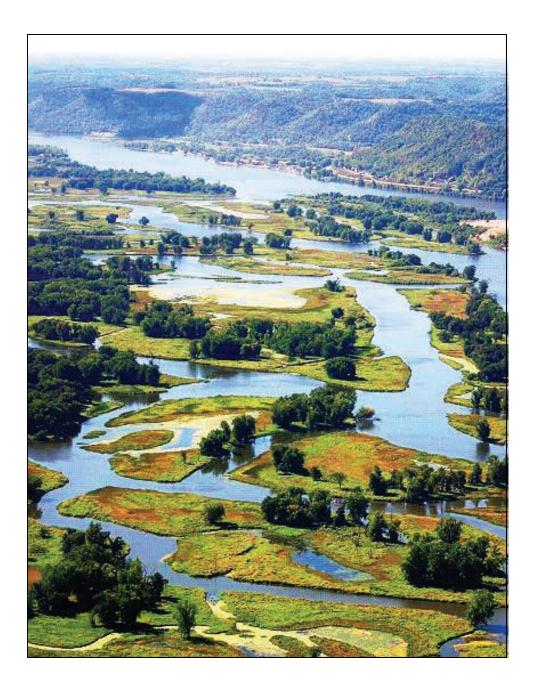
UPPER MISSISSIPPI RIVER LAND USE ALLOCATION PLAN





US Army Corps of Engineers ® St. Paul District



MASTER PLAN FOR PUBLIC USE DEVELOPMENT AND RESOURCE MANAGEMENT PART 1 JANUARY 2011

TABLE OF CONTENTS

|--|

PREFACE	. 1
 SECTION 1 PROJECT DESCRIPTION, REVIEW, AND ANALYSIS. General Project Information Project Authorization Project Purposes Overview of the Project Area. Cooperative Agreement Between the Corps of Engineers and the Fish and Wildlife Service Upper Mississippi River National Wildlife and Fish Refuge 	. 5 . 5 . 6 . 7 . 9
 Comprehensive Conservation Plan Working Relationship With Other River Resource Agencies Channel Maintenance Management Plan 	. 12
 SECTION 2 PUBLIC LAWS AND OTHER POLICIES Laws Applicable to Resource Development and Management Other Federal Statutes Executive Orders Interagency Agreements Corps of Engineers Regulations 	. 17 . 19 . 21 . 21
 SECTION 3 CORPS OF ENGINEERS OPERATING GUIDELINES Project Goals and Objectives Corps of Engineers Environmental Operating Principles 	. 25
 SECTION 4 LAND USE ALLOCATION. Policy Considerations Private Use of Federal Lands Management of Private Use Past Commitments-Grandfathering Definition of Land Use Categories Land Use Allocation 	29 29 30 30 30 31
SECTION 5 ENVIRONMENTAL STEWARDSHIP • Natural Resources Analysis • Forest Management • Cultural Resource Management • Shoreline Protection Projects • Environmental Management Program • Fish and Wildlife Management • Prairie Restoration and Maintenance • Revegetation of Dredged Material • Vegetation and Pest Control • Rare, Threatened, and Endangered Species • Navigation and Ecosystem Sustainability Program • Pool Plans	. 37 . 38 . 38 . 41 . 41 . 41 . 42 . 42 . 42 . 43 . 43 . 44
• Water Level Management	

SECTION 6 CORPS OF ENGINEERS RECREATION PROGRAM	
• General	
Developed Recreation Areas	.9
 Recreation Sites Leased From the Corps or Managed by the 	
Fish and Wildlife Service	0
Recreation Areas and Access Points Along the Mississippi River	
• The Recreation Work Group	
• Interpretive Programs	
SECTION 7 LAND AND WATER MANAGEMENT	3
Shoreline Management (And Other Land Use Delegations)	
• Outgrants on Project Lands	
Boundaries	
	Ŭ
SECTION 8 PUBLIC INVOLVEMENT SUMMARY	7
Public Involvement Summary	
	<i>,</i>
SECTION 9 ENVIRONMENTAL ASSESSMENT	1
• Environmental Compliance Review	
	5
ATTACHMENTS	0
Attachment 1: Limited Development Areas	
Attachment 2: Grandfathered Areas	
Attachment 3: Recreational Access Inventory By Pool	3

PREFACE

In the early 1980's the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers were engaged in writing new Master Plans for the federally owned lands within the Upper Mississippi River basin and within the Corps St. Paul District. Through several coordination meetings it was decided that if the two agencies carried out their planning jointly, the policies established would be much more compatible and the general public would be able to review and comment on all federal policy at one time. It was then that the decision was made to produce a joint document called the Land Use Allocation Plan (LUAP) and as a result the first LUAP was approved by the two agencies in September of 1983.

Recognizing that the Upper Mississippi River is a multi-purpose resource, the LUAP seeks to balance and enhance fish and wildlife management and recreation management actions while maintaining the river's navigation system. Although state lands are shown on the new LUAP maps, policies outlined in this plan are limited to the federal land base. All federally owned acres above normal pool levels are allocated to one of five land use categories as shown in the table below.

	СОЕ	FWS	Total Acres
Project Operations	811	188	999
Recreation Intensive Use	718	0	718
Recreation Low-Density	698	237	935
Natural Area	263	4,685	4,948
Wildlife Management	21,641	39,035	60,676
Total Acres	24,131	44,145	68,276

Table 1. Total acres and land use allocations of Corps of Engineers (COE) and Fish and Wildlife Service (FWS) lands

The original LUAP produced in 1983, used USGS quad sheets as the base map and as a result the islands and shoreline shapes shown on the maps result from pre-1983 air photos. Nonetheless this was the first time that river managers and the general public could look at river maps and instantly know which agency purchased the land and to what category it had been allocated. Because there are continual requests from the general public and from commercial enterprise to use public land for a certain activities, the LUAP is used to guide the federal agencies in determining what types of public uses and to what extent they should be allowed on federal lands.

Since the 1980's computers have entered the picture and geographic information systems (GIS) software has been developed so that the newest air photos can be used and maps can be displayed on a computer, served out to the general public on the internet and generally made available world wide. Although all the text in the LUAP document has been updated and established policies reviewed, there are no new policy changes made or suggested in this document. That was the intent. The main reason for updating the document is to provide updated maps using the newest available air photos.

The LUAP does not establish policy for the water surface areas of the Upper Mississippi River. These policies are outlined in other plans such as the Upper Mississippi River National Wildlife and Fish Refuge Comprehensive Conservation Plan, and the Corps Shoreline Management Plan. Because so much of the federal land along the river is cooperatively managed by the Corps of Engineers and the Fish and Wildlife Service the two agencies have worked together in the preparation of this land use plan so that future management decisions are made cooperatively and in accordance with established policy.

SECTION 1

PROJECT DESCRIPTION, REVIEW, AND ANALYSIS

1. PROJECT DESCRIPTION, REVIEW, AND ANALYSIS

GENERAL

1.01 The 9-foot navigation channel within the St. Paul District, Corps of Engineers, is an existing operational project consisting of 13 locks and dams, supplemented by maintenance dredging that facilitates navigation on the upper reaches of the Mississippi River System. In addition to the Upper Mississippi itself, the project includes portions of the Minnesota, St. Croix and Black Rivers (see figure 1-1). Each lock and dam complex creates a flat water pool that is regulated to maintain water levels required to accommodate navigation. The St. Paul District also dredges within these pools, as necessary, to maintain a channel deep enough for commercial tows with barges drafting nine feet of water.

1.02 Each pool area contains varied natural and recreation resources, often with high scenic, educational, scientific, wildlife, and cultural values. Protection and proper use of these resources are major concerns of the Corps of Engineers.

PROJECT INFORMATION

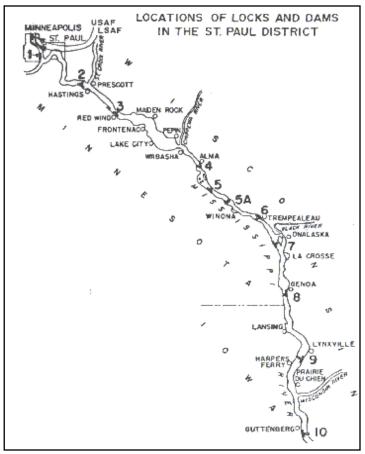
Land Use Allocation Plan Study Area

1.03 The portion of the Mississippi River covered in this plan begins at Minneapolis, Minnesota (mile 854.0), and ends just below Guttenberg, Iowa (mile 614.0). From mile 870.0, the river flows generally southeast to the mouth of the St. Croix (mile 811.3). From that point, the Mississippi continues southeast, forming the Minnesota-Wisconsin boundary between miles 811.3 and 673.8 and the Wisconsin-Iowa boundary between miles 673.8 and 614.0.

PROJECT AUTHORIZATION

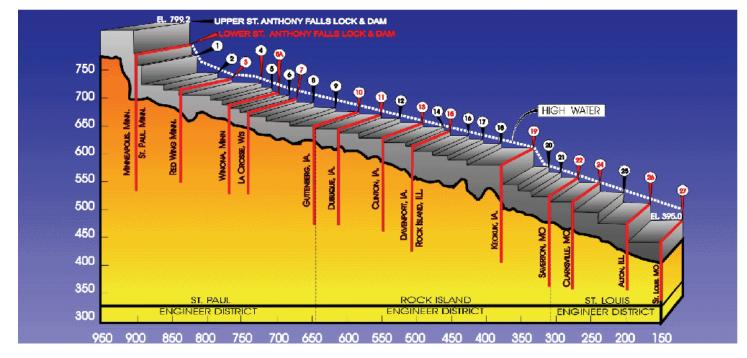
1.04 As early as 1824, the Federal Government recognized navigational problems on the Mississippi River. At that time, Congress authorized the Corps of Engineers to remove snags, shoals, and sandbars; to excavate rock in several reaches of rapids; and to close meandering sloughs and backwaters in order to confine flows and create adequate depths for navigation during low-water periods.

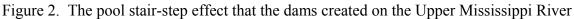
Figure 1-1. Project location



1.05 The first comprehensive modification of the river for navigation was authorized by the River and Harbor Act of June 18, 1878 creating a 4 1/2-foot channel from the mouth of the Missouri River to St. Paul, Minnesota. The Corps maintained this channel by constructing dams at the Mississippi River headwaters (impounding water to supplement low flows), and by constructing bank revetments, wing dams, closing dams, and longitudinal (riverbank) dikes. In 1890, the 4 1/2-foot channel was extended to Minneapolis, requiring removal of boulders and dredging of sandbars.

1.06 The River and Harbor Act of March 2, 1907, authorized a 6-foot channel. The additional depth was obtained primarily by constructing more wing dams (low rock and brush structures extending out from shore into the river to constrict low-water flows). Usually the shore opposite the wing dams was protected against





erosion by rock riprap. Construction of Lock and Dam 1 in 1917 and of Lock and Dam 2 in 1930 further improved the 6-foot channel.

1.07 The River and Harbor Act of July 3, 1930, authorized the 9-foot channel navigation project on the Upper Mississippi. This act approved construction of a system of locks and dams plus supplemental dredging between Minneapolis and the mouth of the Missouri River. The 9-foot channel from Pool 1 through Lock and Dam 10 was operational in 1938. In 1937, Congress authorized a 4.6-mile extension of the project at the upstream end in Minneapolis, past the Falls of St. Anthony. The Lower St. Anthony Falls Lock and Dam complex was completed in 1959, and the Upper St. Anthony Falls Lock and Dam was completed in 1963.

