonable actual notice to affected property owners that the planning process was back in motion. Certainly that is the intent of the original legislation, of which the Analysis of Statue provides in part: "The interested organizations and public also are to be informed that these actions are being taken and are to to consulted." (Plan p 153). Ownership of lands is a matter of public record, and actual notice in this situation would have been quite simple for NPS to achieve. The impact of the Plan will fall most directly on the shoulders of *adjoining real estate owners, yet adjoining real estate owners* have not been routinely notified of significant developments in the finalization of the Plan. Something is wrong with this situation, since it stifles comment by those most directly impacted and in a substantive sense avoids the stated statutory purposes of truly public *planning for this project.* Even if NPS wishes to rely on public notice, my recollection of twenty years ago is that there was a great deal more official public notice over a much longer period of time than has been afforded on the current Plan. I would like to know when NPS first began work on this revised Plan, when notices to the public or interested parties were issued, and whether the current notice is comparable to the original notice procedures in regard to the 1978 legislation.

76

As a matter of general context for MNRR, land owners have been living in a state of "benign neglect" for over 20 years, and the Missouri really has not fared too badly with *this inattention by the federal government. I understand that some property owners cry* out for bank stabilization relief, and I am deeply sympathetic to those who lose family farm lands to the river. But the Plan indicates that every riparian land owner will pay a price in terms of constant and higher level of federal involvement regarding uses not only on the river but also on private lands adjoining the river. My family believes that an intensified

77

76. A continuing effort has been made since 1991 to inform the public about the renewal of planning for the MNRR. Periodic updates were fashioned in the form of news releases to the media, newsletters sent to a continually growing mailing list, and at public meetings. See pages 13-14 and 139-140 for overviews of the planning process.

77. The plan explains that for bank stabilization structures to be constructed on private property there must be a minimum Federal interest established to justify the use of federal money. Also see response 50.

level of federal control of the river uses may actually detract from the river experience for those of us who live on or near it. We believe that enhanced access improvements and educational activities will inevitably increase visitor use and pressure on natural resources, both privately and publicly owned. What is wrong with the MNRR park the way it is now? We understand from your public meeting presentation that political support for spot bank stabilization is the primary motivating factor behind the Plan. However, must spot bank stabilization carry with it a revived version of an actively managed federal park? In 1978, MNRR evolved in a political climate of federal activism in local affairs, which assumed that federal control always made everything better. We now know that federal governmental involvement is not a panacea to any problem. And since the Plan repetitively observes that the MNRR is essentially a local resource used by local residents, we also need to judge the Plan by the degree with which it is continuously responsive to local needs.

78 Finally, I think the Plan should specifically address how, under applicable legislation, it has metamorphosed from the original recreational river concept (ie., Missouri National Recreational River) to the scenic river concepts discussed at public meetings. I have been unable to divine this information from the text of the Plan.

While I have done my best to provide Plan commentary on short notice, I do not waive lack of required notice as an objection to any provision of the final form Plan which might have been subject to more reasoned scrutiny had actual sufficient notice been given.

No Action Alternative No. 1.

From the Missouri River land owner's point of view, the "no action" alternative number 1 must be refreshed with the realization that there is always federal impact even if there is no apparent action. I acknowledge that the *National Environmental Policy Act* requires the status quo to be defined as a "no action" alternative, but informed judgment requires that one recognize preceding federal actions which have created the status quo.

Since the inception of the Pick-Sloan Plan, the federal government has had a continuous impact on riparian land owners in maintaining a federally preferred hydrologic regime in the Missouri River basin to include flood control, navigation, hydropower, water supply and recreation. For the downstream riparian owner, federal water management decisions that might otherwise appear to be for the common good might actually cause local flooding and erosion, inhibit navigation, make agricultural water supply difficult and make recreational facilities unusable. And our family's experience since construction of Gavin's Point Dam is that substantially more than half our farm has been lost to river erosion. The main courses of the Missouri downriver from Gavin's Point to our farm have changed substantially following completion of the dam, and the maintenance of navigation levels to promote shipping and recreation have ensured through the years that surface water remains in virtually constant erosive contact with the fragile base of high bank areas down stream. The costs of this federally preferred hydrologic regime in terms of lost farm land have been substantial over the past four decades, and those costs have been borne

78. See responses 1 and 38.

without compensation by many other down stream land owners besides my family. I think that these accumulated private losses of riparian land owners need to be taken into consideration throughout the entire planning process when envisioned plan rules might deprive those same land owners of rights with respect to their remaining property.

79 I suggest that the boundary concepts for all alternatives of the MNRR as discussed in the Plan and explained at your meeting are somewhat ambiguous. You stated at the November 24 Yankon meeting that the federal government, as owner of the surface of the Missouri River, is simply in the position of a neighboring land owner who always has an interest and a right to comment on the appearance, condition and uses of neighboring properties. You stated that the federal government, as river owner, has no right to tell an adjoining land owner what he or she can or cannot do with adjoining property. Yet, privately owned lands are clearly included within the boundaries of the MNRR. I believe the Plan should clearly and expressly recognize that privately owned lands within the park boundary are not directly controlled by rules of the Plan and remain subject to all state and local laws affecting use. While the Plan makes repeated references to "guidelines" for use and development, the Plan lacks focus and clarity on the distinction between voluntary guidelines as they may be invoked with respect to privately owned property and actual park rules that apply to federally owned water and land.

80 I am also troubled by the apparent Plan position that the MNRR surface water park subject to direct NPS control is the ordinary high water line of the Missouri River. Given the fact that other segments of the federal government are in a position to adjust this water line from time to time, adjoining property owners' lands may be submerged and thus taken for park purposes without any compensation. What is the resulting status of accretion lands that may sometimes be under water and sometimes exposed as a result of the federal hydrologic regime? These are important matters to my family, and I request that the Plan address them.

81 Finally, one aspect of "no action" status quo that the Plan fails to discuss adequately is the possibility that bank stabilization in critical areas, with the same political coordination that would be required under Alternatives 2 and 3, could be completely achieved by the COE under existing legislation, such as Section 32. Many land owners may simply want to address erosion without inviting a larger scheme of federal rules and regulations to their properties, and any Plan should investigate the least restrictive alternative as an option. In its current formulation, the Plan implies that bank stabilization is not obtainable under the status quo, yet this premise has not really been the subject of any serious evaluation.

Alternative 2 and 3 Common Issues.

As a preliminary matter, my family agrees that Alternative 2 (with its envisioned lower use rate) would be preferable to Alternative 3. We regard lower (or, as we would prefer, existing) level of visitor use as highly desirable, since we believe less intensive use better preserves to our family and local users the peaceful and quiet enjoyment of our

79. These assertions are correct. Guidelines are not regulations and a statement explaining this has been added to page 36.

80. No property rights are lost in the implementation of this plan. The water surface discussions at the public meetings pertained to jurisdictional matters relating to public use, not ownership. NPS does not own the water. State law determines ownership of riverbeds and accretion lands, and South Dakota and Nebraska laws differ.

81. Section 32 authority expired in 1984, and only limited maintenance of existing structures continues. Private landowners can accomplish bank stabilization at personal expense under the provisions of a section 10/404 permit. Bank stabilization of sites identified in the 1980 *General Management Plan* and *General Design Memorandum* can also be undertaken, but since then cost-share policies and new laws have been imposed, and erosion problems have expanded not contracted. Congress and the public demand action, not inaction.

family farm and the river. Lower level of visitor use also means less pressure on delicate natural scenery, habitats and species, which my family also regards as essential parts of the intrinsic value of our farm.

With that general preference stated, we still have a number of concerns about common issues of Alternatives 2 and 3, noted below:

82

1 Streambank Stabilization. The initial desired future condition is *streambank stabilization*. First, we submit that adequate streambank stabilization is politically and economically obtainable under the status quo. A good amount of stabilization has already occurred, and there seems to be far less community complaint about erosion and changing river courses now than at any time in the prior thirty years. Even if *additional streambank stabilization* is desirable, must it occur only in the context of a far reaching national park regime? We believe that NPS has argued that stabilization is available only in the context of a national park regulatory schemework, when this need not be true. Spot stabilization of Missouri River bank can and should occur on its own merits, and the extension of a more intensely regulated national park under MNRR should occur only upon the evaluation of its own, separate merits.

83

2. Low Level of Visitor Use. While this may desired, the Plan fails to describe how this will be achieved. At your public meeting, you described environmental and recreational tourism as a dynamic growth industry, yet the Plan does not consider this growing market force. It would seem a matter of common sense that installation of additional visitor facilities and access along with education and interpretation activities and programs will greatly increase public awareness and use of MNRR. Why would the Plan otherwise (as it does) contain contingencies for patrol of river islands and other areas and restricting use of MNRR? And given the assumption of the Plan that most river access will continue to be from private lands, how can any real control over river use be achieved? The Plan recitation of low level visitor use is litany without logic. Of course there will be higher visitor use. And this is all the more troubling because local residents and owners have no meaningful control on the throttle of this new engine.

84

3. Management and Public Understanding/Interest Group Involvement. Although described as a Desired Future Condition in the Plan, the Plan gives this condition no descriptive development to illustrate how it will happen or to assess impact. Federal staff is to "work with *local land owners...on appropriate uses.*" In discussion at your meeting, it was explained that federal staff would use moral suasion and, where available technical assistance and economic incentives, to encourage uses consistent with a park-like setting. This is probably the most predictable of continuing impact with local land owners and by itself would invite more detailed description of how federal staff would make proposals to private land owners. While your own administrative experience in this region was highly complimented by several people attending the Yankton meeting, there was also discussion of the difficulties that can develop when a change in federal personnel brings new personalities and, essentially, new developmental readings under the terms of an administrative plan. Once this Plan is finalized and agreed to, what procedure

82. This contention is countered repeatedly by other respondents. See also response 26.

83. See responses 34 and 62.

84. See responses 4, 7, and 8.

ensures that the project continues to faithfully live up to the Plan? Finally, my sense of the Yankton meeting was that the general public desires more routine opportunities to give input on how the park is developing. The Plan should focus more on the control of uses by new visitors to the park instead of devoting itself primarily to control of uses by existing, adjacent land owners. If, as the Plan states, that this is a local resource used primarily by local people, NPS should be able to offer some routine local meetings for monitoring. The original MNRR legislation provides: "Administration of the river segment designated by this paragraph shall be in coordination with, and pursuant to the advice of a Recreational River Advisory Group which may be established by the Secretary Such group may include in its membership, representatives of the affected States and political subdivisions thereof, affected Federal agencies, and such organized private groups as the Secretary deems desirable." (Plan p. 150) Although the emphasis of the current Plan is scenic river development rather than recreational river development, the importance of coordinated public input to the park was congressionally recognized by the enabling legislation. NPS would probably need some site experience to develop and coordinate site-specific rules, regulations and procedures, during which time divergent public comment might be disruptive. But after a settling-in period during which the operation of the park becomes routine, it would seem that an organized advisory group would provide useful input to NPS and address the local desire for input.