PROJECT PURPOSES

1.08 The 9-foot channel project was originally constructed for a single purpose – to provide sufficient water depth for river traffic during low flows in the river. However, in addition to this original navigation purpose, the project has improved the desirability of the Upper Mississippi River for a broad spectrum of outdoor recreation by providing more stable water levels where formerly the river fluctuated substantially with every change in flow. Throughout the year, the locks and dams now provide a series of slack-water pools that annually attract thousands of people who fish, swim, boat, hunt, or picnic. The number of visitors to the river increases each year, and each autumn finds more and more people who enjoy viewing the wonderful sight of a fall migration. Wildlife also benefits from the project because the backwater areas created by the dams provide good habitat for feeding, spawning, and nesting.

1.09 A common misconception is that the Mississippi River lock and dam system was constructed to control floods, but their function for flood control is very limited. Figure 1-2 illustrates the pool stair-step effect that the dams created on the Upper Mississippi. Note that flooding still occurs (shown by the "High Water" line) even with the dams in place.

1.10 Before the Corps of Engineers constructed the 9-foot channel navigation project, the river would occasionally have so little water that navigation was nearly impossible, backwater areas would dry up, and mud flats would extend out from the riverbanks. Since the locks and dams were built, the water level has been

relatively stable, and would only be lowered in the case of a planned water level reduction intended for environmentally beneficial purposes such as increasing vegetative diversity within the pool above the dam.

1.11 Although navigation was the initial purpose of the 9-foot channel project, Congress has since authorized the development of recreational facilities, protection of forest resources, and required the consideration of fish and wildlife conservation at water resources projects. The Flood Control Act of 1944, as amended, authorized the Corps of Engineers to construct recreational developments at water resources projects. In 1958, the Fish and Wildlife Coordination Act required that fish wildlife conservation receive consideration equal to that of other project purposes and be coordinated with other features of water resource development. In 1960 Congress enacted the Forest Cover Act which provides the authority for multiple use forest management, or other vegetative cover management on project lands and waters. In accordance with these laws, the protection and enhancement of the environmental value of project lands along the Upper Mississippi River is a major goal of the Corps of Engineers.

OVERVIEW OF PROJECT AREA

1.12 The Mississippi River headwaters are in north central Minnesota, a relatively flat area where streams meander through shallow valleys. This part of the Mississippi is too shallow for commercial navigation. But where the Mississippi reaches Minneapolis in central Minnesota, it flows in a narrow valley with steep bluffs on either side. Corps of Engineers locks and dams in this valley allows river traffic to reach this area. As a result, Minneapolis is the head of navigation on the Mississippi. This area marks the beginning of the Land Use Allocation Plan (LUAP) project area.

1.13 The gradient of the riverbed where the Mississippi flows into Minneapolis is the steepest on the entire river. Consequently, the locks in this area have the greatest lifts (difference in water level between upstream and downstream sides of the lock) of all the locks in the Mississippi River navigation system. In fact, the three uppermost locks, Upper and Lower St. Anthony Falls and Lock and Dam 1, have a greater combined lift than the combined lift of the nine remaining down stream locks in the St. Paul District.

1.14 The Minneapolis-St. Paul metropolitan area is the most highly urbanized area on the Upper Mississippi River. This metropolitan area has a considerable impact on all facets of the river system. Access to the river is often difficult because of the bluffs and because much of the river's edge is industrialized and privately owned. As a result of the extensive development, the quality of the water is generally below the water quality of the river as a whole. Water quality further deteriorates in this area below the Mississippi's confluence with the Minnesota River – a river that carries a large sediment and nutrient load from the farmlands to the west.

1.15 The Minnesota River enters the Mississippi between Minneapolis and St. Paul. Thirty-three miles downstream from the mouth of the Minnesota River, the St. Croix River joins the Mississippi in Pool 3. Unlike the Minnesota River, the St. Croix is a relatively clean river that drains Minnesota and Wisconsin from the north. Consequently, the water quality of the Mississippi improves below the mouth of the St. Croix.

1.16 The Minnesota and St. Croix Rivers are important to the Mississippi River navigation system because they are tributaries that the Corps maintains (in part) for commercial river traffic. However, there are no Federal lands along these tributaries. In fact, there are very few Federal lands upstream from Lock and Dam 2 (near Hastings, Minnesota). Consequently, this area does not figure significantly in the allocation of Federal land use as described in this study.

1.17 Downstream of St. Paul, the Mississippi spreads into a wide floodplain, developing an extensive system of lakes and sloughs. The Mississippi continues to widen until it reaches Lake Pepin, a 22-mile long natural river-lake approximately 2 miles wide, in Pool 4. This lake ends at the delta formed by the Chippewa River (a contributor of large volumes of coarse sediment visible for many miles downstream of its mouth).

1.18 Below the Chippewa River, the Mississippi again forms a main channel with a wide floodplain of extensive backwaters. The climate of the Mississippi River Valley downstream from Pool 4 is moderated because the floodplain is only about 650 feet above sea level and because it is flanked by bluffs that rise as high as 650 feet above the valley floor. Winters are less severe in the river community of Winona, Minnesota, for example, than they are in the Rochester, Minnesota, area only about 45 miles to the west.

1.19 Further downstream, in Pool 7, the floodplain contains many ponds and lakes such as Lake Onalaska. Waters of the Black River flow into Lake Onalaska. A portion of Lake Onalaska passes through Onalaska Dam and Spillway. This water enters the Mississippi River downstream near La Crosse, Wisconsin.

1.20 From Pool 7 to the southernmost boundary of the St. Paul District at Guttenberg, Iowa, the river flows through a valley 2 to 3 miles wide between weathered bluffs, crags, and pinnacles. Terraces, usually narrow and sometimes discontinuous, can be seen at the bases of the bluffs where they have provided places for people to settle and for towns to develop.

1.21 Below Prairie du Chien, Wisconsin, the Wisconsin River flows into the Mississippi River, 16 miles above Lock and Dam 10. Lock and Dam 10, at Guttenberg, Iowa, marks the end of the St. Paul District portion of the Upper Mississippi River.

1.22 In most of the 13 pools in the study area, three distinct zones occur. The upper end of each pool is in essentially the normal river condition, where impoundment did not raise the water levels to any extent. In this portion of the pools, marsh development is limited, and the old condition of deep sloughs and wooded islands is found. In the middle of each pool, impoundment backed up water over islands and old hay meadows, spreading the river out over large areas of comparatively shallow water. The best marsh development occurred in the middle portion of the pools. Immediately above each dam, the water was impounded to a depth that precluded marsh development. The mid and lower pool areas are now the focus for habitat rehabilitation through the Operations and Maintenance (O&M), Environmental Management (EMP), and Navigation Ecosystem Sustainability (NESP) programs.

1.23 These lake-type pools caused a change from predominantly fast-water fish species such as smallmouth bass to fishes whose environment is pond-like, such as largemouth bass, bluegills, crappies, carp, buffalo, and northern pike. The dams also slowed the current and increased silt deposition. The sediment sometimes covers the sand and gravel bars necessary for feeding and breeding of such fish as smallmouth bass and walleyes. There has been a corresponding increase of fish that are tolerant of mud bottoms.

1.24 Since many of the characteristic birds of the river valley are migratory, the study area is of national and international significance. In addition, the Mississippi River and its tributary valleys are a natural route over which the non-migratory or semi-migratory species may expand their ranges. The river valley forms a wildlife corridor between the Gulf of Mexico and the Great Lakes Region. The mammalian species are generally representative of eastern (Alleghenian) types, with some influence of southern (Carolinian) and northern (Canadian) species.

1.25 Floodplain forests are the major terrestrial vegetation type within the project area. Recent forest inventories show a heavy dominance by silver maple. Other common tree species of lesser frequency include eastern cottonwood, green ash, black willow, river birch, American elm, box elder, hackberry, swamp white oak, black oak and bitternut hickory. The ground cover within these forests is most often composed of herbaceous plants, but can include small tree species, saplings and shrubs. Willow communities tend to be present on newly-formed point bars, channel borders and along backwater lake margins. Disturbed sites with moist sandy soil are often dominated by eastern cottonwood. Without additional disturbance, silver maple and other mixed species often become established within and eventually replace the cottonwood and willow communities. On ridges and more elevated sites within the floodplain where flood heights are generally less

and the depth to normal groundwater is greater, the mixed silver maple community can also include oaks, hackberry and hickory. A few of these sites may be dominated by swamp white oak. Natural regeneration of these floodplain forests is quite limited. Several managed sand prairies occur within the project area and contain a diverse mix of native grass and forbs species. The invasive species reed canary grass has become well established, especially in mid-pool sections of the project area where it tends to out-compete trees and other vegetation. Other invasive terrestrial plant species of concern include garlic mustard and buckthorn.

Pool	Length (miles)	River Miles	Average Elevation	Surface Area (acres)	Shoreline Miles	Corps Fee Purchased	Corps Fee Above Pool
USAF	10.9	853.8-864.7	798.3	974	25.0	10	9
LSAF	0.4	853.4-853.8	750.0	51	1.5	3	2
1	5.7	847.7-853.4	725.1	546	11.6	33	7
2	32.5	815.2-847.7	687.2	9,652	110	1,219	66
3	18.3	796.9-815.2	675.0	17,950	37.1	5,605	2,359
4	44.2	752.7-796.9	667.0	35,198	155.0	2,900	1,800
5	14.6	738.1-752.7	660.0	10,836	50.0	7,565	2,234
5A	9.6	728.5-738.1	651.0	6,140	35.0	3,915	2,364
6	14.2	714.3-728.5	645.5	8,870	55.0	337	373
7	11.8	702.5-714.3	639.0	13,440	37.1	7,066	2,261
8	23.3	679.2-702.5	631.0	20,810	85.0	10,179	3,831
9	31.3	647.9-679.2	620.0	29,125	90.0	8,950	6,325
10	32.8	615.1-647.9	611.0	17,070	110.0	3,794	2,500
Total	249.6			170,662	802.3	51,576	24,131

1.26	Table 2.	Summarization	of each poo	ol within the st	udv area
1.20	1 4010 2.	5 annual 12actor	or each poe		aay area

COOPERATIVE AGREEMENT BETWEEN THE CORPS OF ENGINEERS AND THE FISH AND WILDLIFE SERVICE

1.27 The working relationship between the Army Corps of Engineers and the Fish and Wildlife Service is well documented in the Upper Mississippi River National Wildlife and Fish Refuge Comprehensive Conservation Plan (CCP), and the Mark Twain National Wildlife Refuge CCP (Chapter 3). The following excerpt is taken from the Upper Mississippi River National Wildlife and Fish Refuge CCP:

1.28 "In an effort to help clarify agency roles and responsibilities, cooperative agreements were negotiated and signed in 1945, 1954, 1963, and 2001 (amended the 1963 agreement), each time bringing more clarity to who managed what within the Refuge. An excellent and thorough history of the cooperative agreements is found in the CCP for Mark Twain National Wildlife Refuge Complex, Chapter 3, available on-line at http://mid-west.fws.gov/planning/marktwain/index.html. In summary, the cooperative agreement, with some reservations, grants to the Service the rights to manage fish and wildlife and its habitat on those lands acquired by the Corps of Engineers. These lands are managed by the Service as a part of the Refuge and the National Wildlife Refuge System. The Corps of Engineers retained the rights to manage as needed for the navigation project, forestry, and Corps of Engineers managed recreation areas, and all other rights not specifically granted to the Service. A copy of the cooperative agreement can be found online (http://www.fws.gov/midwest/

planning/uppermiss). As part of the planning process, the Refuge initiated efforts with the Corps of Engineers to amend the current agreement to clarify language on the responsibility and authority of each agency, especially in regard to recreational uses. These discussions will continue. Other conflicts over the years between navigation, fish and wildlife conservation, and recreation influenced Refuge and Corps of Engineers cooperative working arrangements. In the 1950s and 1960s, there was growing concern over the common practice of placing dredged material from navigation channel maintenance in the marshes and backwaters of the river. These concerns were heightened with talk of a 12-foot navigation channel in the mid-1960s; new studies on dredging impacts; and new national environmental laws such as the Water Resources Planning Act of 1962, National Environmental Policy Act of 1969, and the Federal Water Pollution Control Act of 1972. In 1973, the State of Wisconsin sought a preliminary injunction against the Corps of Engineers to prevent the disposal of dredged material on Crosby Island and vicinity (Pool 8), and in 1974 filed another injunction for disposal at several other sites in Pools 4-8 and one further down-river. The State of Minnesota joined Wisconsin in the 1974 injunction. These legal actions were the impetus for more structured cooperation. In 1974, the Corps of Engineers and the Service began work on a long range management strategy for the Upper Mississippi River. A broad based task force representing five states and several federal agencies was formed under the auspices of the Upper Mississippi River Basin Commission, and became the Great River Environmental Action Teams (GREAT). The Great River Study was authorized by Congress in 1976 and called upon the Corps of Engineers, in concert with other agencies and the states, to develop a management plan that looked at the needs of navigation, barge traffic, fish and wildlife, recreation, watershed management, and water quality. The resulting GREAT studies not only provided a comprehensive look at all aspects of the Upper Mississippi River, but provided the institutional framework for the Service, Corps of Engineers, states and other agencies to work together to meet often divergent needs and mandates. In 1978, Congress mandated that the Upper Mississippi River Basin Commission complete a comprehensive master plan for the Upper Mississippi River, which includes the Refuge. The plan was completed in 1982 and encompassed many of the recommendations developed in the GREAT studies for dredge material disposal, fish and wildlife conservation, and recreation management. In 1983, the Service and the Corps of Engineers (St. Paul District), in cooperation with Minnesota, Wisconsin, and Iowa, completed a the first Land Use Allocation Plan for Refuge and Corps of Engineers acquired lands in Pools 1-10 (Pools 4-10 affect the Refuge). The plan, through policy statements and detailed maps, provided a clear, practical, and balanced plan to guide future federal land use actions. In effect, the plan was a zoning plan for federal lands, allocating lands in the floodplain for wildlife management, navigation project operations, low-density recreation, intensive recreation, and natural areas."

1.29 This document serves as an update of the original Land Use Allocation Plan and will continue to be a joint document used by both the Corps and the Service. The Upper Mississippi River National Wildlife and Fish Refuge CCP is a completed and approved document. The Corps of Engineers participated fully in the CCP planning process and has formally concurred with the CCP. All policy discussed in this Land Use Allocation Plan (LUAP) is intended to endorse and compliment those policies set forth in the CCP.

UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE COMPREHENSIVE CONSERVATION PLAN

1.30 During the 2002 to 2006 timeframe the Upper Mississippi River National Wildlife and Fish Refuge staff completed a comprehensive planning process for the Upper Mississippi River National Wildlife and Fish Refuge that resulted in an approved Comprehensive Plan in July of 2006. This entire document is available on the internet at http://www.fws.gov/midwest/planning/uppermiss/index.html

The executive summary from the Upper Mississippi River National Wildlife and Fish Refuge CCP is re-printed here in its entirety.

1.31 This Comprehensive Conservation Plan (CCP) will guide the administration and management of the Upper Mississippi River National Wildlife and Fish Refuge for the next 15 years and meets a requirement in the

Refuge Improvement Act of 1997. The Refuge was established by act of Congress in 1924 for the purpose of providing a refuge and breeding ground for migratory birds, fish, other wildlife, and plants. The Refuge encompasses approximately 240,000 acres in four states in a more-or-less continuous stretch of 261 miles of Mississippi River floodplain from near Wabasha, Minnesota to near Rock Island, Illinois. This CCP is the result of four years of extensive public involvement and planning. A Final Environmental Impact Statement was released July 11, 2006 and a Record of Decision was signed August 24, 2006. That decision selected Alternative E, Modified Wildlife and Integrated Public Use Focus, as the CCP for the Refuge. This CCP contains 43 measurable objectives and many associated strategies that will be carried out over the next 15 years. The objectives are designed to help the Refuge achieve its purposes and contribute to the mission and policies of the National Wildlife Refuge System, while being sensitive to the needs of partner states and agencies, conservation organizations, communities, and the general public. Below is a summary of the major objectives of the CCP.

- Acquire from willing sellers 15,000 acres of land within approved boundary.
- Seek protection for 13 bluffland areas within the approved boundary.
- Improve water quality and reduce and/or address sedimentation.
- Complete pool-wide drawdowns on as many pools as practicable to enhance habitat.
- Inventory and reduce invasive plants 10% by 2010, work with others on invasive animals.
- Complete \$150 million worth of habitat restoration and enhancement projects or \$10 million per year compared to \$2.7 million per year on Refuge from the Environmental Management Program.
- Increase wildlife monitoring and research efforts to guide management.
- Increase emphasis on fishery and mussel management in cooperation with the states and Corps of Engineers.
- Complete an inventory of the 51,000 acres of Refuge forest and begin management actions.
- Maintain abundant hunting and fishing opportunities, and increase opportunities for wildlife observation, photography, interpretation and environmental education.
- Adjust the system of Waterfowl Hunting Closed Areas established in 1958 to meet the food and rest needs of migrating waterfowl. This means deleting some closed areas, adding some, and adjusting boundaries on others. Total acres will drop from 44,544 acres to 43,652, although a special hunt area, no open water hunting area, and administrative no hunting zones will increase overall acreage that has some restrictions.
- Reduce human disturbance to waterfowl and other wildlife using closed areas with a blend of voluntary measures and targeted regulations.
- Help ensure a quality hunting experience for the broadest cross-section of the public by eliminating permanent blinds in Pools 12-14 and addressing crowding/behavior issues on a portion of Pool 7.
- Better manage commercial-type activities on the Refuge such as guiding services, fish floats, and fishing tournaments in cooperation with the states and Corps of Engineers.
- Fine tune existing beach-related uses such as camping and general recreation to safeguard both wildlife and people.
- Establish 5 electric motor only areas totaling 1,852 acres (1 exists now) and 8 seasonal slow, no wake areas totaling 9,720 acres to reduce disturbance to fish and wildlife in backwater areas and provide alternative experiences for Refuge visitors. These areas represent about 8% of the water area of the Refuge, and less than 5% of the entire Refuge.
- Establish a new and relaxed dog policy that allows owners to exercise and train their dogs while safeguarding other visitors and wildlife.
- Improve Refuge boat, canoe, and walk-in accesses.
- Replace or construct 4 new offices and 5 new maintenance facilities to replace rental space or aging facilities.
- Increase public information efforts and programs.
- Increase staff to minimum levels to increase stewardship capabilities for private lands work, fisheries, forestry, biological monitoring, maintenance, visitor services, and law enforcement.

• Estimated cost over 15 years if every objective/strategy funded: \$227.8 million, of which \$177 million (78%) is habitat restoration, maintenance, and land acquisition.

WORKING RELATIONSHIP WITH OTHER RIVER RESOURCE AGENCIES

1.32 One of the products of the GREAT study within St. Paul District is the interagency team called the River Resources Forum (RRF). This organization provides coordination for dredging and other navigation operations, habitat project planning, pool habitat plans, monitoring efforts, recreation planning, water level management (pool drawdowns), forestry, and education and outreach programs.

1.33 When the GREAT study completed in 1980, participating agencies realized that the cooperation and coordination process that was established during the GREAT study should continue. Agencies with river resource management responsibilities needed a mechanism for ongoing coordination of management proposals and related activities, so they joined together to form a partnership that started out as the Channel Maintenance Forum and later became the River Resources Forum in recognition of an increased emphasis on coordination of environmental and recreational resources. Participating federal agencies are: Corps of Engineers, Fish and Wildlife Service, Coast Guard, Environmental Protection Agency, Natural Resources Conservation Service and National Park Service. State agencies include the Department of Natural Resources' and Department of Transportations' from Minnesota, Wisconsin and Iowa and the Minnesota Pollution Control Agency. Representation is at the middle manager/policy-maker level, which has been successful in achieving results, because participants can effectively represent the interests and positions of their respective agencies. In 1991, participating agencies entered into a formal partnership agreement that states "We, the partners involved in management of the Mississippi River, recognize the multiple uses and benefits provided by this diverse ecosystem and are committed to work together as a trusting, cooperative team to manage the River from a resource-balanced approach in the best interest of the public." The group has a number of established goals and procedures for working together cooperatively that are described in the partnership agreement and accompanying operating procedures. The RRF is used to build consensus for proposed actions and to streamline administrative procedures and provides a mechanism by which the St. Paul District can obtain the collective endorsement and support of other agencies when selecting management actions to be implemented on the river. The RRF is an advisory group that has no statutory or regulatory authority. Recommendations of the RRF are not binding upon any of the participating agencies nor does coordination of activities through the RRF eliminate the need for formal coordination and approval with the appropriate regulatory agencies. However, endorsement of a proposed action by the RRF is highly desirable and is often an important consideration element, in the agency's review and approval process. Failure to obtain RRF consensus or endorsement would result in proposed actions following normal regulatory procedures. This would require that the proponent agency would have to seek permits or agreements with the individual regulating agency. The RRF meets three times per year, normally in April, August and December. Field trips are sometimes arranged in conjunction with the meetings so that managers have an opportunity to observe activities first hand. The RRF also has sub-groups for providing technical advice on matters related to fish and wildlife resources, navigation, recreation and public information and education. These groups are used when issues are technically complex or more involved and the RRF cannot take the time necessary to fully investigate details. Each agency has designated representatives who are members of the on-site inspection team (OSIT). OSIT visits field sites and makes professional recommendations concerning how projects should be implemented in the best interest of the overall health of the river. These teams also allow local communities and other organizations involvement in the program. This is a very valuable tool for providing information on proposed actions to agencies at a review level where it can be immediately evaluated for potential impacts. It allows the District the opportunity to obtain advice and recommendations from "local technical experts" as the activity is being planned. The District uses this input in formulating final decisions on a proposed action. The OSIT also facilitates the regulatory process by providing regulating agencies an early review of the action and allows the District an opportunity to obtain information related to regulatory procedures.

CHANNEL MAINTENANCE MANAGEMENT PLAN

1.34 This Land Use Allocation Plan is only one of the documents that sets policy and guides the Corps of Engineers Operations and Maintenance Program on the Upper Mississippi River. The St. Paul District's Channel Maintenance Management Plan (CMMP) is an approved document that sets policy and guides channel maintenance activities on the river. The LUAP does not change any of the policies set forth in the CMMP but it does deal with environmental stewardship and recreation issues. The Channel Maintenance Program has been used on many occasions for improving habitat on the Upper Mississippi River and for improving recreation areas. The intent is for the environmental and recreation functions to work with the Channel Maintenance Program in a manner that results in the most efficient way of accomplishing business.

SECTION 2

PUBLIC LAWS AND OTHER POLICIES

2. PUBLIC LAWS AND OTHER POLICIES

LAWS APPLICABLE TO RESOURCE DEVELOPMENT AND MANAGEMENT

2.01 This section discusses the Federal statutes, other applicable laws, executive orders, interagency agreements, and regulations that affect development and management of the Upper Mississippi River system.

Federal Statutes with Major Impacts

2.02 Public Law 68-268, June 7, 1924 – The Upper Mississippi River National Wildlife and Fish Refuge Act (43 Statute 650) authorized a refuge between Rock Island, Illinois, and Wabasha, Minnesota. (Originally administered by the U.S. Department of Agriculture, this refuge is now under the jurisdiction of the U.S. Department of the Interior, Fish and Wildlife Service.) The Upper Mississippi River National Wildlife and Fish Refuge is designated a refuge and breeding place for migratory birds. As prescribed by the Secretary of the Interior through regulations, this area also serves as a refuge and as a breeding and conservation area for other wild birds, game animals, furbearing animals, wildflowers, aquatic plants, fish and other aquatic animal life.