84

4. Land Use Planning and Cooperation to Protect Resources, Including Both Natural and Cultural Resources. Agricultural use would continue to be encouraged, except that feedlots and confinement facilities adjacent to the river would be considered *incompatible activities. We agree that highly intense animal activities should be* discouraged, but we would object to any provision of the Plan that would prohibit us from grazing stock cattle on our lands, as our family has done since my great-grandfather's establishment of the farm. The Plan hints at concurrence with this use by stating: "Financial assistance for livestock watering equipment could be used as an incentive to minimize trampling of riverbanks." (Plan p. 37). We feel that we must graze cattle in our timber and pasture areas during fair weather in order to maintain weed control. The Plan should more directly address this need. We are also troubled by the vagueness of the term "feedlot," since we also have an established feedlot area at the farmstead which we might choose to remodel as stables and corrals for horses and other farm animals. Since the Plan does not specify the intensity of use which is to be avoided, it leaves these area is a great deal of uncertainty.

85

The Plan concedes that "present development could remain in place inside the boundaries," yet a series of Guidelines are established for "Existing and Replacement Structures." These Guidelines further confuse the issue by providing that "There would be no effect on existing structures and uses." (Plan p. 36) As we understand the Plan's voluntary position on land use and the existing patchwork of state/county land use rules, it would be better understood if the Plan guidelines were limited to the advocacy position that NPS will adopt with regard to the future development of state and county land use rules.

86

85. A feed lot is defined as a permanent confinement area for animals in buildings, pens, or areas that normally are not used for raising crops or grazing. This definition has been added to the glossary. The grazing of stock cattle is not prohibited in the plan, but the trampling of riverbanks could be a problem.

86. The guidelines offered are recommendations only.

5. With regard to the normative judgments implicitly stated in the Guidelines for Structures (Plan p. 36), I have the following comments:

87 a Minimum setback requirements are sure to be a source of controversy. Owners of river bank strongly appreciate the beauty of their river views, especially if they live there on a daily or frequent basis. The Plan presumes that there is a greater value in affording the occasional water traveler an unimpeded view of the riparian owner's property than in affording the riparian owner a beautiful daily view of the river No exception is apparently contemplated for public or private venues which might logically be developed adjacent to the water's edge precisely for the convenience and safety of park visitors using mainly the water surface of the park.

b. Structures should be consistent with maintenance, screening, visibility, texture and color recommendations. I think we all want recreational and residential structures to be harmonious with the landscape and intrinsically aesthetically satisfying. However, I would strongly object to a federally sponsored set of local zoning laws that would limit design, materials and landscaping. I am also deeply troubled by the apparent intent that my family's use and activities should now become "invisible" from river users, after we have so visibly lived on the river for many years. After years of enduring fearful erosion from the river, the visible beauty of the river is the essence of my family's living experience on the farm. This Plan should not take that right away from any riparian owner

c Colors similar to the surrounding environment. Country structural colors are not necessary gentle. Farmhouse white and barn red are encountered up and down the river Nature, itself, changes color through the year. Many rural buildings stand for years without fresh paint and thus slowly return to the woods from whence they came. While we can certainly discuss color of structures, I would strongly object to any zoning or use law that attempted to create and enforce a color scheme.

d. Exterior Maintenance of Structures. What does this mean? To the extent that structures are not visible from the river, what interest does NPS have in their appearance? Is it possible that a rustically designed structure might fall afoul of this maintenance requirement?

6 With regard to Guidelines for Zoning and New Construction, (Plan pp, 36-37), I have the following comments:

88 a. First, on a philosophical level, local land use planning is an inherently local concern, and the idea of a federal zoning law imposed at the local level by the considerable resources of the the federal government is disturbing to my notion of balanced powers. If this new federal vision is even partially achieved, it will certainly limit the variety of economic uses to which adjoining land may be put. It may perhaps prohibit the highest and best economic uses that should otherwise be available to an adjoining private land owner

87. See response 86.

88. See response 14.

b Structures/Maintenance, Screening, Visibility. I continue my same comments regrading parallel performance requirements previously noted for existing structures, in particular those provisions *suggesting that landowners must mask their occupation and* activities from the river. The Plan must make a more deliberate attempt to recognize that part of the cultural landscape being embraced by this new park is the historical, individual private uses adjacent to the river

89

c. Boat Docks and Ramps. The Plan suggests that boat ramps and boat docks should be shared. My family takes strong exception to this suggestion. In my personal memory, we have always had some form of boat dock and/or ramp on our farm. And with nearly a mile of river front, we should be entitled to establish and maintain our own dock and ramp without being required to share it with other members of the public. This would be tantamount to forcing a land owner to grant a public access easement in order that the owner be allowed continued access to the water surface. We would like to see the Plan acknowledge that riparian land owners have an absolute right of access to the river surface and that any permit system established to control docks and boat ramps be impartially administered without requiring that public access be granted at any such permit site.

90

7 The Plan at several points addresses a need for two additional public access sites on the South Dakota side, and generally prefers the locations to be "near Elk Point and one between Myron Grove and Yankton." (Plan p. 54). We would like NPS to disclose its entire thinking on this subject, since it is impossible to assess probable impact on the basis of these vague references. To the extent that intensified use impact will occur, it will most likely develop at or near these proposed new South Dakota access sites. Owners of property near these proposed new sites are entitled to as much advance information as NPS possesses so that owners can effectively comment on the Plan.

8. Assessment of Impacts of the Plan.

I have the following comments on the Plan's assessment of impacts.

a. Natural Resources/Noise (Plan p. 121). We believe that some visitor increase is likely, and we concur with meeting comments that noise levels may become a real concern. If the Plan were as detailed about use restrictions of the river surface as it is about private owners' use of lands adjoining the river, we would feel more comfortable on this subject. We do not want to live through a worst case scenario, where our rights to use and develop our property are significantly limited without compensation, but unbridled public use makes the river not worth living on any more.

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b. Socioeconomic Resources/Land Use, Property Owners and Regional Population. (Plan p 123) It is not clear how one gets cleanly to the stated conclusion: "The net effect of these techniques would be to stabilize, and neither increase or decrease, the intensity of use of the land." Agricultural uses, at least along the perimeter of the

89. Anything that is built into or on the water is subject to a section 10/section 404 permit. The plan does not force consolidation of boat docks and ramps, but encourages it when and where possible. See also the last part of response 47.

90. As discussed in the plan and at each of the public meetings, neither NPS nor COE have specific land acquisition agendas, but the agencies do accept the challenge of limited additional access development. Resolution of that matter will be guided by NEPA, which is a public process. If related land acquisition were involved, it would only be from willing sellers.

91. The emphasis of the plan is not on recreation alone but a balance between recreation and resource preservation. Existing agricultural practices are viewed as protecting the river corridor. Encouraging successful continued agricultural land use helps to minimize future development, as noted on page 37, under "Guidelines for Agricultural Lands."

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river, certainly must decrease if more land area is dedicated to park access and use. Visitor uses for recreational and scenic/historic touring certainly must increase, and public and private infrastructure for all these uses will provide further impacts. Isn't that what the Plan is all about? Further, the Plan states that current real estate tax assessment practices based on current use "means that land values and property taxes would not be significantly affected." (Plan p. 123) This is a speculative statement which may not supported by actual experience. One recent sale of riverfront property near our farm closed at a multiple of more than twice what the best agricultural land in the neighborhood sells for.

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Riverfront property will probably continue to appreciate in value faster than ordinary farm land, because having physical and scenic access to the river is a valuable property right of riparian land owners. One can reasonably foresee how the Plan might enhance the general scenic and recreational reputation of the entire area, resulting in higher land values and perhaps taxes. This escalation in possible value represents a potential burden for area farmers who continue agricultural uses but who may find that the scenic or recreational portions of their properties will be viewed as sources of additional local tax revenue. On the other hand, escalation in land values also represents an opportunity to the many riparian land owners who have endured the risks of living on the Missouri. Who will be entitled to the benefit of any such opportunities, and will the Plan be flexible enough over time to allow land owners to put their properties to the highest and best uses that may exist from time to time?

The Plan impact analysis makes little sense on land use issues. The Plan contends that Alternative 1, No Action (Plan p. 114) would result in "potentially minor adverse local impact on land use, property owners and regional population." But if market driven demand for recreation and scenic experience continues to evolve, a more likely "no action" scenario would allow locally desirable development and reward the land owner who wants to participate. By contrast, the Plan furthers asserts (Plan p. 124) that under Alternative 2, "there would be no adverse local impact on land use, property owners and regional population." This conclusion is unlikely, unless NPS is singularly unable to advocate any of the land use guidelines otherwise contained in the Plan. Surely the Plan does not suggest that NPF will fail in obtaining some measure of "guideline" conformance. Given the intention to acquire a minimal amount of park land in fee, the public rights in the new park experience will most likely depend on a complex system of rules (both federal and federally inspired state and county) limiting private ownership rights. Thus, the Plan's denial of impact from proceeding with the new park vision seems insincere. For my family, as owners who want to continue on the river even with this new park vision, the likely impact on our own uses and farm value is certainly the darkest part of the crystal ball before us.

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In conclusion, as a family, we are generally supportive of the evolutionary development of more park uses on the Missouri River, as long as we are not asked to undergo economic harm or to be denied the economic expectancies of reasonable development of our property. We have concerns that a park administration not closely

92. No property rights are lost in the implementation of this plan.

93. See response 86.

aligned to local needs will eventually produce burdens on private land owners and local public users. Given the extensive privately owned areas of this park, we hope the administration of the park will be structured to be specially responsive to the needs of local land owners.

Please add my name and address, and the names and addresses of my co-trustees and mother as set out on the attached page, to your official mailing list with respect to all public matters affecting MNRR.

Respectfully submitted,
On behalf of the Trustees of the
Marvin L. Ryken Big Timber Trust

Robert L. Ryken, One of the Co-Trustees

cc: *U.S Army Corps of Engineers (Omaha)*
VIA EXPRESS MAIL
Mrs. Gladys E Ryken
Mrs. Linda K. Merkwan
Dr. Mary Ann Ryken
Mr. Sam K. Ryken
Dr. Marvin L. Ryken
U.S. Senator Thomas Daschle
U.S. Senator Tim Johnson
U.S. Representative John Thune
S.D. Representative Gary Moore

INTERESTED PARTY NOTICE LIST

1. Gladys E. Ryken

2 Marvin L. Ryken, Jr.

3 Dr. Mary Ann Ryken Wilcox

4 Linda K. Merkwan

5 Sam K. Ryken

Appendixes
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Preparers and Contributors
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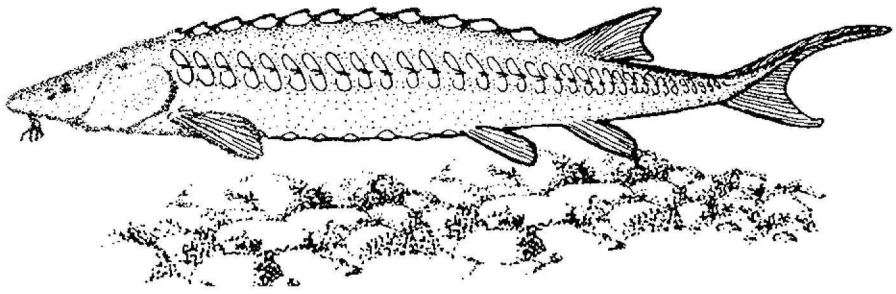

PUBLIC LAW 95-625 – NOV. 10, 1978
92 STAT. 3529

ADDITION OF MISSOURI SEGMENT

SEC. 707. Section 8(a) of the Wild and Scenic Rivers Act is amended by adding the following new paragraph at the end thereof : Boundaries.

"(22) MISSOURI RIVER, NEBRASKA SOUTH DAKOTA.– The segment from Gavins Point Dam, South Dakota, fifty-nine miles downstream to Ponca State Park, Nebraska, as generally depicted in the document entitled "Review Report for Water Resources Development, South Dakota, Nebraska, North Dakota, Montana," prepared by the Division Engineer, Missouri River Division, Corps of Engineers, dated August 1977 (hereinafter in this paragraph referred to as the "August 1977 Report"). Such segment shall be administered as a recreational river by the Secretary. The Secretary shall enter into a written cooper- Cooperative agreement.
time agreement with the Secretary of the Army (acting through the Chief of Engineers) for construction and maintenance of bank stabilization work and appropriate recreational development. After public notice and consultation with the State and local governments, other Notice and consultation.
interested organizations and associations, and the interested public, the Secretary shall take such action as is required pursuant to subsection (b) within one year from the date of enactment of this section. In Administration.
administering such river, the Secretary shall, to the extent, and in a manner, consistent with this section –

"(A) provide (I) for the construction by the United States of Recreation river features and streambank stabilization structures as the Secretary of the Army (acting through the Chief of Engineers) deems necessary and advisable in connection with the segment designated by this paragraph, and (ii) for the operation and maintenance of all streambank stabilization structures constructed in connection with such segment (including both structures constructed before the date of enactment of this paragraph and structures constructed after such date, and including both structures constructed under the authority of this section and structures constructed under the authority of any other Act); and

"(B) permit access for such pumping and associate pipelines as may be necessary to assure an adequate supply of water for owners of land adjacent to such segment and for fish, wildlife, and recreational uses outside the river corridor established pursuant to this paragraph. Access.

The streambank structures to be constructed and maintained under subparagraph (A) shall include, but not be limited to, structures at such sites as are specified with respect to such segment on pages 62 and 68 of the August 1977 Report, except that sites for such structures may be relocated to the extent deemed necessary by the Secretary of the Army (acting through the Chief of Engineers) by reason of physical changes in the river or river area. The Secretary of the Army (acting through the Chief of Engineers) shall condition the construction

or maintenance of any streambank stabilization structure or of any recreational river feature at any site under subparagraph (A) (I) upon the availability to the United States of such land and interests in land in such ownership as he deems necessary to carry out such construction or maintenance and to protect and enhance the river in accordance with the purposes of this Act. Administration of the river segment designated by this paragraph shall be in coordination with, and pursuant to the advice of a Recreational River Advisory Group which may be established by the Secretary. Such Group may include in its membership, representatives of the affected States and political subdivisions thereof, affected Federal agencies, and such organized private groups as the Secretary deems desirable. Not withstanding the authority to the contrary contained in subsection 6(a) of this Act, no land or interests in land may be acquired without the consent of the owner: *Provided*, That not to exceed 5 per centum of the acreage within the designated river boundaries may be acquired in less than fee title without the consent of the owner, in such instance of the Secretary's determination that activities are occurring, or threatening to occur thereon which constitute serious damage or threat to the integrity of the river corridor, in accordance with the values for which this river was designated. For purposes of carrying out the provisions of this Act with respect to the river designated by this paragraph, there are authorized to be appropriated not to exceed $21,000,000, for acquisition of lands and interests in lands and for development."

Recreational River Advisory Group.

Lands and interests, acquisition. 16 USC 1277.

Appropriation authorization.

ANALYSIS OF THE STATUTE THAT DESIGNATED
THE GAVINS POINT DAM TO PONCA STATE PARK REACH
OF THE MISSOURI RIVER AS A RECREATIONAL RIVER

On November 10, 1978, President Carter signed Public Law 95-625 into law which, in part, amended the Wild and Scenic Rivers Act, 16 U.S.C. 1271 et. seq., by adding a 59-mile reach of the Missouri River to the Wild and Scenic Rivers System. The purpose of this paper is to analyze the statute that designated that reach of the Missouri River by utilizing the legislative history of this statute and the other applicable sections of the Wild and Scenic Rivers Act (the Act).

Portion of the Statute

> Section 3(a). The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system: . . .
>
> (22) Missouri River, Nebraska, South Dakota.—The segment from Gavins Point Dam, South Dakota, 59 miles downstream to Ponca State Park, Nebraska, as generally depicted in the document entitled *Review Report for Water Resources Development, South Dakota, Nebraska, North Dakota, Montana* prepared by the Division Engineer, Missouri River Division, Corps of Engineers, dated August 1977 (hereinafter in this paragraph referred to as the "August 1977 Report"). Such segment shall be administered as a recreational river by the Secretary.

Interpretation

The segment of the Missouri River discussed in the August 1977 Report is the 59.05-mile reach immediately below Gavins Point Dam at the 1965 river mile 811.05 downstream to Ponca State Park, Nebraska, at the 1965 river mile 752, (Appendix 1, at E-93). This reach is the segment that this legislation designates for protection as a Recreational River. Due to physical changes in the river channel the reach between Gavins Point Dam to Ponca State Park may not be 59.05 miles at this point in time. This does not present a problem because the statute provides the flexibility to allow for such difference where it states that the designated segment is that which is "generally depicted" in the August 1977 Report.

Rivers designated for inclusion in the wild and scenic rivers system may be classified as *wild, scenic, or recreational. The basic differences between* these are the amount of manmade development allowed and the degree of accessibility. A river classified as recreational, such as the subject reach, may have the greatest amount of such development and is to be readily accessible by road or railroad, Section 2(b)(3).

All the rivers in the system must be freeflowing and the related adjacent land must possess at least one of the following: "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values," Section 2(b). The August 1977 Report describes in detail the values of this recreational river segment and states the conclusion that the values that made this segment eligible for designation are the

outstandingly remarkable recreational, fish and wildlife, esthetic, historical, and cultural values, (Appendix 1, at E-113). In urging designation of this reach of the Missouri River both Congresswoman Smith and Senator McGovern stressed that these were the values that needed to be protected and enhanced. 124 *Cong. Rec.* E3529 (1978) and 166 *Cong. Rec.* S18526-9 (daily ed. October 12, 1978).

The Secretary of the Interior is mandated to administer the river in a manner that will "protect and enhance the values which caused it to be included" in the system, Section 10(a), for the benefit and enjoyment of present and future generations, Section 1(b). Therefore, the recreational, fish and wildlife, esthetic, historical, and cultural values described in the August 1977 Report are to be protected and enhanced. The freeflowing condition of this reach is also to be preserved and protected, Section 1(b). Actions taken to carry out the authorities granted by the Act or actions limited by the Act must be exercised in a manner that is consistent with such protection, enhancement, or preservation.

Although Congress has given the Secretary of the Interior the duty to administer this river, this responsibility may be delegated. If the Secretary of the Interior delegates his administrative responsibility to the Park Service, the recreational river must become part of the National Park System, and if that responsibility is delegated to the Fish and Wildlife Service, it must become part of the National Wildlife Refuge System, Section 10(c). In these situations, the recreational river will then be subject to the laws covering the National Park System or the National Wildlife Refuge System as well as the provisions of the Wild and Scenic Rivers Act.

A state or local government may participate in the administration of the river if the Secretary enters into a cooperative agreement with the state or local government for such participation. The Secretary is to encourage the cooperation of the state and local governments in the planning and administration of the river segments which include or are adjacent to any state or county-owned lands, Section 10(e). This cooperative effort may be accomplished through the use of the Recreational River Advisory Group (discussed below).

Portion of the Statute

> The Secretary shall enter into a written cooperative agreement with the Secretary of the Army (acting through the Chief of Engineers) for construction and maintenance of bank stabilization work and appropriate recreational development. After public notice and consultation with the state and local governments, other interested organizations and associations, and the interested public, the Secretary shall take such action as is required pursuant to subsection (b) within one year from the date of enactment of this section.

Interpretation

The Corps of Engineers (Corps) is responsible for constructing and maintaining bank stabilization works and recreational facilities. The Corps is to carry out this responsibility through a written cooperative agreement entered into by the Secretary of the Interior and the Chief of Engineers. That agreement may delineate the details of the Corps' responsibility. The legislative

intent of this section, as stated by Senator McGovern in the October 12, 1978, *Congressional Record* at S18528, is that the Corps is to be responsible for the two specified functions of bank stabilization and recreational development but is not necessarily limited to these functions. The Secretary of the Interior has the discretionary authority to delegate to the Corps a greater involvement in the management of the river, including the day-to-day routine management responsibility. Therefore, the cooperative agreement could cover responsibilities in addition to bank stabilization and recreational facilities. However, both House and Senate subcommittees made it clear in informal conversations that the Secretary of the Interior was to retain ultimate administration authority and that such authority could not be delegated to the Corps.

The actions the Secretary of the Interior must take by November 10, 1979, are delineated in Section 3(b), and are as follows: (1) establishing detailed boundaries of the recreational river, (2) preparing a management plan, and (3) publishing the boundaries and management plan in the *Federal Register* which will become effective 90 days after being forwarded to the President of the Senate and the Speaker of the House of Representatives. The area within the recreational river boundaries shall include an average of not more than 320 acres per mile on both sides of the river.