2.03 The River and Harbor Act of 1930, July 3, 1930 – The River and Harbor Act of 1930 (46 Statute 847) authorized the 9-foot navigation channel, to be achieved by constructing a system of locks and dams, supplemented by dredging. This act also authorized the Secretary of the Army to acquire land for the 9-foot channel project.

2.04 Public Law 78-534, December 22, 1944 – Section 4 of the Flood Control Act of 1944 (58 Statute 887), as amended, authorizes the Chief of Engineers to construct, operate, and maintain public park and recreational facilities at water resource projects. It also allows for the water areas of all such projects to be open to the public use for boating, fishing and other recreation provided that such use is not unsafe or detrimental to the primary purposes of the project.

2.05 Public Law 79-732, August 14, 1946 – Section 3 of the Fish and Wildlife Coordination Act of 1946 (60 Statute 1080) provides for use of water resource projects for the conservation, maintenance, and management of wildlife resources and wildlife habitat, to be administered by State agencies or the Secretary of the Interior. In accordance with this act, General Plans for the Use of Lands and Waters of the Navigation Channel Project for Wildlife Conservation and Management were formulated and approved by the Secretary of the Army, the Secretary of the Interior, and the heads of pertinent State agencies.

2.06 Public Law 85-624, August 12, 1958 – The Fish and Wildlife Coordination Act of 1958 (72 Statute 563) requires that fish and wildlife conservation receive equal consideration with other project purposes and that they be coordinated with other features of water resource development programs. All planning and project development must be coordinated with the Fish and Wildlife Service.

2.07 Public Law 86-523, June 27, 1960 – The Reservoir Salvage Act of 1960 (74 Statute 220), as amended by Public Law 93-291 (88 Statute 174), specifically provides for preservation of historical and archaeological data that might otherwise be irreparably lost or destroyed as a direct result of any Federal construction project or any federally-licensed project, activity, or program. For Federal construction projects, up to 1 percent of the authorized appropriation for the project may be expended for survey and mitigation work. For emergency programs, no recovery or mitigation work is required if such work would impede the emergency action.

2.08 Public Law 86-645, July 14, 1960 – Section 107 of the River and Harbor Act of 1960 (74 Statute 484), as amended, provides authority for the Corps to develop and construct small navigation projects, including small-boat harbors for recreational boaters. Although Section 107 authorizes the Corps to plan and construct such projects, only general navigational facilities can be provided as a Federal project. Terminal facilities and

interior dredging are local responsibilities.

2.09 Public Law 87-714, September 28, 1962 – The Refuge Recreation Act (76 Statute 653), as amended, authorizes the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use, when such uses do not interfere with the primary purposes of these areas. This act authorizes construction and maintenance of recreational facilities and the acquisition of land for incidental facilities and wildlife-orientated recreational development or for protection of natural resources. It also authorizes charging fees for public use.

2.10 Public Law 88-578, September 3, 1964 – The Land and Water Conservation (LAWCON) Fund Act of 1965 (78 Statute 897), as amended, established a fund to help public agencies meet outdoor recreation demands and needs. The act authorized acquisition of lands for federally-administered recreating areas plus matching grants for State recreation planning and for State and local land acquisition and development. Various State, county, and city parks along the Upper Mississippi River have been developed with LAWCON money, and it is the chief funding mechanism for continuing land acquisition within the generally recognized boundary of the Upper Mississippi River National Wildlife and Fish Refuge.

2.11 Public Law 89-72, July 9, 1965 – The Federal Water Project Recreation Act of 1965 (79 Statute 213), as amended, established recreation at Federal water resources projects as a full project purpose. This act requires consideration of recreation opportunities and of fish and wildlife enhancement in planning water resources projects. Section 2(a) specifies that benefits for recreation must be included in the economic analyses of proposed projects when a non-federal public agency agrees to administer the facility at its expense and to pay half of the separable first cost. Section 3(b) authorizes land acquisition to preserve the recreation potential of a project for a 10-year period, when no local sponsor can be found.

2.12 Public Law 89-665, October 15, 1966 – The National Historic Preservation Act of 1966 (80 Statute 915), as amended by Public Law 96-515 (94 Statute 2987), established national policy for historic preservation, authorized the Secretary of the Interior to expand and maintain a National Register of Historic Places, and created the Advisory Council on Historic Preservation. Section 101 of Public Law 89-665 authorized the Secretary of the Interior to grant funds to individual States for comprehensive statewide historic surveys. These surveys were to inventory historic, archeological resources within States. Many of the counties along the Mississippi River in Iowa, Minnesota, and Wisconsin have been surveyed by the State Historic Preservation Offices in the last decade. Section 106 specifies that Federal agencies, before approval of any expenditure or before issuance of any license, must consider the effect of the action on any property included in or eligible for the National Register of Historic Places and must afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on this action. Section 110 requires each Federal agency to establish a program to locate, inventory, and nominate all properties under the agency's ownership or control that appear to qualify for inclusion on the National Register.

2.13 Public Law 89-669, October 15, 1966 – The National Wildlife Refuge System Administration Act of 1966 (80 Statute 927), as amended, defines the National Wildlife Refuge System as including wildlife refuges, areas for the protection and conservation of fish and wildlife species that are threatened with extinction, wildlife ranges, game ranges, wildlife management areas, and waterfowl production areas. A 1997 amendment, known as the Refuge Improvement Act of 1997, established a mission for the Refuge System and provided clear policy direction and management standards. The Secretary of the Interior is authorized to permit any use of an area, provided that such use is compatible with the major purposes for which such area was established. Any payments for right-of-way through such areas go into the Migratory Bird Conservation Fund for the acquisition of the additional lands. By regulation, up to 40 percent of an area acquired for a migratory bird sanctuary may be opened to migratory bird hunting unless the Secretary of the Interior finds that hunting any species of migratory game bird in more than 40 percent of such an area would be beneficial to the species. This act requites an Act of Congress for the divestiture of lands in the system, except (1) that lands acquired through the

Migratory Bird Conservation Fund may be divested upon approval of the Migratory Bird Conservation Commission, and (2) that any lands can be removed from the system by lands exchange, or if bought into the system by a cooperative agreement, then these lands can be removed according to the terms of the agreement.

2.14 Public Law 96-95, October 31, 1979 – The Archaeological Resources Protection Act of 1979 (93 Statute 721) provides excavation and removal of archaeological resources on public or Indian lands, by qualified individuals with a permit from the Federal land manager. The act establishes criminal and civil penalties for persons engaged in illegal excavation, removal, or damage to archaeological resources or in the sale, purchase, exchange, or transportation of illegally-removed resources. This act authorizes rewards for information that leads to conviction. It authorizes the forfeiture of archaeological resources, equipment, and vehicles involved in a violation. It authorizes the Federal land manager to withhold disclosure of the location and nature of archaeological resources. The act also provides for cooperation with private individuals having collections obtained before passage of this act.

2.15 Public Law 99-662, November 17, 1986 – Water Resource Development Act of 1986 – Authorized the Upper Mississippi River Environmental Management Program (EMP). EMP is intended to ensure the coordinated development and enhancement of the Upper Mississippi River system, with primary emphasis on habitat restoration and protection projects as well as long term resource monitoring. Original authorization provided for a 10-year Program starting in 1987; Section 405 of the Water Resources Development Act of 1990 (Public Law 101-640) extended the Program an additional 5 years; Section 509 of the Water Resources Act of 1999 (Public Law 106-53) extended the Program indefinitely.

2.16 Public Law 110-114, November 9, 2007 – Water Resource Development Act of 2007 – Authorized the Navigation and Ecosystem Sustainability Program (NESP). This act authorized \$2.2 billion in navigation improvements and \$1.7 billion in ecosystem restoration activities on the Upper Mississippi River and Illinois Waterway (UMR-IWW).

OTHER FEDERAL STATUTES

2.17 Public Law 59-206, June 8, 1906 – The Antiquities Act of 1906 (34 Statute 225) makes it a Federal offense to appropriate, excavate, injure, or destroy any historic ruin or monument located on lands owned or controlled by the Federal Government, without permission from the Secretary of the Department having jurisdiction over those lands.

2.18 Public Law 80-697, June 19, 1948 – Section 5(a) of the Anti-Drawdown Law of 1948 (62 Statute 497) directs the Corps of Engineers to give full consideration and recognition to the needs of fish and wildlife and their habitat dependent upon the waters of the Upper Mississippi River by operating and maintaining pool levels as though navigation were carried on throughout the year, to the maximum extent possible.

2.19 Public Law 83-780, September 3, 1954 – Section 209 of the Flood Control Act of 1954 (68 Statute 1256) amends the Flood Control Act of 1944 and authorizes the Secretary of the Army to grant licenses for use and occupation of land and water areas under the jurisdiction of the Department of the Army for park and recreation purposes.

2.20 Public Law 86-717, September 6, 1960 – This law (74 Statute 817) requires that projects be developed and maintained to encourage adequate forest resources. Forest management programs must be administered to increase the value of project lands for recreation and wildlife and to promote natural ecological conditions by following accepted conservation practices.

2.21 House Committee on Public Works Resolution, December 11, 1969 – The Endangered Species Act of 1973 (87 Statute 884), as amended, states the policy of Congress that all Federal departments and agencies

must seek to conserve endangered and threatened species. Section 7 requires each Federal agency to consult with the Secretary of the Interior to insure that authorized actions neither jeopardize the continued existence of any endangered or threatened species nor result in adverse modification of critical habitat. Unless previously completed and included in the project environmental impact statement, a biological assessment must identify any endangered species that, in the opinion of the Fish and Wildlife Service, may be affected by the project. This requirement applies to all civil works studies, projects, or programs and includes the operation and maintenance of completed projects.

2.22 Public Law 94-587, October 22, 1976 – The Water Resources Development Act of 1976, Section 117, authorized funds to initiate the interagency Great River Environmental Action Team (GREAT) study.

2.23 Public Law 95-217, December 27, 1977 – The Federal Water Pollution Control Act of 1977, also called the Clean Water Act of 1977 (91 Statute 1566), amends earlier acts to establish a more effective program of water pollution control by extending Federal authority and increasing construction grant authority. Section 404(b) of the act requires an evaluation of dredged material disposal activities to insure compliance with guidelines developed by the Administrator of the Environmental Protection Agency (EPA) and the Secretary of the Army. Section 404(t) authorizes any State to regulate, in accordance with its laws, the discharge of dredged material, in any portion of the navigable waters within the jurisdiction of the State that results from maintenance dredging involving Corps of Engineers navigation projects.

2.24 Section 30.12 of the Wisconsin Statutes totally prohibits open-water disposal of dredged material, including beach nourishment. All disposals in Wisconsin must be above the normal high-water mark. In addition, Section 147.025 of the Wisconsin Statutes requires a discharge permit for any discharge of dredged materials into State waters. To facilitate the implementation of recommendations of the interagency Great River Environmental Action Team (GREAT), the State of Wisconsin exempted designated dredged material placement sites from State statutes. A memorandum of understanding between the Corps of Engineers and the Wisconsin Department of Natural Resources regulates use of the placement sites in accordance with this exemption.

At present, no Minnesota regulation specifically governs dredged material disposal; however, disposal below the ordinary high-water mark in State waters is not allowed without a permit. Minnesota also requires that any effluent generated from dredging operations must meet the standards and regulations described in Minnesota Statutes, Chapters 115 and 116, as amended. Effluents generated from disposal and dredging operations must be monitored for their impacts on water quality.