The Heritage Conservation and Recreation Service has been directed by the Secretary of the Interior to carry out these three actions. These are to be done in consultation with Nebraska, South Dakota, and local governments. The interested organizations and public also are to be informed that these actions are being taken and are to be consulted. Public meetings or other appropriate means may be used to consult and communicate with the organizations and the interested public.

The management plan may establish varying degrees of intensity of protection and development but the plan must provide for the protection and enhancement of the recreational, fish and wildlife, and the other values for which this river was designated, and for the preservation of its freeflowing condition, Section 10(a). Uses which do not substantially interfere with the public use and enjoyment of these values may be permitted, if those uses are consistent with such protection, enhancement, and preservation. These uses can be delineated in the management plan and a mechanism can be established for permitting compatible uses.

The land or interests in land that need to be acquired to protect, enhance, and preserve the river's values may be detailed in the management plan. However, Section 6(a) places a limitation on such acquisition by limiting the lands on which fee title may be acquired to an average of not more than 100 acres per mile on both sides of the river.

Section 7(a) of this Act additionally protects this reach by prohibiting any manner of federal assistance for a water resource project that would have a direct and adverse effect on the values for which this river was designated. However, projects above or below this recreational river reach which will not unreasonably diminish these values may be permitted.

Portion of the Statute

> In administering such river, the Secretary shall, to the extent, and

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in a manner, consistent with this section—

> "(A) provide (i) for the construction by the United States of such recreation river features and streambank stabilization structures as the Secretary of the Army (acting through the Chief of Engineers) deems necessary and advisable in connection with the segment designated by this paragraph, and (ii) for the operation and maintenance of all streambank stabilization structures constructed in connection with such segment (including both structures before the date of enactment of this paragraph and structures constructed after such date, and including both structures constructed under the authority of this section and structures constructed under the authority of any other Act); and . . .

Interpretation

The Secretary of the Interior is to consult with the Corps with a view to determining what recreational facilities and streambank stabilization structures the Chief of Engineers deems necessary and advisable to construct. When the Secretary of the Interior, who has the ultimate responsibility for administration, concurs in the Chief's determination the Secretary is to have such facilities or stabilization structures constructed pursuant to the cooperative agreement. Such concurrence is to be consistent with the Secretary's affirmative duty to protect, enhance, and preserve the river's values. This division of responsibility may be clarified further in the cooperative agreement between the Secretary of the Interior and the Corps.

The operation and maintenance referred to in (ii) gives the Secretary of the Interior the responsibility to operate and maintain streambank stabilization structures constructed in this reach that the Secretary may authorize under this Act, that have been authorized under the National Streambank Erosion Prevention and Control Demonstration Program, P. L. 93-251 and P. L. 94-587, or structures constructed under the authorities of any other Act.

Any streambank stabilization structures or recreational river facilities constructed or maintained under the authority of this Act may be subject to the conditions discussed below.

Portion of the Statute

> "(B) permit access for such pumping and associated pipelines as may be necessary to assure an adequate supply of water for owners of land adjacent to such segment and for fish, wildlife, and recreational uses outside the river corridor established pursuant to this paragraph.

Interpretation

The Secretary is to permit access for water pipes, pumps, irrigation intakes, etc.; however, that permission must be consistent with the Secretary's responsibilities to protect, enhance, and preserve the values which caused this river to be included in the wild and scenic rivers system. This may involve putting stipulations in a permit regarding noise limitations, visual screening, or other protective measures. The mechanism that will be utilized to grant or deny such access may be developed as part of the management plan. If

the pumping and pipelines also involve the discharge of dredge or fill material, a Section 404 permit also may be required.

Section 13(g) of this Act authorizes the Secretary of the Interior to grant easements and rights-of-way for other purposes and to include protective stipulations in those easements or rights-of-way.

Portion of the Statute

> *The streambank* structures to be constructed and maintained under subparagraph (A) shall include, but not be limited to, structures at such sites as are specified with respect to such segment on pages 62 and 63 of the August 1977 Report, except that sites for such structures may be relocated to the extent deemed necessary by the Secretary of the Army (acting through the Chief of Engineers) by reason of physical changes in the river or river area.

Interpretation

The sites that are listed on pages 62 and 63 are as follows:

Site Location 1960 River Mile	Right or Left Bank	Name of Area
755.5	Left	Elk Point
759.0	Right	Ionia Bend
760.5	Right	Ionia Bend
764.5	Left	Bolton Bend
767.0	Right	Ryan Bend
771.0	Left	Vermillion River Chute
772.5	Left	Fairview
775.0	Right	Mulberry Bend
777.0	Left	Mulberry Point
779.0	Right	North Alabama Point
781.0	Left	Clay County Park
783.5	Left	Vermillion Boat Club
784.0	Right	Brooky Bottom Road
786.0	Left	Vermillion Boat Club Area 2
790.0	Left	Audubon Bend
794.0	Left	St. Helena Bend
796.5	Left	Goat Island
798.5	Right	Cedar County Park
800.0	Right	Campbells Point
801.0	Left	James River
803.0	Right	Yankton Reach
804.0	Left	Rush Island
805.7	Right	Beaver Creek
806.0	Left	Yankton Riverfront
806.6	Left	Sacred Heart Hospital

The legislation does not limit the stabilization structures to the sites listed to the left. If there are physical changes in the river that make stabilization at these sites unnecessary or other sites preferable, the Secretary of the Interior has the discretionary authority to provide for the stabilization of other sites. The actual construction and maintenance is to be carried out by the Corps according to the terms of the cooperative agreement. Changes in sites or additions of sites for other than physical changes in the river are covered by subsection (A)(i) which states that the Corps is to decide what structures are necessary and advisable. However, such changes are subject to the Secretary of the Interior's ultimate administrative authority over the river and limitations of the Act that the administration of the river must be in a manner that will protect, enhance, and preserve the river's values.

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Portion of the Statute

> The Secretary of the Army (acting through the Chief of Engineers) shall condition the construction or maintenance of any streambank stabilization structure or of any recreational river feature at any site under subparagraph (A)(i) upon the availability to the United States of such land and interests in land in such ownership as he deems necessary to carry out such construction or maintenance and to protect and enhance the river in accordance with the purpose of this Act.

Interpretation

Since this legislation puts limits on the exercise of the condemnation powers of the United States government, the intent of this sentence is to assure, that at a minimum, the land or interests in land necessary to protect, enhance, and preserve fish and wildlife, and other values will be acquired at the sites that may be stabilized under the authority of the subject amendment. Congress intended that there be a "quid pro quo." This was explained by Senator McGovern in his statement in the October 12, 1978, *Congressional Record*, at S18529, that "If a landowner wants to protect his property with bank stabilization and such a stabilization plan is authorized under the conditions of this amendment, then that streambank protection is conditioned upon his making an acceptable amount of acreage within the river corridor available for protection of wildlife habitat and other values for which this designation is intended." This assurance was deemed necessary to meet the concern expressed by the Fish and Wildlife Service that the then existing wildlife habitat would be cleared for agricultural purposes once the banks were stabilized.

This sentence means that land or interests in land deemed necessary must be made available to the United States before any stabilization site can be constructed or maintained by the Corps under the authority of this Act. The Corps is to determine which land or interests in land is necessary to protect, enhance, and preserve the fish and wildlife, and other values. However, again this determination is subject to the Secretary of the Interior's ultimate authority to administer the recreational river. Any interests in land acquired in this manner must be acquired in the name of the United States for such interest probably could not be legally transferred at a later date.

The words "lands and interests in land in such ownership" mean that if a landowner has 1 mile of land that is to be stabilized but that landowner owns additional acreage in the designated boundaries, the United States can condition that additional acreage to protect, enhance, and preserve the river. The land or interests in land that are made available to the United States may be grants of land in fee simple absolute, easements, or other types of real property interests. The land or interests in land may be sold or donated to the United States [authority to accept donations is in Section 6(f)], or may be made available by other means that are acceptable to the Corps and the Secretary of the Interior.

Portion of the Statute

> Administration of the river segment designated by this paragraph

> shall be in coordination with, and pursuant to the advice of a Recreational River Advisory Group which may be established by the Secretary. Such Group may include in its membership representatives of the affected states and political subdivisions thereof, affected federal agencies, and such organized private groups as the Secretary deems desirable.

Interpretation

The intent of the above is to assure the continued involvement of the private local citizen groups, and the affected local state and federal agencies and to provide a mechanism for that involvement in the management of the river. The Recreational River Advisory Group is to assist the Secretary of the Interior in the administration of the river by acting in an advisory capacity and in such capacity participating in the decisionmaking process regarding the management of the river.

Portion of the Statute

> Notwithstanding the authority to the contrary contained in subsection 6(a) of this Act, no land or interests in land may be acquired without the consent of the owner: *Provided*, That not to exceed 5 per centum of the acreage within the designated river boundaries may be acquired in less than fee title without the consent of the owner, in such instance of the Secretary's determination that activities are occurring, or threatening to occur thereon which constitutes serious damage or threat to the integrity of the river corridor, in accordance with the values for which this river was designated.

Interpretation

The authority in Section 6(a) that is limited by the above sentence states:

> The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of the Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him . . . .

The above authority of the Secretary of the Interior to acquire lands or interests in land includes the authority to use the power of eminent domain. However, that power is specifically limited by this subsection. In the situation where the Secretary would use his power of eminent domain, it cannot be used to acquire fee title or to acquire more than 5 percent of the acreage of the river and the adjacent lands that will be within the designated river boundaries. The acreage to which the 5 percent limit applies does not include land in public ownership or land or interests in land that are made available to the United States as a condition of the construction or maintenance of a stabilization structure. Public ownership includes land owned by the local, state, or federal government.

For the Secretary of the Interior to exercise his power of eminent domain

within 5 percent of the acreage, the Secretary must first determine that activities are occurring or are threatening to occur which would seriously damage or threaten the recreational, fish and wildlife, esthetic, or the other values for which the river was designated.

This Act further limits the condemnation power in Section 6(c) which states:

> (c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic, or recreational river area, if such lands are located within any incorporated city, village, or borough which has in force and applicable to such lands a duly adopted valid zoning ordinance that conforms with the purposes of this Act.

The Secretary of the Interior may determine that a zoning ordinance is sufficient to protect the river's values and in that event the above limit would become effective. No specific guidelines have been established for evaluating zoning ordinance.