Iowa Statutes do not allow beach nourishment or open-water disposal without a State discharge permit. Although Iowa does not require a permit for discharge of effluent from a diked disposal facility, impacts of the effluent can be regulated by State water quality standards.

2.25 Public Law 95-502, October 21, 1978 – The Inland Waterway Authorization Act (92 Statute 1693) provides a schedule for taxing fuel used in commercial transportation on inland waterways. Sections 203 and 204 of this act established an Inland Waterways Trust Fund (in which fuel tax receipts are to be deposited) and specify its use. Money in this fund is reserved for future construction and rehabilitation to facilitate navigation. Section 101 stipulated that the Upper Mississippi River Basin Commission (UMRBC) prepare a comprehensive master plan for the Upper Mississippi River system. No replacement, construction, or rehabilitation that expanded the navigational capacity of locks and dams or channels was to be undertaken by the Secretary of the Army until Congress approved the UMRBC master plan, except for the construction of a single 1,200-foot long lock at Lock and Dam 26 and for necessary operation and maintenance.

EXECUTIVE ORDERS

2.26 Executive Order 11593, May 13, 1971 – This executive order requires the location, inventory, and nomination to the National Register of Historic Places of all sites, buildings, districts, and objects under a Federal agency's jurisdiction or control. Caution must be exercised in the interim to assure that any federally-owned properties that might qualify for nomination are not inadvertently transferred, sold, demolished, or substantially altered. Properties that may be affected by Federal action or assistance shall be appropriately recorded prior to initiation of the Federal undertaking. These requirements have been incorporated into the amendments of the National Historic Preservation Act of 1966.

2.27 Executive Order 11988, May 24, 1977 – This executive order places new emphasis on environmental aspects of floodplain management. It requires Federal agencies to recognize the significant values of floodplains and to consider the public benefits that would be realized from restoring and preserving floodplains. This executive order requires the Corps of Engineers to provide leadership and to take action to avoid development in the base floodplain unless it is the only practical alternative, to reduce the hazards and risk associated with floods, to minimize the impact of floods on human safety and welfare, and to restore and preserve the natural and beneficial values of the base floodplain.

2.28 Executive Order 13112, February 3, 1999 – This executive order states that each Federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law: (1) identify such actions, (2) use relevant programs and authorities to prevent, control, monitor, and research such species, and (3) not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere.

INTERAGENCY AGREEMENTS

2.29 General Plans, March 9 – November 2, 1953, revised March 8, 1961 – General plans for the use of project lands for wildlife conservation and management were drawn up in accordance with the Fish and Wildlife Coordination Act of 1946 (Public Law 9-732). Through this agreement, the Secretary of the Army made certain project lands available to the Secretary of the Interior for wildlife conservation and management. The Secretary of the Interior may, in turn, make these lands available to the respective State conservation agencies for administration.

2.30 Memorandum of Agreement, April 18, 1973 – A memorandum of agreement between the Corps of Engineers and the U.S. Coast Guard clarifies areas of jurisdiction and responsibilities under Federal statutes to regulate certain activities in navigable waters of the United States. The agreement covers alteration of bridges; construction, operation, and maintenance of bridges and causeways; closure of waterways and restriction of passage under bridges; and design of flood flows. This agreement also requires mutual coordination and consultation on projects and activities in or affecting navigable waters.

2.31 Cooperative Agreement, 2001 – Through the cooperative agreement between the Department of the Army and the Department of the Interior, Bureau of Sport Fisheries and Wildlife (now the Fish and Wildlife Service), certain Corps lands and waters in the 9-foot channel navigation project were made available to the Department of the Interior for conservation and wildlife management. The Department of the Army, however, retains the right to develop public use facilities, conduct forest management, and to issue leases and easements for public use, and special licenses for non-exclusive private uses. Under this agreement, every proposal to develop a public use area must be coordinated with the Fish and Wildlife Service and the Corps must consider any adverse effect that a proposed development may have on the wildlife management program. The agreement stipulates that the Fish and Wildlife Service must submit an annual management plan to the Division Engineer.

CORPS OF ENGINEERS REGULATIONS

2.32 Engineering Regulation 1165-2-400, August 9, 1985 – This regulation (Water Resource Policy and Authorities: Recreational Planning, Development, and Management Policies) defines objectives and policies governing planning, development, and management of outdoor recreational resources, plus enhancement of fish and wildlife at Corps water resource projects.

2.33 Engineering Regulation 1130-2-406, May 28, 1999 – Defines the Corps of Engineers policy on managing recreational use and identifies specific management procedures to deal with private use on Corps-administered lands and waters at all civil works projects. The regulation also states that each District Engineer has the responsibility to evaluate the compatibility of existing private recreation use with project purposes.

2.34 Engineering Regulation 1130-2-550, August 15, 2002 – This regulation establishes Corps of Engineers policy for the management of recreation programs and activities, and for the operation and maintenance of Corps recreation facilities at civil works water resource projects.

2.35 Engineering Regulation 1130-2-540, July 31, 2005 – This regulation establishes land management policy for Corps administered project lands and waters. It outlines policy to apply principles of good environmental stewardship to the natural and cultural resources occurring on Corps administered lands and waters.

2.36 St. Paul District Policy Letter No. 08-02, October 29, 2007—This letter establishes the policy of the St. Paul District to support and contribute towards the efforts of state and other federal agencies to impede the movement of invasive species by the transport of firewood.

SECTION 3

CORPS OF ENGINEERS OPERATING GUIDELINES

3. CORPS OF ENGINEERS OPERATING GUIDELINES

PROJECT GOALS AND OBJECTIVES

3.01 The following goals and objectives have guided the St. Paul District in formulating management alternatives and land use allocations. These objectives will provide direction for long-range development plans such as the Operational Management Plan.

<u>Goals</u>

- To manage resource capabilities wisely in relation to multiple purpose resource demand (including recreation, fish and wildlife, and navigation interests).
- To maintain public recreational opportunities for all publics on an equal basis in accordance with recreation needs.
- To adjust management activity with respect to resource capabilities in relation to multiple resource demands for the greatest public benefit (including recreation, fish and wildlife, and navigation interests).
- To minimize user conflicts and to optimize public safety and access.
- To consider the implications of Corps planning and management activities on the Upper Mississippi River National Wildlife and Fish Refuge.

Objectives

- Develop plans that manage the natural resource for the enjoyment and use of this and future generations.
- Seek and incorporate public involvement from a cross-section of interests and governmental entities to develop a plan that equitably serves all publics.
- Manage and sustain unique, endangered, or threatened species.
- Develop interpretive programs which foster public understanding and appreciation of the Corps multiple purpose missions (recreation, water safety, navigation, fish and wildlife, forestry, and cultural resources) through education and resources.
- Preserve, restore, and maintain important cultural and historic sites.
- Prepare a sensitive and balanced land use plan that the managing agencies (Fish and Wildlife Service-Corps) are actively committed to follow for all federal lands along the Upper Mississippi River
- Maintain open communication channels among the Fish and Wildlife Service, Corps, and States for cooperation of resource management and public use facility development actions.
- Maintain and enhance the integrity of the refuge and navigational system by making all federal actions/decisions in concert with the Fish and Wildlife Service and States.
- Control private exclusive use of Corps administered lands through the implementation of the Shoreline Management Plan.
- Fully evaluate the environmental effects of all federal actions consistent with the National Environmental Policy Act.
- Provide and maintain a safe and healthful environment for all visitors.

CORPS OF ENGINEERS ENVIRONMENTAL OPERATING PRINICPLES

3.02 In accordance with Corps policy, all operating projects are required to embrace the concept of sustainability and strive to achieve balance between social, economic, and environmental considerations. It is the policy of the Corps that the environmental Operating Principles will, to the extent legally and financially practical, guide all appropriate Corps management initiatives and business processes. These principles are as follows:

- Strive to Achieve Environmental Sustainability An environment maintained in a healthy, diverse and sustainable condition is necessary to support life.
- **Consider Environmental Consequences** Recognize the interdependence of life and the physical environment. Proactively consider environmental consequences of Corps programs and act accordingly in all appropriate circumstances.
- Seek Balance and Synergy—Seek among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another.
- Accept Responsibility Continue to accept corporate responsibility and accountability under the law for activities and decisions under Corps control that impact health and welfare and the continued viability of natural systems.
- **Mitigate Impacts** Seek ways and means to assess and mitigate cumulative impacts to the environment; bring systems approaches to the full life cycle of Corps processes and work.
- Understand the Environment Build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of Corps work.
- **Respect Other Views** Respect views of individuals and groups interested in Corps activities, actively listen, and learn from their perspective in the search to find innovative win-win solutions to the nation's problems, solutions that also protect and enhance the environment.

SECTION 4

LAND USE ALLOCATION

4. LAND USE ALLOCATION

POLICY CONSIDERATIONS

Introduction

4.01 This section provides an overview of the major factors involved in the formulation of the land use allocations shown on the plates in Part 2. Definitions of each land use allocation plus supporting information clarify the management objectives associated with each allocation. The last part of this section describes the allocations in each pool. Much of the blue, or water areas, shown in the Land Use Allocation maps are underlain by lands owned by the United States and were acquired by either the Corps of Engineers or the U.S. Fish and Wildlife Service. These lands were subsequently flooded permanently when the 9-foot navigation channel was created. This ownership is not delineated since the purpose of this plan is to deal with land use, or the generally exposed portions of the floodplain.

4.02 This land use allocation plan has been developed within the scope of existing policy and in consonance with stated national policy directives. The following statements provide general guidance for the plan of development and future management arrangements.

- Corps of Engineers management activities will be directed towards fostering a balance between the economic, environmental, and recreational demands on the Upper Mississippi River within constraints of the two primary Federal purposes of the river (navigation and fish and wildlife) while recognizing the multi-use, multi-purpose character of the resource.
- Allocation of public lands for private recreational use will be consistent with the intent of current Federal resource management policies. Generally, use of Federal lands should foster public (community) use rather than private, special use.
- Major portions of land parcels purchased by the Federal Government along the river are submerged (below normal pool levels) as a result of construction and operation of the navigation project. To the degree possible, these submerged lands will be treated in a manner consistent with adjacent land use allocation designations in terms of permit applications for non-federal uses. For example, a permit for a barge-fleeting area may be viewed differently if the proposed location were adjacent to lands allocated for project operations than it would be if the location were adjacent to lands allocated for wildlife management.
- Commercial activities will generally not be considered appropriate on Federal land within the jurisdiction of this plan. However, instances may arise where the only valid alternative for a justifiable activity is on Federal lands. Such instances will be evaluated on a case-by-case basis through established permit and lease mechanisms.
- The Corps and Fish and Wildlife Service recognize the need for jointly planned and fully-coordinated action on Federal lands covered under the General Plan agreement. This plan reinforces the joint working relationship between the two agencies.

PRIVATE USE OF FEDERAL LANDS

4.03 In consonance with stated national policies and public law, the St. Paul District of the Corps and Region 3 of the Fish and Wildlife Service have implemented different policies concerning the granting of private rights to public lands (for cottages, boathouses, private docks, and similar structures or uses). The policy of these two agencies differs because of public law that specifically prohibits the Corps of Engineers from grandfathering

and phasing out such structures.

4.04 The Water Resource Development Act of 1986, Public Law 99-662, Section 1134(d) prohibits the Secretary of the Army from phasing out private structures that are legally licensed on Corps of Engineers administered lands.

4.05 Since the late 1980's the U.S. Fish and Wildlife Service has had a consistent grandfathering policy. This policy honors existing licenses, "grandfathering" them so that the license holders may keep them as long as the holders or their spouses live and as long as the licenses meet federal guidelines. This policy will gradually eliminate existing private-use licenses without imposing hardship on current license holders.

MANAGEMENT OF PRIVATE USE

4.06 The following paragraphs describe the Corps of Engineers authority and regulations for management of private use.

<u>Authority</u>

• Title 16, United States Code, Section 460d

The Flood Control Act of 1944, now Title 16, United States Code, Section 460d, authorized the Chief of Engineers to construct, maintain, and operate public park and recreation facilities at Corps of Engineers water resource development projects. This law also authorizes the Chief of Engineers to lease project lands upon such terms for such purposes as he deems reasonable in the public interest.

- <u>Regulation</u> The Chief of Engineers exercised the authority granted him; and, in 1974, published a regulation (ER 1130-2-406, as amended) that outlined Corps policy for management of the shorelines at Corps of Engineers civil works projects. That regulation is in Title 36, Code of Federal Regulations, Section 327.30. The Chief of Engineers management policy states the following:
 - "It is the objective of the Corps to manage private exclusive use of public property to the degree necessary to gain maximum benefits to the general public." (ER 1130-2-406, paragraph 4a, and Title 36, Code of Federal Regulations, section 32730(d)(1)).
 - "It is the policy of the Chief of Engineers that private exclusive use will not be permitted on new water resource projects where no private facilities or uses exist as of the date of this regulation. Such use will be permitted only to honor any past commitments which have been made." (ER 1130-2-406, paragraph 4b, and, Title 36, Code of Federal Regulations, section 327.30(d)(2)).

PAST COMMITMENTS-GRANDFATHERING

- <u>Regulation</u> Engineering Regulation (ER) 1130-2-406, paragraph 4b and Title 36, Code of Federal Regulations, Section 327.30(d)(2), states that the policy of the Chief of Engineers is to honor past commitments regarding private facilities or uses on public lands.
- <u>Grandfathering</u> As provided in the regulations discussed above, the grandfathering policy is intended to consider the prior Corps commitment implicit in the issuance of permits and the residual value of a permitted structure or uses. No new additional structures or uses are allowed in these areas. However, maintenance and renewal of the grandfathered items is allowed provided that the owner complies with the policies set forth in the Shoreline Management Plan.

DEFINITION OF LAND USE CATEGORIES

4.07 The land use allocation categories described below are based on criteria in Engineering Regulation (ER) 1130-2-550 and are modified to meet unique riverine conditions. Emergency operation requirements for navigation take priority over any of these five categories:

- <u>Project Operations</u> These lands are required for siting or storing facilities, structures, or equipment areas, and dredged disposal areas. This category includes lock and dam facilities, areas restricted for safety, major dredged material disposal sites, and Corps maintenance facilities. Recreational uses of such lands may be considered appropriate on a case-by-case basis.
- <u>Recreation/Intensive-Use</u> These lands are allocated for use as developed public areas for intensive recreational activities, including areas for concessions and quasi-public development. An intensive recreation area is generally defined as a relatively small, distinctly defined area where concentrated public use for the more traditional recreation predominates, such as campgrounds, picnic areas, and swimming areas. These areas generally require extensive facility development and maintenance.
- <u>Recreation/Low-Density</u> These lands are allocated for non-intensive, low-density recreation use. Low -density or dispersed recreation occurs generally throughout a large area and is not confined to a specific place. This type of recreation includes scattered, individual outdoor recreation activities. Low-density recreation areas normally are not identified with developed facilities or with areas of intense group concentration. Typical activities on such lands include hiking, hunting, fishing, undeveloped beach use, primitive camping, and cross-country skiing.
- <u>Natural Areas</u> These lands are allocated to preserve scientific, ecological, historical, archeological, or aesthetic values and to protect threatened or endangered species. Public uses that do not adversely affect the protected resource may be allowed on a case-by case basis.
- <u>Wildlife Management</u> These lands are allocated for fish and wildlife needs and provide opportunities for wildlife/wildlands-related recreation. Hunting, fishing, trapping, boat access, bird watching, and photography are examples of such recreation. The lands will also be available for other traditional dispersed forms of public recreation such as primitive camping, boating, water skiing, sailing, canoeing, swimming, cross-country skiing, and hiking. The primary management emphasis is protection and enhancement of wildlife habitat values, recognizing traditional forms of public recreation at use levels that have proven compatible with wildlife. Designated portions of such lands are reserved as waterfowl sanctuaries ("closed areas") where special regulations may apply. Such closed areas limit certain activities, especially during the fall migration season. Limited development such as boat landings, access roads, trails, and parking areas are facilities that may be compatible with this allocation.

4.08 The following paragraphs are intended to describe the federal agencies' operating guidelines and policies in regards to privately owned structures placed on federal property. The colors relate to the colors used on the LUAP maps.

- **Brown (Wildlife Management):** Private structures not allowed, although there are grandfathered areas as noted below where structures existing in the 1980s can continue to be maintained.
 - Light brown: Only three areas where structures are allowed (Winona District—-Clear, Peterson, and Robinson Lakes) but structures will be phased out when either the permit lapses (not renewed), or, the owner of record dies.
 - **Dark brown:** Existing structures can remain but not expanded under Corps grandfathered rules. Permit for private structure can be transferred to new owners.

- Green (Low-Density Recreation): Private structures may or may not be allowed as noted below.
 - Light green: Private structures not allowed. Many of these areas are shorelines, including islands and peninsulas, zoned for beach-related general public use.
 - **Dark green:** Private structures not allowed except in those specific areas listed as "limited development areas" in the Corps' Shoreline Management Plan. In these limited development areas, structures may also be expanded or new structures considered under Corps permitting requirements and standards.
- Orange/Tan (Natural Areas): Private structures not allowed.
- Yellow (Intensive Use Recreation): Private structures not allowed unless operated for public benefit under permit. These areas are usually developed sites for general public recreation and often include campgrounds, marinas, boat ramps, and buildings.
- **Red/Pink (Project Operations):** Private structures generally not allowed unless needed for Corpsrelated maintenance of the 9-foot channel project (e.g. contractors).

4.09 The Limited Development Areas and Grandfathered Areas as defined in the Corps of Engineers Shoreline Management Plan are listed respectively as Attachments 1 and 2 at the end of this document.

4.10 Recreation/low-density lands differ from wildlife management lands primarily in terms of the density of recreation use considered acceptable. For example, on low-density recreation lands, management in support of recreational use may be considered above habitat management. On wildlife management lands, habitat values would take priority over recreation use levels. This priority means that, if Refuge lands come under enough pressure from increased public use and are unable to provide for wildlife needs, the Corps and the Fish and Wildlife Service would work with the public to make resource management adjustments necessary to protect the integrity of wildlife lands. If future restrictions on use are necessary, river users would have adequate opportunities to contribute their ideas before any change in management is implemented.

4.11 After site-specific planning and appropriate coordination between the Corps, Fish and Wildlife Service, and States, dredged material could be placed on lands allocated for recreation/intensive-use, recreation/low-density, or wildlife management if it would serve management objectives in addition to project operations. Example of this would include the construction of islands using dredged material where there is both an ecological and navigation benefit.

- Corps of Engineers access points with limited, existing developments that primarily provide for hunting and fishing-related boat launches are allocated as wildlife management.
- Corps of Engineers access points with good access to the main channel that primarily serve recreational boat launching are allocated as recreation/low-density.

LAND USE ALLOCATION

4.12 Although the land use allocations shown in this document were prepared under Corps of Engineers planning guidelines, allocations on Fish and Wildlife Service fee title lands are also shown on the map plates. It is necessary to show allocations on the land of both agencies because most of the Corps fee title land is managed by the Fish and Wildlife Service along with Fish and Wildlife Service fee title land as a cohesive management unit: the Upper Mississippi River National Wildlife and Fish Refuge. Since Corps administered fee title lands are so closely related to the Fish and Wildlife Service fee title lands, it is impractical and much less useful to allocate only the Corps portion of these lands.

4.13 These allocations illustrate how the lands of these two agencies combine to form the Upper Mississippi

River National Wildlife and Fish Refuge. For example, the plates clearly illustrate that not all project operation areas or recreation allocations are on Corps land and that not all wildlife management or natural areas are on Fish and Wildlife Service land.

4.14 In allocating land use, certain system wide guidelines were established that predetermined allocations for a very few areas, although most Federal land areas were considered individually during the allocation process. These general allocation guidelines included the following:

4.15 Some allocation principles were developed and applied case by case. For example, on some island areas, beach sites were allocated as recreation/low-density although the rest of the island was allocated as wildlife management. This allocation method addresses both the recreational use of the beach site and the natural resource value of the island in question. The wildlife management allocation does not limit recreation use of the island to the recreation/low-density area, although only the recreation/low-density beach area would be managed and possibly maintained for recreation.

4.16 The following table depicts total acreage by allocation for each of the Upper Mississippi River Pools in the St. Paul District. The total of Corps owned fee title lands above the normal operating pools is 24,131 acres, and the total of Fish and Wildlife Service owned fee title above the normal operating pools is 44,145 acres.

	Wildlife Management		Recreation Intensive Use		Recreation Low Density		Natural Area		Project Operations	
	COE	FWS	COE	FWS	COE	FWS	COE	FWS	COE	FWS
SAF	0	0	0	0	0	0	0	0	16.6	0
1	0	0	0	0	1.4	0	0	0	0.3	0
2	0	0	0	0	10.3	0	0	0	55.8	0
3	2,141.2	0	18.8	0	149.0	0	0	0	49.6	0
4	1,410.0	1504.1	7.7	0	37.5	30.0	227.2	3,003.4	118.1	49.3
5	1,924.8	1912.8	6.1	0	128.4	13.3	0	0	174.5	3.1
5A	2,226.5	1,366.5	11.9	0	16.4	15.7	0	0	108.7	5.0
6	258.6	3,296.8	16.4	0	15.6	1.8	0	0	82.7	1.4
7	2.108.3	5,093.1	13.7	0	89.7	35.7	0	5.1	49.2	7.2
8	3,113.0	6,713.7	420.7	0	210.4	58.5	0	0	86.6	57.5
9	6,082.5	9,762.5	159.2	0	11.8	37.5	35.9	1,676.7	35.7	53.3
10	2,376.1	9,385.3	63.7	0	27.2	44.8	0	0	33.5	15.5
Total	21,641.0	39,034.8	718.2	0	697.7	237.3	263.1	4,685.2	811.3	192.3

Table 3. Total acreage by allocation for each of the Upper Mississippi River Pools in the St. Paul District

SECTION 5

ENVIRONMENTAL STEWARDSHIP

5. ENVIRONMENTAL STEWARDSHIP

NATURAL RESOURCES ANALYSIS

5.01 Within the 2002-2004 time frame the Fish and Wildlife Work Group, a sub-group of the River Resources Forum, completed Environmental Pool Plans for River Pools 1 - 10 (see paragraph 5.36). These plans along with the Upper Mississippi River National Wildlife and Fish Refuge Environmental Impact Statement and Comprehensive Conservation Plan contain extensive descriptions of the condition of natural resources in and along the Upper Mississippi River. These documents describe what are generally considered the major resource issues facing river managers of today. Most of these issues are a result of, or related to the permanent impoundment of water created by the 9-foot navigation project. They are summarized below.

5.02 Erosion of Islands. Corps of Engineers efforts to improve navigation on the Mississippi River began in the 1800s, but it was not until the late 1930s, when the Locks and Dams were constructed, that water was permanently impounded. Initially, this permanent increase in water levels created many islands that provided habitat for terrestrial species, and protected the aquatic ecosystem by deflecting and reducing damaging wave and ice action. Over the past 60 years these forces of nature have gradually taken their toll eroding shorelines and in many cases completely eliminating islands.