Portion of the Statute

> For purposes of carrying out the provisions of this Act with respect to the river designated by this paragraph, there are authorized to be appropriated not to exceed $21,000,000, for acquisition of lands and interests in lands and for development.

Interpretation

Congress has authorized $21,000,000 for the acquisition of land and interests in land and for the streambank stabilization, recreational facilities, and other developments that are outlined in the management plan. The involved federal agencies must go through the appropriation process before this money is available for their use.

APPENDIX B: PLANT COMMUNITY TYPES

Fourteen general plant communities were identified and mapped for the 1978 Missouri National Recreational River. Wetland community types were identified using U.S. Fish and Wildlife Service –National Wetlands Inventory data, which consisted of 125 wetland categories. These categories were further classified by the Nebraska Game and Parks Natural Heritage Program to come up with the 10 wetland types defined below. The remaining 4 plant community types (terrestrial system) were derived through classification of satellite imagery by the Nebraska Natural Resource Commission.

The actual community types used for this project are numbered 1–14 below, along with general descriptions of the palustrine, riverine, and terrestrial systems:

Palustrine System – This includes all wetlands dominated by trees, shrubs and persistent emergents. It also includes wetlands lacking such vegetation, but with all of the following three characteristics: 1) areas less than 20 acres, 2) active wave-formed or bedrock shoreline features absent, and 3) water depth in the deepest part of the basin less than 2 m.

1 **Palustrine aquatic bed (PAB)** – This includes wetlands dominated by plants that grow principally on or beneath the water surface. *(Found along some portions of the unchannelized Missouri. Some farm ponds are also this type)*

2 **Palustrine unconsolidated bottom (PUB)** – This includes all wetlands with at least 25% cover of particles smaller than stones, and vegetative cover less than 30% . *(No areas of this wetland type could be found on NWI maps, it may be of minor importance)*

3 **Palustrine emergent temporarily flooded (PEMA)** – These are emergent wetlands where surface water is present for brief periods during the growing season, but the water table usually lies well below the soil surface for most of the year. *(Most commonly found as small pockets of wetlands in the Missouri River floodplain. Probably dominated by a combination of wetland and upland plants)*

4 **Palustrine emergent seasonally and semipermanently flooded (PEMC-F)** – These are emergent wetlands where surface water is present for extended periods of the growing season (seasonally flooded) through the entire growing season (semipermanently flooded). *These are emergent marsh areas very common along the Missouri river. Probably dominated by cattails, bulrushes, arrowhead, etc.)*

5 **Palustrine scrub/shrub (PSS)** – This includes wetlands dominated by woody vegetation less than 6 m tall. This includes true shrubs and young or stunted trees. *(This consists of stands of willow and other shrub species and young cottonwoods. Most commonly found along the Missouri river.*

6 **Palustrine forested (PFO)** – This includes wetlands dominated by woody vegetation that is 6 m or taller. *(This consists of stands of wet forests along the Missouri River. Dominant tree is likely cottonwood)*

7 **Palustrine unconsolidated shore (PUS)** – This includes all wetland habitats having three characteristics: 1) unconsolidated substrates with less than 75% areal cover of stones, boulders, or bedrock; 2) less than 30% areal cover of vegetation other than pioneering plants; and 3) any of the following water regimes: irregularly exposed, regularly flooded, irregularly flooded, seasonally flooded, temporarily flooded, intermittently flooded, saturated, or artificially flooded. Unconsolidated shores are characterized by substrates lacking vegetation except for pioneering plants that become established during brief periods when growing conditions are favorable. Erosion and deposition by waves and

currents produce a number of landforms such as beaches, bars, and flats, all or which are included in this category. *(This type is found at a few areas of the unchannelized Missouri River where it is almost always associated with PSS wetlands. It appears to be indicating sparsely vegetated areas that are only seasonally flooded. A few farm ponds are also this type)*

Riverine System – This includes all wetlands and deepwater habitats contained within a channel with the exception of wetlands dominated by trees, shrubs, and persistent emergents. Water is usually, but not always, flowing in the Riverine System. Upland islands or palustrine wetlands may occur in the channel, but they are not included in this system.

8 **Riverine, lower perennial, unconsolidated shore (R2US)** – Lower perennial rivers include low gradient rivers where the water velocity is slow. The substrate consists mainly of sand and mud. Unconsolidated shore includes habitats having three characteristics: 1) unconsolidated substrates with less than 75% areal cover of stones, boulders, or bedrock; 2) less than 30% areal cover of vegetation other than pioneering plants; and 3) any of the following water regimes: irregularly exposed, regularly flooded, irregularly flooded, seasonally flooded, temporarily flooded, intermittently flooded, saturated, or artificially flooded. Unconsolidated shores are characterized by substrates lacking vegetation except for pioneering plants that become established during brief periods when growing conditions are favorable. Erosion and deposition by waves and currents produce a number of landforms such as beaches, bars, and flats, all of which are included in this category. *(Sandbars in the rivers)*

9 **Riverine, lower perennial, unconsolidated bottom (R2UB)** – Lower perennial rivers include low gradient rivers where the water velocity is slow. The substrate consists mainly of sand and mud. Unconsolidated bottoms are characterized by the lack of large stable surfaces for plant and animal attachment. This includes all areas with at least 25% cover of particles smaller than stones, and vegetative cover less than 30% . *(This is the main channel of the Missouri River)*

10 **Riverine intermittent (R4)** – This includes streams where the channel contains flowing water for only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent. *(This includes all small streams, Such as the James and Vermillion Rivers and Bow Creek.)*

Terrestrial System – These are upland areas.

11 **Croplands** – This includes both irrigated and nonirrigated row crops and alfalfa fields.

12 **Pasture/Rangelands** – This includes loess mixed-grass prairie on the loess-soiled bluffs of the Missouri and Niobrara Rivers. Dominant grasses in this community include big and little bluestem in moister and drier sites, respectively, blue and sideoats grama, needlegrasses, June grass and others. This category also included areas of wet-mesic prairie in river floodplains and areas of tallgrass prairie on rolling to level, deep-soiled upland sites. Dominant grasses in these two prairie types include big bluestem, Indian grass, switchgrass and Canada wildrye. Prairie cordgrass and bluejoint may also be prominent in wet-mesic prairies. Both grazed and hayed areas of the above grassland types are included here. Brome fields and planted warm-season grasses are also included here.

13 **Floodplain forest** – This includes all forests in floodplains of rivers and major streams not designated as palustrine communities by the NWI. These forests are probably somewhat drier than the forested palustrine communities. Cottonwood is the dominant tree species in this community, but green ash, boxelder, American elm, black walnut, honey locust and hackberry may also be prominent.

14 **Upland forest** – This includes all forests on uplands. Dominant trees are bur oak and basswood. American and red elm, black walnut, green ash, eastern red cedar and hackberry may also be prominent.

APPENDIX C: 1980 COOPERATIVE AGREEMENT BETWEEN U.S. DEPARTMENT OF THE INTERIOR AND U.S. DEPARTMENT OF THE ARMY

II. THE SECRETARY OF THE INTERIOR, ACTING THROUGH THE ASSISTANT SECRETARY FOR FISH AND WILDLIFE AND PARKS, WILL:

(A) Administer the designated segment as a Recreational River under the provisions of the act;

(B) Initiate efforts to establish a Recreational River Advisory Group which may include members representing those organizations identified in section 3(a)(22) of the act and define the duties and responsibilities of the Recreational River Advisory Group;

(C) Upon request, provide technical assistance to the U.S. Army Corps of Engineers in those instances where the Department of the Interior has unique capability by virtue of law or special expertise required for planning and implementation of the act;

(D) Determine, upon notification by the Secretary of the Army (acting through the Chief of Engineers), or otherwise, if activities are occurring or threatening to occur along the designated river segment which constitute serious damage or threat to the values for which the segment was designated; and

(E) Submit budget requirements through normal Departmental channels.

III. THE SECRETARY OF THE ARMY, ACTING THROUGH THE CHIEF OF ENGINEERS,
WILL:

(A) Submit budget requirements for project planning, acquisition of lands and interests in lands, development of interpretive facilities and features, and construction of recreational and streambank stabilization;

(B) Submit budget requirements for operations, maintenance and replacement of such features and facilities;

(C) Notify the representative of the Secretary of the Interior and other members of the Recreational River Advisory Group about activities that are occurring along the designated river segment which constitute a threat to the values for which the river was designated and to land and interests in land acquired by the United States, and make recommendations concerning the issuance of a determination by the Secretary of the Interior as provided for in Article II(D) of this Agreement; and

(D) Notify Interior of the congressional budget hearings on the Recreational River so that Interior will be able to testify.

IV. THE SECRETARY OF THE ARMY, ACTING THROUGH THE CHIEF OF ENGINEERS, SUBJECT TO APPROPRIATIONS WILL:

(A) Conduct or cause to be conducted during detailed planning and design for implementation of the Recreational River Management Plan (incorporated herein by reference), and in coordination with appropriate agencies of the Department of the Interior:

1. A survey to determine the sites of historical and archeological resources which may be located within the river corridor;

2. A visual resource analysis to identify any outstandingly remarkable scenic areas which should be protected as part of the Recreational River;

3. An inventory and assessment of wildlife resource values which should be protected and enhanced to maintain those qualities which led to designation of the segment; and

4. A mineral resource inventory and analysis for management of these resources.

(B) Determine the extent and location of streambank stabilization structures and other works necessary to control erosion and the legal interest in lands required for the construction and maintenance of such works;

(C) Further determine, prior to the initiation of construction (or the Federal assumption of maintenance), of any streambank stabilization structure, the extent of additional related lands or legal interests in lands within the same ownership which are required to protect and enhance the river in accordance with the purposes of the act;

(D) Condition the construction or maintenance of any streambank stabilization structure, other works necessary to control erosion, or of any recreational river feature, upon the availability to the United States of such land and interests in land in such ownership as is deemed necessary to carry out such construction and maintenance and to protect and enhance the river in accordance with the purposes of the act.

(E) Acquire in the name of the United States such additional lands and legal interests in lands required to carry out the river preservation and recreational purposes of the act in accordance with normal real estate practices of the Corps of Engineers, section 3(a)(22) of the act, and the requirements of Public Law 91-646;

(F) Design, construct, operate, and maintain the recreation and interpretive features in consonance with the Recreational River Management Plan;

(G) Design, construct, operate and maintain streambank stabilization and river preservation structures;

(H) Seek written cooperative agreements for State or local governmental participation as provided for by section 10(e) of the act; and

(I) Failing to negotiate adequate protection or willing cessation of activities which threaten the land or interests in land acquired by the United States or which threaten the values for which the river segment was designated, as determined by the Secretary of the Interior, exercise eminent domain or other appropriate remedy to prevent or terminate such adverse activities.