5.03 Excessive Sedimentation of Side Channels and Backwater Lakes. While sedimentation is a natural process in all river systems it is accentuated when water is impounded behind man made structures such as the locks and dams. Impoundment of water slows river velocities and allows suspended sediments to drop out, especially in backwater and/or slack water areas. This process can and has caused excessive sedimentation of side channels and backwaters resulting in a loss of valuable fish and wildlife habitat. This restricts river flows, fills in deep water habitat and results in a monotypic bathometric condition.

5.04 <u>Reduced Flow and Current Diversity.</u> Inundation of the floodplain has reduced the diversity of water velocities on the river, resulting in increased sedimentation, loss of bathometric diversity, and loss of aquatic habitats. The loss of islands and the filling in of deep water channels has caused widespread sheet flow patterns, thus reducing flow and current diversity.

5.05 Excessive Current Scour, Wave Action, and Re-suspension of Sediments. Initially after inundation, the emergent and submergent aquatic plants were abundant throughout the river pools. Over the many years of erosive wind, wave, and ice action many of the pools have become windswept riverine lakes, especially within the lower pool areas. This causes the uprooting of vegetation, re-suspension of sediments, and an increase in water turbidity. This process continually compounds itself resulting in large losses of aquatic vegetation and a decrease in overall habitat value.

5.06 <u>Stabilized Long Term Water Levels.</u> Although the higher and stable water levels created by the 9-foot navigation system initially benefited many fish and wildlife species, most wetland habitats have lost productivity since initial flooding. This natural fluctuation of water no longer exists and eliminates low water periods that allow sediments to dry and plants to re-generate. Re-creating, to a partial extent, the river's natural hydrograph has been the subject of the River Resource Forum's Water Level Management Task Force.

5.07 <u>Changes in the Connectivity of Aquatic Habitats and Loss of Isolated Wetlands.</u> Prior to construction of the locks and dams much of the water and sediment flowed in relatively well defined channels. Some wetlands were flooded annually and others much less frequently. This alteration of the original distribution of flow across the floodplain results in elimination and/or loss of these isolated wetlands.

5.08 <u>Reduced Floodplain Forest and Terrestrial Vegetation Diversity.</u> Much of the existing forest within the Upper Mississippi River floodplain is relatively even aged and composed of relatively few species. Much of the

current forest is not regenerating for a number of reasons. Flat topography, higher groundwater levels, increased frequency of flooding, loss of island habitat, and increased competition from invasive species such as reed canarygrass have all contributed to the monoculture within the forest.

FOREST MANAGEMENT

5.09 In accordance with the Forest Cover Act of 1960 and Engineer Regulation 1130-2-540, it is the Corps policy to apply forest management on all civil works projects, including outgranted areas. Objectives of the Corps forest management program are to develop, maintain, protect and/or improve vegetation conditions on project lands for multiple beneficial uses. Forest management activities are closely coordinated with the U.S. Fish and Wildlife Service in order to support the management goals and objectives of the Upper Mississippi River National Wildlife and Fish Refuge. Management prescriptions are developed to improve and sustain the resource in the best interest of the general public and may include reforestation, timber stand improvement, timber harvest and monitoring or treatment for forest insect and disease. Forest management activities are closely monitored to provide information on the long and short term effects to the overall resource.

5.10 In 2007, the St. Paul District Commander established a firewood policy for District recreation areas on other project lands. The purpose is to protect the forest resources on Corps land by implementing an effective firewood policy consistent with policies formulated by the state natural resource agencies that reduces the likelihood of emerald ash borer (*Agrilus planipennis*) (EAB) and other damaging forest pests from spreading onto project lands and adjacent areas. Components of the policy are public information and education, firewood restrictions and interagency cooperation.

CULTURAL RESOURCE MANAGEMENT

5.11 Cultural resources are a major component of the Upper Mississippi River and are integral, nonrenewable elements of the physical landscape. As expressions of human culture, they convey an appreciation for the past, our cultural heritage and diversity, enriching and shaping our identities and those of future generations. Cultural resources include precontact and historic archaeological sites and artifacts, historic standing structures, shipwrecks, historic and archaeological districts, cultural landscapes and ethnographic resources. Cultural resource sites exist on a variety of landforms, including uplands, terraces, islands, the river floodplain, and within the river channel. Numerous cultural resource sites are listed on the National Register of Historic Places (NRHP) or are eligible for listing, including Lock and Dams 2-10.

5.12 The archaeological record, represented by thousands of sites, indicates continual human occupation along the Upper Mississippi River for approximately 12,000 years. The cultural chronology is divided into several time periods that are roughly coeval with specific cultural traditions: Paleo (ca. 14,000-10,000 BP); Archaic (ca. 10000-2500 BP); Woodland (ca. 2500-1000 BP); Oneota/Mississippian (ca. 1,000-400 BP); and Historic (ca. 400 BP – present). Many areas along the Upper Mississippi River have not been surveyed for cultural resources and of the known sites, relatively few have been evaluated for listing on the NRHP. Cultural resources on Federal lands are protected by a variety of historic preservation laws; disturbing sites and collecting artifacts is illegal.

5.13 The environment of the Upper Mississippi River has been significantly altered following the installation of the lock and dam system, primarily completed in the 1930s. As this change has affected a variety of natural resources, it has also impacted cultural resources. Effects to cultural resources are manifest by a variety of complex natural mechanisms and anthropomorphic agents, such as site burial by sediment aggradation, site degradation and loss through erosion, inundation and dredging. However, the idiosyncratic nature of each site and its natural setting (e.g., terrace, natural levees and bank geometry), in addition to other factors, determines the susceptibility and extent that various processes and land use will have on a site.

Saint Anthony Falls Pools and Pool 1

5.14 A total of 24 cultural resource sites and six historic districts are located within the Upper and Lower Saint Anthony Falls Pools and Pool 1. Two sites are precontact, including a Paleo age Clovis type projectile point (c. 12,000 years before present) find spot, while the remaining sites include a variety of historic standing structures, such as the Stone Arch Railroad Bridge, flour and saw mills and breweries related to the early industrial development of Minneapolis. While these pools have not been systematically surveyed, the relatively sparse number of recorded cultural resources is not unexpected with the high degree of historic development along the river and its narrow floodplain through the gorge south of the Falls to the debaucher of the Minnesota River south of Lock and Dam 1.

<u>Pool 2</u>

5.15 While Pool 2 is significantly urbanized, the broader floodplain and extensive terraces along the river harbor 67 cultural resources. Nearly 40 percent of these sites are historic structures and sites and include several historic districts, Historic Ft. Snelling, fur trading posts, breweries and others. The precontact sites span the Paleo through Contact (c. AD 1670) periods and include burial mound groups, caves with rock art, rockshelters and villages. Pool 2 also has not been systematically surveyed for cultural resources.

Pool 3

5.16 Pool 3 contains 155 recorded cultural resource sites, with 84 percent of these being precontact sites. The bulk of the historic sites are concentrated in and around Hastings, Minnesota and Prescott, Wisconsin. The historic sites include three historic districts, several shipwrecks, residences, farmsteads, bridges, industrial structures and fur trading posts. Precontact sites include villages, burials, find spots and artifact scatters spanning the Archaic (c. 9,000-2,500 years before present) through Contact Periods. Notably, several large villages and associated burial mounds are located along the river terraces on Prairie Island, Minnesota and around the Diamond Bluff, Wisconsin area. Many of the large villages were occupied by Woodland (c. 500 BC-AD 1650) and Oneota/Mississippian (c. AD 900-1500) societies.

<u>Pool 4</u>

5.17 Pool 4 contains 304 recorded cultural resources. Precontact sites exist throughout the pool, although they are denser along the prominent terraces at Red Wing, Frontenac, Lake City, Pepin and Wabasha. Precontact sites include single artifacts, village sites, rock art, burials and burial mounds that span Paleo through Oneota/Mississippian traditions. The area around Red Wing supported several large Oneota/Mississippian villages as well as thousands of burial mounds, the most recorded in Minnesota and along the Upper Mississippi River. Three precontact sites are listed on the NRHP. Historic sites, constituting approximately eight percent of the total, are also clustered on these terraces and include mills, fur trade posts, early town sites and pottery production facilities. Two historic sites are on the NRHP, six historic districts and at least ten historic shipwrecks exist in the pool.

Pool 5

5.18 A total of 63 cultural resources have been identified in Pool 5. Precontact sites comprise approximately 60 percent of the total and are mainly situated along the terraces near Kellogg, Minnesota and Buffalo City, Wisconsin. Site types range from single artifacts and village sites, to artifact scatters and rockshelters that include Paleo through Oneota/Mississippian periods. Historic sites are nested near Alma and Cochrane, Wisconsin and include one historic district and three sites on the NRHP. Two shipwrecks have been identified in the pool.

Pool 5A

5.19 Pool 5A contains 43 cultural resources that are relatively evenly dispersed throughout the pool. Precontact sites dominate at 84 percent of the total and include artifact scatters, village sites and burial mounds. Historic sites include mills and a fur post. No historic shipwrecks have been recorded in the pool.

<u> Pool 6</u>

5.20 Pool 6 contains nearly 300 identified cultural sites. Many of the precontact sites are situated on terraces at Winona and in Trempealeau National Wildlife Refuge and within the more rugged area of Perrot State Park in Wisconsin. Precontact sites include mound and non-mound burials, village sites, caves, rockshelters and rock art that span in age from the Paleo through Oneota/Mississippian periods. Notably, temple mounds related with Mississippian groups are extant near Trempealeau. Most of the historic sites, approximately 40 percent of the total sites, are located within the City of Winona and include a broad range of standing structures that reflect the commercial importance of this river community and includes three historic districts. Many sites are listed on the NRHP. Four historic shipwrecks have been identified within the pool.

<u>Pool 7</u>

5.21 Pool 7 contains 317 recorded cultural resources, with precontact sites making up approximately 90 percent of the total. Like elsewhere along the Upper Mississippi River, the cultural periods represented in the pool include Paleo through Historic components principally from single artifact finds, village sites, and mound and non-mound burials. While precontact sites exist on a variety of landforms throughout the pool, most are concentrated along the terraces at Brice Prairie and Rosebud and French Islands in Wisconsin. Two Archaeological Districts, with significant Oneota/Mississippian assemblages, are located just north and east of Onalaska. Several precontact are listed on the NRHP. Historic resources include mills, farmsteads, quarries, steamboat landings, early town sites and four shipwrecks.

<u>Pool 8</u>

5.22 Pool 8 contains approximately 650 recorded cultural sites, with approximately 60 percent of this total belonging to historic structures situated within the City of La Crosse. Several historic districts are within La Crosse and many individual sites are listed on the NRHP, including a wide range of historic site types, such as mills, commercial, industrial and residential buildings and transportation features. At least 10 shipwrecks are recorded in the pool. Precontact sites, spanning Paleo through Oneota/Mississippian periods are located throughout the pool, although clusters of multi-component habitation sites are located on the terraces at La Crosse, Goose Island and Stoddard. Several sites in Pool 8 have been extensively researched and the results have helped to establish the cultural record along the Upper Mississippi River while making major contributions to Americanist archaeology.

<u>Pool 9</u>

5.23 Pool 9 contains 200 identified cultural resource sites. Precontact sites, making up 80 percent of the total, are encountered throughout the pool and include village sites, rockshelters, rock art, and mound and non-mound burials. Several of these sites are listed on the NRHP. Historic sites are mostly contained in the bounds of the communities along the river, such as Lansing and several are listed on the NRHP. Other historic sites include the site of the Battle of Bad Axe in 1832, farmsteads, residences and clamming middens. Three shipwrecks are recorded in the pool.