V. RENEGOTIATION OR TERMINATION

Either party may initiate renegotiation or termination of this agreement by 30 days written notice.

U.S. Department of the Interior

By _____ 1/4/80
Robert L. Herbst (Date)
Assistant Secretary for Fish and Wildlife and Parks

U.S. Department of the Army

By _____ 2/1/81
J.W. Morris (Date)
Lieutenant General, USA
Chief of Engineers

MNRR 404 Permits

as of April 1997

404 Permits Within MNRR

802.75	SD	Jul-76	irrig intake
802.25	NE	Nov-94	irrig intake
802	NE	Oct-92	irrig intake
801.8	SD	Jul-80	irrig intake
801.5	SD	Jul-76	irrig intake
801	NE	Sep-92	irrig intake
800.9	SD	Mar-81	bank stab
800.75	SD	Aug-91	boat ramp
800.6	SD	Mar-96	bank stab
800.5	SD	Mar-90	bank stab
800.4	SD	Mar-82	irrig intake
800	SD	May-81	bank stab
799.3	NE	Mar-94	bank stab
798.8	NE	Jun-96	bank stab
798.8	NE	Aug-95	bank stab
798.6	SD	Jul-76	bank stab
798.6	SD	Mar-78	irrig intake
798.3	SD	Mar-78	irrig intake
798.1	SD	Mar-81	bank stab
797.7	SD	Mar-78	irrig intake
797.5	SD	Aug-78	Section 32 structure*
797.4	SD	Mar-78	irrig intake
797.1	SD	Dec-91	bank stab
795.7	SD	May-83	bank stab
795.7	SD	Mar-94	bank stab
795.5	SD	Aug-78	Section 32 structure
795.3	SD	Mar-94	Section 32 structure
795.1	SD	Apr-83	Section 32 repair
794.9	SD	Aug-95	bank stab
794.8	SD	Nov-95	bank stab
791.8	SD	Jul-92	bank stab
791.4	SD	Jul-92	bank stab
791.3	SD	Aug-92	bank stab
790.4	SD	May-89	dredge fill
790	NE	Jul-96	boat dock
789.3	SD	Dec-81	bank stab
789.3	SD	Jun-81	irrig intake
787.1	SD	May-95	bank stab
787	SD	Dec-96	bank stab
787	SD	Jul-86	boat ramp
786.7	SD	Dec-96	boat ramp
786.35	SD	Mar-83	bank stab
786.3	SD	Aug-81	bank stab
786.25	SD	Mar-83	bank stab
786.1	SD	Jun-82	bank stab
786	SD	Mar-97	bank stab
786	SD	Feb-80	Section 32 structure
785.91	SD	Jun-84	bank stab
785.91	SD	Jan-97	boat ramp

* The Section 32 projects are each a series of structures within a 4-mile area, which explains why repair river miles may vary from original river miles.

404 Permits Within MNRR

785.9	SD	Apr-90	boat dock
785.9	SD	May-96	boat ramp
785.8	SD	Sep-95	bank stab
785.7	NE	Apr-85	boat ramp
785.68	SD	May-83	boat ramp
785.6	NE	Sep-95	bank stab
785.6	SD	Aug-96	bank stab
785.57	NE	Oct-95	bank stab
785.2	SD	Jul-90	boat ramp
785	NE	Aug-95	bank stab
785	NE	Oct-95	bank stab
785	SD	Dec-96	bank stab
784.95	SD	Feb-83	irrig intake
784.75	SD	Dec-81	irrig intake
784.7	SD	Oct-85	irrig intake
784.61	SD	Aug-81	boat ramp
784.61	SD	Nov-81	irrig intake
784.5	SD	Oct-92	boat dock
784.2	NE	Jun-96	bank stab
784	NE	Aug-95	bank stab
784	NE	Aug-96	bank stab
783.9	NE	Oct-93	bank stab
783.25	SD	Mar-97	bank stab
783	SD	Jun-96	bank stab
782.5	SD	Feb-80	Section 32 structure
782	SD	Jul-95	bank stab
781.75	SD	Apr-97	bank stab
781.25	NE	Oct-96	bank stab
781.25	NE	Jul-95	boat dock
781.2	SD	Jul-87	bank stab
781.1	SD	Jan-97	bank stab
780.85	SD	Jun-95	bank stab
780.85	SD	May-82	bank stab
780.85	SD	Jun-92	boat ramp
775	NE	Jul-79	Section 32 structure
775	NE	Nov-93	boat ramp
774.5	NE	Jul-76	irrig intake
774.1	SD	Feb-95	irrig intake
774	SD	Jun-96	bank stab
772	SD	Feb-80	Section 32
771.55	SD	Mar-94	Section 32 repair
771.1	SD	Mar-94	Section 32 repair
769.8	SD	Mar-96	boat dock
769.5	SD	Feb-80	Section 32 structure
769.3	SD	Aug-85	Section 32 repair
769.3	SD	Jun-76	boat dock
768.85	SD	Jul-95	bank stab
768.85	SD	Feb-81	boat dock
768.8	SD	Jul-95	bank stab

* The Section 32 projects are each a series of structures within a 4-mile area, which explains why repair river miles may vary from original river miles.

404 Permits Within MNRR

768.68	SD	Sep-77	Section 32 structure
768.6	NE	May-78	bank stab
768	NE	Aug-95	bank stab
768	NE	May-81	irrig intake
767	SD	Sep-77	Section 32 structure
765.95	SD	Jun-78	road
763.4	SD	Dec-86	boat ramp
762.8	SD	Sep-77	irrig intake
757	NE	Mar-93	bank stab
757	SD	Nov-95	bank stab
757	SD	Nov-79	bank stab
755.5	SD	Jun-89	irrig intake
755.2	SD	Mar-94	Section 32 repair
755	SD	Mar-94	Section 32 repair
754.85	SD	Jan-92	boat dock
753.6	SD	Mar-83	Section 32 structure

* The Section 32 projects are each a series of structures within a 4-mile area, which explains why repair river miles may vary from original river miles.

APPENDIX E: U.S. FISH AND WILDLIFE LETTER

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
420 South Garfield Avenue, Suite 400
Pierre, South Dakota 57501-5408

June 25, 1998

MEMORANDUM

To: Director, National Park Service (Attention: Lynn Peterson)
Denver, Colorado

From: ACTING Field Supervisor, Ecological Services
South Dakota Field Office; Pierre, South Dakota

Subject: Continued Informal Consultation on the General Management Plan/ Environmental Impact Statement for the 59-Mile Section of the Missouri National Recreational River

This is in reference to your letter of June 17, 1998, regarding the subject document which requested an extension of 90 days on the list of endangered, threatened, and candidate species that appears as Table 5.

The Fish and Wildlife Service (Service) has reviewed the subject list and finds that there have been no changes since our previous letter of March 17, 1997. Accordingly, the previous list will remain applicable for the following 90 days. The Service continues to concur with your assessment that implementation of the General Management Plan will not adversely affect threatened and endangered species which may occur within the project area. We would like to alert you to one potential change in the list which may occur sometime in October or November of 1998. The Topeka shiner is present in both the Vermillion River and James River watersheds and is currently listed as a candidate species. We anticipate that this species will be listed as endangered and may occur within the project area but only as an accidental occurrence. The Service will advise the National Park Service accordingly after listing through the informal consultation process.

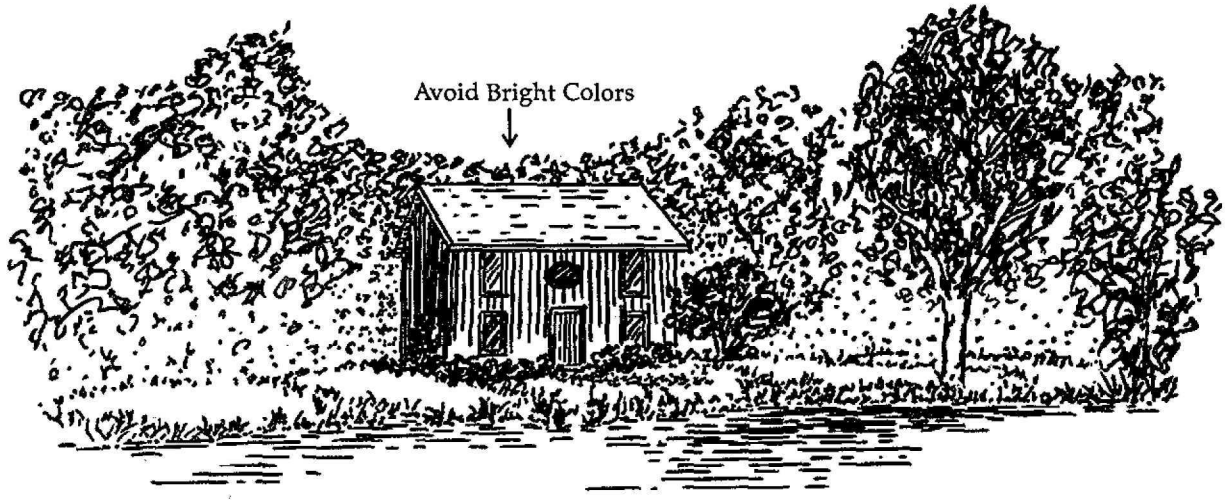
Also, it is important to remember that the Service has issued a jeopardy biological opinion to the Corps of Engineers regarding the adverse impacts of their Missouri River operating plans on threatened and endangered species. Once a jeopardy opinion has been issued, section 7 may preclude further activities in that ecosystem which may adversely affect those species. Therefore, a determination of an adverse affect on these species as a result of implementing the Missouri National Recreational River General Management Plan would require formal consultation and could result in a jeopardy biological opinion.

If you have further questions concerning section 7 consultation, please feel free to contact Nell McPhillips of this office at (605) 224-8693, Extension 32.

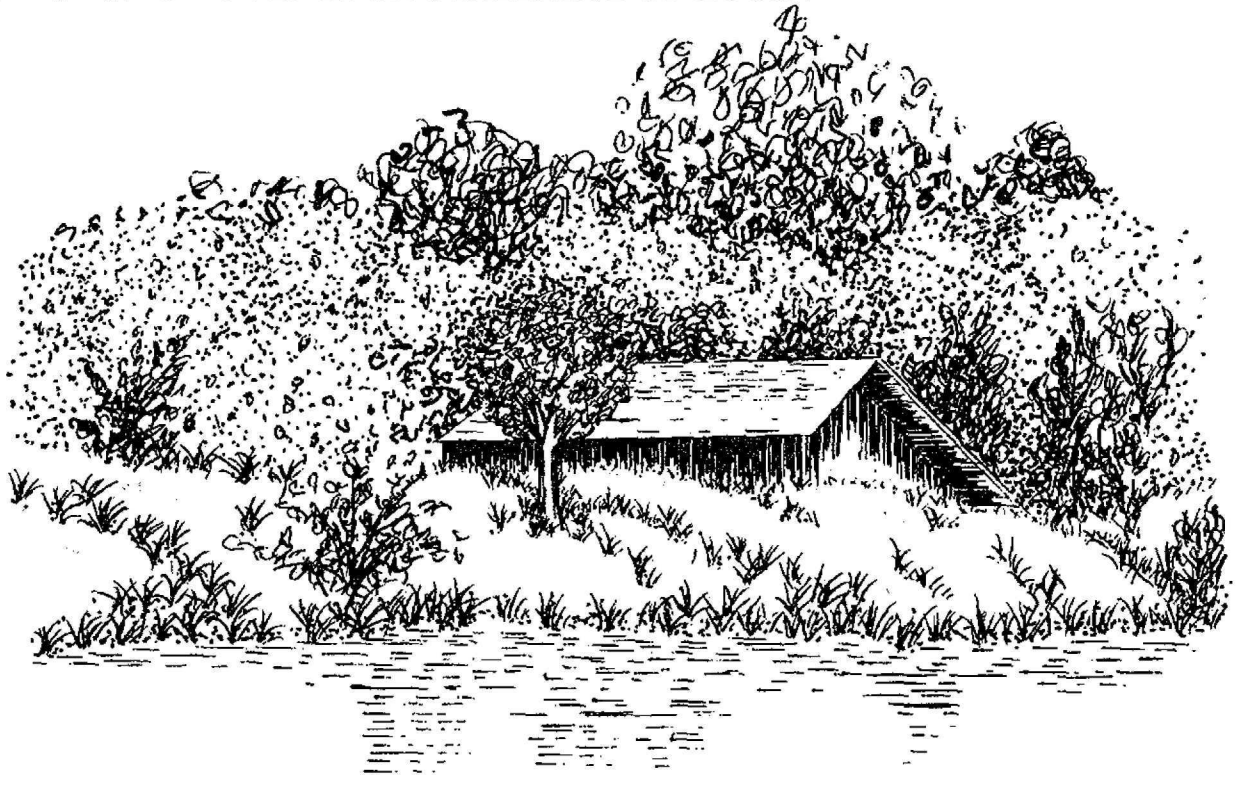
Scott Larson

cc: Field Supervisor, ES; Grand Island, NE

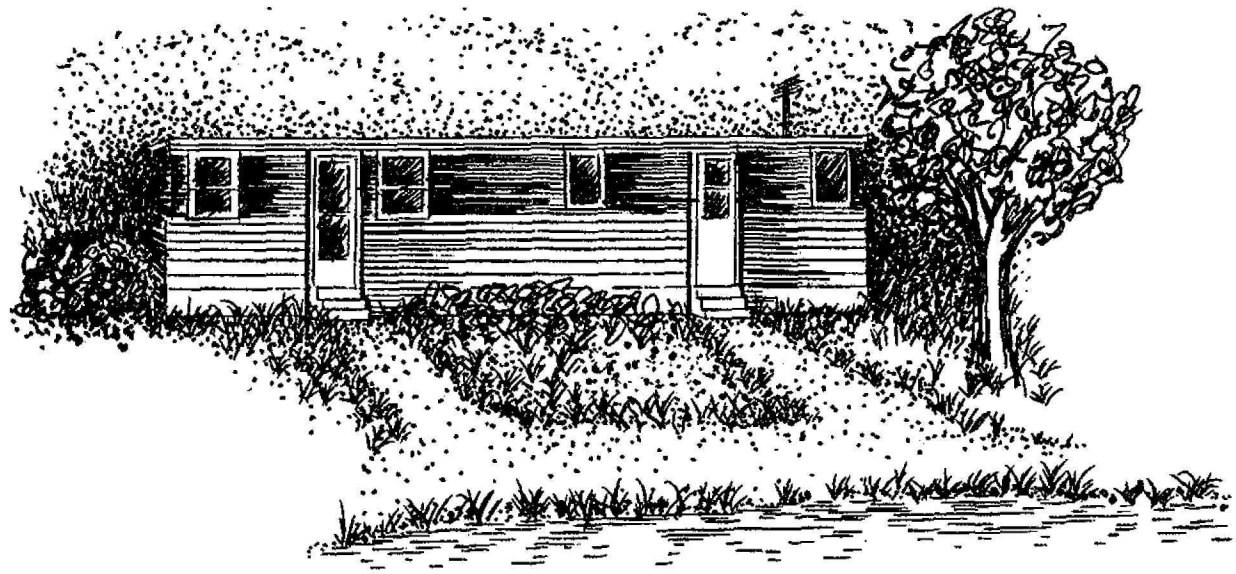
INAPPROPRIATE VEGETATION SCREENING OF HOUSE



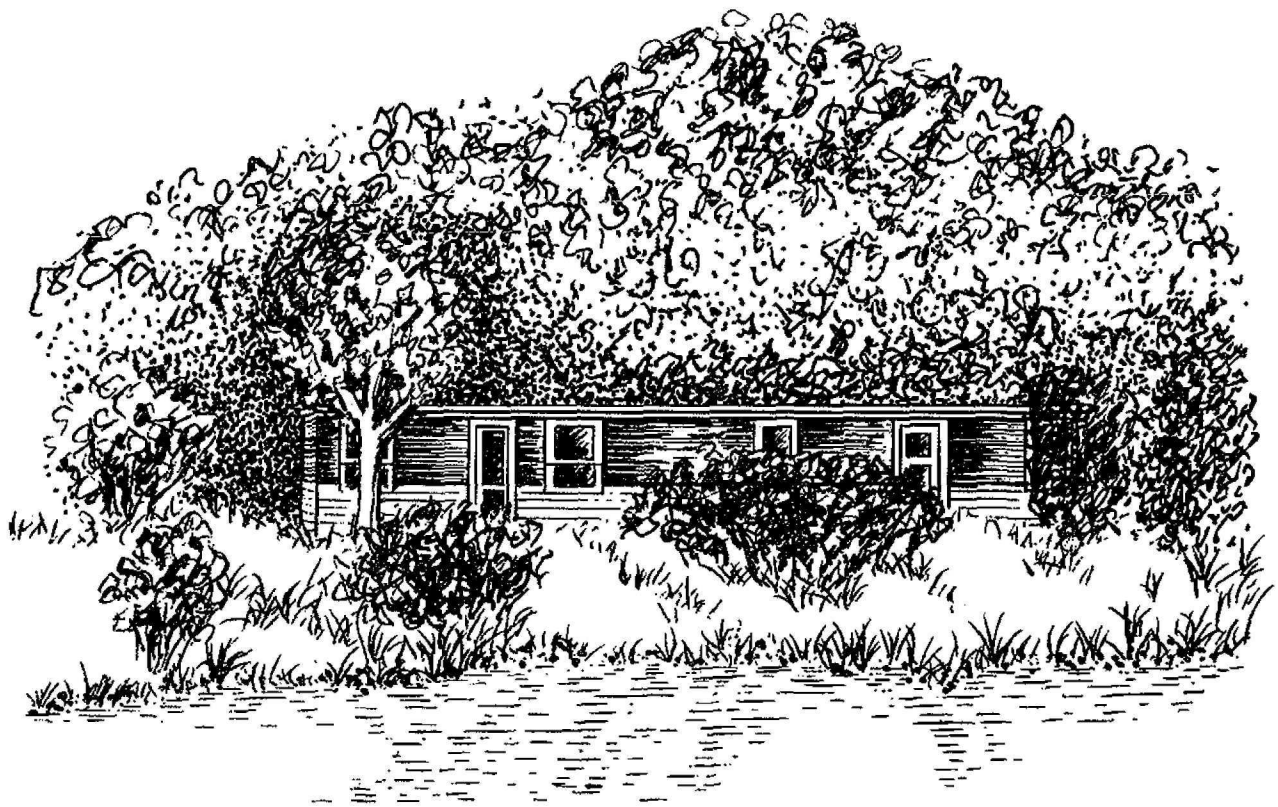
PREFERRED VEGETATION SCREENING OF HOUSE

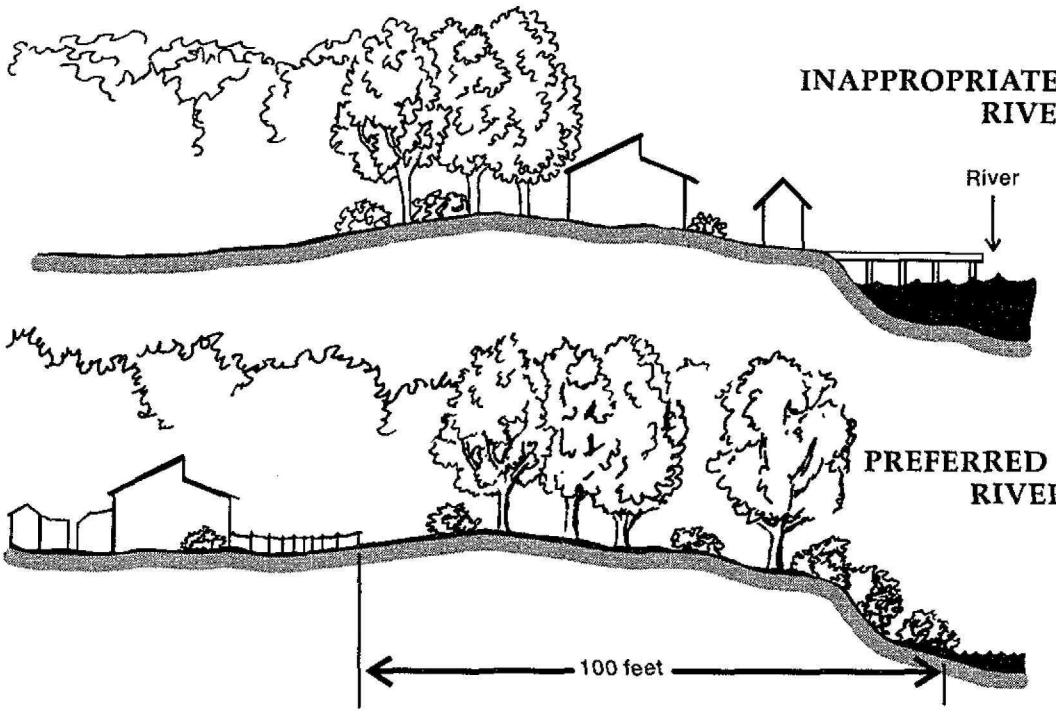


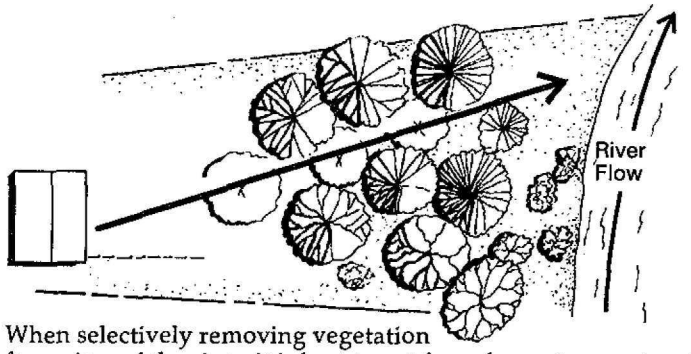
NEGATIVE VEGETATION SCREENING OF TRAILER HOUSE



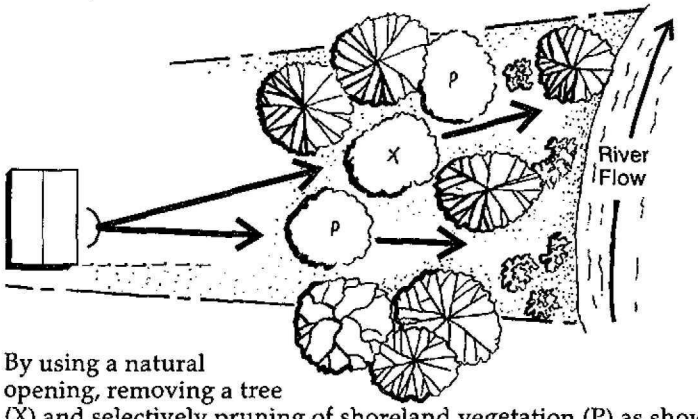
PREFERRED VEGETATION SCREENING OF TRAILER HOUSE







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.

GLOSSARY

100-year floodplain – an area of land where the probability of inundation is once in 100 years

Access – a way of approaching, entering, or using an area; river access includes boat ramps and canoe launches

Adjacent wetlands — the river and its islands and adjacent wetlands within the ordinary high water lines; under the influence of groundwater or high water, such as areas that would be wet during high releases from dams (see also Wetlands).

Agricultural land — land used for farming and ranching

Agricultural landscape — land used for farming and ranching, and the associated structures, vegetation, and livestock that comprise the scene

Backwater (area) — (1) a place where water has moved backward or has been held back or (2) stagnant water in a small stream or inlet

Biological hot spots — small, intact riverine habitat patches that provide critical functions for a segment of the ecosystem; could include deep pools for fish habitat, a cold-water tributary junction with a small thermal refuge, or a small section of complex healthy riverine habitat

Biological resources — includes all of the plants and animals and their habitat

Biotic refuges or refugia — areas with relatively undisturbed, healthy habitat and processes

Bluff – a topographic feature such as a hill, cliff, or embankment with steep slopes rising above the river corridor

Bluff line – the transition point between the steep bluff face and more level terrain at the top of a bluff

Buffer – a method of minimizing the impact of adjacent activities by the use of setbacks, vegetation screening, and other means

Carrying capacity — the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions that complement the purposes of the park units and their management objectives

Commercial development – the creation or placement of buildings or facilities for business purposes, principally for the sale lease, rental, or trade of products, goods, or services

Corridor – a long, relatively narrow area that is centered on a linear feature, such as a river

Cultural landscape — a geographic area, including both natural and cultural resources, associated with a historic event, activity, or person

Cultural landscape resources — the components of a landscape that, taken together, provide a scene evocative of a specific culture

Cultural resources – includes archeological resources, cultural landscapes, historic buildings and structures, museum objects and archival materials, and ethnographic resources

Design guidelines — recommendations for scale, form, materials, color, and texture; addresses the aesthetic issues and blending of new development into the surroundings

Development — includes buildings and recreational facilities, excluding only those associated with agricultural and public land. Platting land is not development.

Development zone — area in which buildings, recreational facilities, or other development is encouraged

Endangered and threatened species — those plants and animals that are listed by the U.S. Fish and Wildlife Service and offered protection under the Endangered Species Act; also state-listed species that are protected under state law

Environmental education — activities with organized groups (such as schools, scouts, community groups) or seminar participants; designed to develop understanding, appreciation, and caring for the natural environment

Ethnic group — a cultural group who shares common values, beliefs, and customs

Feed Lot — A permanent confinement area for animals in buildings, pens, or areas that normally are not used for raising crops or grazing.

GIS — geographic information system, a computerized system for storing, analyzing, and displaying geographically oriented data, such as vegetation, topography, roads, cultural sites, and land use

Historic properties — any prehistoric or historic district, site, building, structure, or object included on, or eligible for inclusion on the National Register of Historic Places, including artifacts, records, and material remains related to such a property or resource

Hydrologic regime – the flow amount and timing/pulsing of water releases from the main stem reservoirs along the Missouri River.

Interpretation — educational activities designed to reveal meanings and relationships through presentations, original objects, first-hand experience, or graphic illustrations; activities or media designed to help people understand, appreciate, and care for the natural and cultural environment

Interpretive media — visual, auditory, and textual products (such as exhibits, films, videos, books, pamphlets) designed to provide interpretation and education

Lacustrine — standing bodies of water, marshes, etc.

Law enforcement — the act of ensuring that laws or regulations are followed, including rules for management of visitor use and resource protection

Marina - A dock or basin providing secure moorings for motorboats and other small craft. A marina may offer supply, repair, and other boating related facilities.

Monitoring — a program established to track the condition of a resource over time or evaluate the effectiveness of implementation of plan elements

Natural area — an area that visually exhibits primarily nonmanufactured qualities, such as a forest or wetland

Natural landscape – the natural scene with little modification by man; includes land, water, sky, vegetation, wildlife, and natural processes such as weather and erosion

Natural materials – naturally occurring substances, not manufactured; stone rather than brick, wood rather than plastic

Natural resources — assets or values related to the natural world, such as plants, animals, water, air, soils, geologic features, fossils, and scenic vistas; elements of the environment not created by humans

Nonpoint source pollution — pollution from a broad area, resulting from such things as agricultural pesticides and fertilizers or from urban activities (oil, salt, etc.).

Open space — includes public and private land that is retained as primarily undeveloped; includes land devoted to active or passive recreational use or land retained for visual or natural resource protection purposes

Ordinary high water line – the line on the shore established by the fluctuations of water; indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris.

Oversight — periodic review of a program's effectiveness or the success of plan implementation to determine if objectives are being met; could take place monthly, quarterly, annually, or less often based on the need

Oxbow – a U-shaped bend in a river or stream, which can become largely cut off from the main channel and become a backwater area.

Point-source pollution — pollution from a single source, such as a sewage treatment plant discharge

Prime farmland – one of several kinds of important farmland; best suited to food, feed, forage, fiber, and oilseed crops; can be cultivated land, pasture, or woodland; does not include urban or developed or water areas

Recreational resources — those elements of the environment that are used for outdoor recreation purposes; includes natural and manmade features such as rivers, lakes, parks, and trails

Residential and other private developed areas — areas that include buildings or facilities for residential living or other private purposes

Resource — something of value to be preserved, protected, and enhanced, such as significant historical, recreational, scenic, cultural, natural, economic, and scientific resources

Resource management — the art or manner of treating, directing, or handling resources

Restore — to bring back or emulate natural processes and features by correcting detrimental, human-included habitat alterations

Restoration — the act of restoring

Riparian area (or streamside vegetation buffer zone) – (1) land adjacent to streams where vegetation such as willow and cottonwood is strongly influenced by presence of water or (2) the transition zone between the flowing water and terrestrial ecosystems

River — (1) a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes or (2) a natural stream of water larger than a creek and emptying into an ocean, a lake, or another river

River area — for a river study, that portion of a river authorized by Congress for study; includes at least .25 mile from each bank; for designated river, the river and adjacent land within the authorized boundaries

Riverine — pertaining to a river or formed by the action of a river

Riverine-riparian ecosystem — includes the processes and elements that interact throughout the entire riverine system; generally includes the 100-year floodplain

Riverine system— the entire river network, including tributaries, side channels, sloughs, and intermittent streams

Scenic easement — the right to control the use of land within the authorized boundaries

Sensitive natural areas — includes shorelines, floodplains, wetlands, endangered or threatened species habitat, steep slopes, and bluff lines

Significant resources – the area's important resources as listed in the significance statements, including scenic vistas; habitat for endangered, threatened, and rare species; exceptional fish and wildlife; scientifically important fossil deposits; historic and prehistoric cultural resources; visitor use and access areas; and areas that would be wet under high releases from dams

Stewardship — care of resources to preserve and protect them for future generations

Upland (1) above the floodplain — not to be wetted, (2) land elevated above other land, as above land along a river

Undeveloped — Land left in a natural state; unplowed, uncultivated, without roads, buildings, or other manufactured structures

Watershed — (1) a ridge or stretch of high land dividing the areas drained by different rivers or river systems, (2) the area drained by a river or river system

Watershed or catchment basin — the entire area or basin drained by a distinct stream or riverine system, physically separated from other watersheds by ridge–top boundaries

Watershed ecosystem — all of the elements and processes that interact within the catchment basin or watershed, including the riverine-riparian ecosystem.

Wetland — those areas that are inundated or saturated often and long enough by surface or groundwater to support vegetation adapted for life in wet soil; includes swamps, marshes, bogs; upper limit is the boundary between land that is flooded or saturated at some time during the growing season each year and land that is not flooded.

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The U.S. Army Corps of Engineers (Corps) is a vital part of the Army and the engineer team of choice responding to our Nation's needs in peace and war. The Corps has been a significant force in the history of modern development in the United States. Corps missions include support to military installations and military construction; hazardous, toxic and radioactive waste cleanup; emergency management; and water resources management. The Corps water management mission includes the operation and maintenance of the Missouri River Main Stem Reservoir System for flood control, irrigation, navigation, hydropower, recreation, fish and wildlife, water supply, and water quality.

As the nation's principal conservation agency, the Department of the Interior has 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.

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