<u>Pool 10</u>

5.24 Pool 10 contains approximately 790 recorded cultural resource sites. Historic sites constitute 30 percent of this total and are mainly located in Prairie du Chien, Harpers Ferry and Guttenberg. They include fur posts and early nineteenth century forts, mills, farmsteads, residences, shipwrecks and transportation features. Several are historic landmarks and listed on the NRHP. Precontact sites include numerous mound and non-mound burials, village sites, rockshelters and rock art. Two archaeological districts are within the pool as well as Effigy Mounds National Monument and several sites are listed on the NRHP. Many of these sites are deeply buried and contain multi-component shell middens. Research at precontact sites in the Prairie du Chien area have provided important information that has shaped our knowledge of the various societies inhabiting this part of North America and has contributed to Americanist archaeology.

SHORELINE PROTECTION PROJECTS

5.25 The Mississippi River floodplain contains a wealth of cultural resources and nationally significant habitats for fish and wildlife. Severe erosion occurs at many locations along the river. The loss of landmass and the associated increases in flow and/or sedimentation result in loss and shallowing of aquatic habitat in backwaters, adversely affecting water quality in the backwaters. Shoreline erosion also threatens to degrade cultural resources at historic sites throughout the project. Corps' staff undertakes protection of these resources in areas where they are threatened by erosion. Various rock riprap and bioengineering designs are used.

ENVIRONMENTAL MANAGEMENT PROGRAM

5.26 The Environmental Management Program (EMP) was authorized by the Water Resources Development Act (WRDA) of 1986 and amended by WRDA 90 and WRDA 92. Section 509, WRDA 99, reauthorized and amended the program to extend it without a termination date and required a report to Congress every 6 years.

To implement the program, a partnership has been formed among the Corps of Engineers; U.S. Fish and Wildlife Service; U.S. Geological Survey; and the States of Minnesota, Iowa, Wisconsin, Missouri, and Illinois. The Corps' St. Paul, Rock Island, and St. Louis Districts manage the program within their respective boundaries.

The habitat project component includes dredging backwater areas and channels, constructing dikes, creating and stabilizing islands, and controlling side channel flows and water levels. In the St. Paul District, the projects are located along the Minnesota River and along the Mississippi River from Guttenberg, Iowa (Lock and Dam 10), to Minneapolis, Minnesota, a distance of 250 river miles.

The long-term resource monitoring component includes monitoring trends and impacts with respect to selected resources, developing products for resource management decisions, and maintaining river information databases.

As of December, 2007, 25 projects have been completed in the St. Paul District and several more are under construction or in planning stages. Current information on the Environmental Management Program within the St. Paul District can be found at http://www.mvp.usace.army.mil/environment/

FISH AND WILDLIFE MANAGEMENT

5.27 The Fish and Wildlife Coordination Act of 1958 established the requirement to give fish and wildlife conservation equal consideration with other project purposes. Public Law 86-717 indicated that lands under the jurisdiction of the Corps should be maintained to assure adequate timber resources, as well as to increase the value of such areas for conservation, recreation, and other beneficial uses. This broadly worded authorization

was intended to provide considerable discretion in developing and maintaining reservoir lands for any or all conservation purposes, including wildlife conservation. The Forest Cover Act provides authority for the Corps to manage project lands and waters for any or all conservation purposes, including fish and wildlife conservation. Because of the cooperative relationship between the Corps and the Fish and Wildlife Service, the Service conducts fish and wildlife management activities on Corps land and the Corps conducts fish and wildlife management program which emphasizes forest management prescriptions that improve habitat for native wildlife species.

5.28 The states of Minnesota, Wisconsin, and Iowa are responsible for fisheries management practices on the Mississippi River. The Corps recognizes however that the construction and operation of the locks and dams have or are negatively impacting the fisheries resource. As such, the Corps has identified three areas of possible restoration activities:

- (1) potential modification of water control actions at the locks and dams to minimize adverse effects to fish and wildlife resources;
- (2) rehabilitating fisheries habitat that was negatively affected by the construction of the locks and dams;
- (3) rehabilitating side channels and associated backwater lakes that have been adversely impacted by past channel maintenance activities.

5.29 The majority of project lands are managed for refuge purposes as part of the Upper Mississippi River National Wildlife and Fish Refuge by the Fish and Wildlife Service. This authority first established in 1945 under a Cooperative Agreement and General Plan between the two agencies and has since been modified and re-written in 1954, 1963, and most recently in 2001.

5.30 Additionally, approximately 4,123 acres located in Pool 3 were made available to the Minnesota Department of Natural Resources (MNDNR) for wildlife management, maintenance, and conservation purposes through a real estate license (Gores Wildlife Management Area).

PRAIRIE RESTORATION AND MAINTENANCE

5.31 Grassland management is within the mandate of the Forest Cover Act. The Corps will provide for the protection and development of vegetative cover other than forests and woodlands as well as establish conservation measures for its maintenance. Grassland management techniques will be applied whenever the opportunity exists to protect native grasslands or prairie and improve vegetative conditions as a soil conservation, watershed protection, fish and wildlife habitat, or range management practice. Opportunities exist to restore remnant prairies and create prairies on a wide variety of project lands such as water control embankments, islands created through the EMP program, and dredged material offload sites. By doing this, diverse habitats are created and the public is afforded the opportunity to view the prairies and associated wildlife, while the Corps is able to offer interpretive and educational opportunities.

REVEGETATION OF DREDGED MATERIAL

5.32 Dredged material placement sites are locations along the main channel of the Mississippi River where sand from channel maintenance dredging operations are placed. Over the years, the Corps has significantly reduced the number of placement sites and currently strives to maximize beneficial use of the material for other purposes. Many historic placement sites are no longer used for channel maintenance work. Establishing vegetation at these sites is designed to improve habitat by enhancing soils and restoring trees, shrubs, grasses and/or forbs. The placement of topsoil is recommended to facilitate revegetation efforts.

VEGETATION AND PEST CONTROL

5.33 The River and Harbors Act of 1899 directed the Department of Defense's Army Corps of Engineers to manage aquatic invasive plants. This was in response to invasive species that interfered with navigation. Invasive species now present one of the greatest threats to the health and biodiversity of Corps lands. These unwelcome plants, insects and other organisms are disrupting the ecology of natural ecosystems, displacing native plant and animal species, and degrading our nation's unique and diverse biological resources.

ER 1130-2-540 Chapter 4 establishes the policy for consistent Corps involvement under the Memorandum of Agreement (MOA) between the U.S. Department of Agriculture (USDA) and U.S. Department of Defense (DOD) for assistance in the conduct of forest insect and disease suppression on lands administered by the DOD. In accordance with the MOA, Division and District Commanders shall cooperate fully with the USDA to prevent and suppress damaging forest insect and disease outbreaks. The Cooperative Forestry Assistance Act of 1978, PL 95-313 authorizes the UDSA Forest Service to allocate funds to other Federal land management agencies for suppression of forest insect infestation and disease epidemics. Lack of USDA Forest Service funding for a particular Corps suppression project does not prohibit Corps funding of the project using Operation and Maintenance, General funds if good stewardship practices dictate.

Lastly, vegetation control is an important part of maintaining the integrity of water control structures. Rip-rapped areas of sand embankments must be kept entirely free of vegetation and on other areas of the embankment, woody vegetation must be eliminated.

RARE, THREATENED, AND ENDANGERED SPECIES

5.34 The Endangered Species Act mandates Federal agencies to utilize their authorities to carry out programs for the conservation and survival of federally-listed endangered and threatened species. The Act also requires the Fish and Wildlife Service/National Marine Fisheries Service (FWS/NMFS) to develop and implement recovery plans as a program for the conservation and survival of endangered and threatened species. Therefore, it is the policy of the Corps, in balance with other Corps priority missions, to participate in the implementation of FWS/NMFS recovery plan efforts involving civil works project lands and waters.

EP 1130-2-540 states that civil works project lands and waters will be managed in a manner which assists in the overall conservation of federally-listed endangered and threatened species, and the ecosystems upon which they depend. Species which are candidates for listing will also be given consideration. Conservation methods and procedures will be utilized which will enable the inventory and protection of these species of special concern and their habitat, as well as the participation in their recovery.

On the Mississippi River project, the Higgins' Eye Relocation Plan was developed in response to the Fish and Wildlife Service's 2000 Biological Opinion. This opinion stated that continued operation of the 9-foot navigation channel project on the Upper Mississippi River System would likely jeopardize the continued existence of the federally endangered Higgins' eye (*Lampsilis higginsii*) and result in the incidental take of winged mapleleaf (*Quadrula fragosa*). The Fish and Wildlife Service determined that operation and maintenance of the navigation pools and project-dependent commercial barge transportation would encourage continued zebra mussel (*Dreissena polymorpha*) dispersion throughout the Upper Mississippi River system. Zebra mussels negatively affect the survival and recovery of these endangered mussels. Relocation sites have been established in Minnesota, Wisconsin, Illinois, and Iowa using a variety of propagation and relocation techniques. The Higgins' Eye Relocation Plan will take 10 years to fully implement, with long-term (20 years) monitoring continuing after the implementation period. In addition, the federal and state agencies are leading the interagency effort to establish new mussel populations on the Upper Mississippi River, evaluating the opportunity for fish passage at locks and dams for fish species that are hosts of the Higgins' eye and other native mussel young, and funding research to obtain more information about the little-studied winged mapleleaf

and to develop a relocation plan.

NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

5.35 The Navigation and Ecosystem Sustainability Program (NESP) is a long-term program of navigation improvements and ecological restoration for the Upper Mississippi River System over a 50-year period that will be implemented in increments through integrated, adaptive management.

The primary opportunities are to reduce or eliminate commercial traffic delays and improve the national and regional economic conditions while restoring, protecting, and enhancing the environment. The primary goal of the program is implementation of an integrated, dual-purpose plan to ensure the economic and environmental sustainability of the UMRS.

NESP does not directly affect authorization and funding of other programs addressing the needs of the Upper Mississippi River System, but management of NESP will be integrated with the management of other programs to enhance efficiency and effectiveness across programs.

The NESP program was authorized by Congress under Title VII-Upper Mississippi River and Illinois waterway system of the Water Resources Development Act of 2007. Section 8004, Ecosystem Restoration Authorization, directs the Corps to "modify, consistent with requirements to avoid adverse effects on navigation, the operation of the Upper Mississippi River and Illinois Waterway System to address the cumulative environmental impacts of operation of the system and improve the ecological integrity of the Upper Mississippi River and Illinois River." It further directs that the Corps "shall carry out, consistent with requirements to avoid adverse effects on navigation, ecosystem restoration projects to attain and maintain the sustainability of the ecosystem of the Upper Mississippi River and Illinois River in accordance with the general framework outlined in the Plan." The "Plan" refers to *Project for Navigation and Ecosystem Improvements for the Upper Mississippi River and Illinois Waterway System: Report of the Chief of Engineers*, dated December 15, 2004.

POOL PLANS

5.36 The Environmental Pool Plans were prepared by the Fish and Wildlife Work Group at the request of the River Resources Forum. The plans will serve as a guide for individual agencies as they carry out their respective missions and seek funding to do so in a way that insures environmental sustainability. The plans are considered to be an environmental concept that the River Resources Forum can reference when considering future projects and activities brought forth by member agencies.

The Environmental Pool Plans are a result of cooperative efforts among State and Federal agencies and the public to help develop common habitat goals and objectives for the Upper Mississippi River. The plans identify a desired future habitat condition toward which resource agencies and other river interests can strive. The desired future was developed on the basis of our current knowledge about the Mississippi River ecosystem, experience with past habitat projects, and observations of river managers, biologists, and members of the public. The desired future habitat described in the plans represents what river managers and the public have identified as the habitat and features necessary to reverse negative trends in habitat quality and move toward a more sustainable ecosystem.

WATER LEVEL MANAGEMENT

5.37 Since the construction of the lock and dam navigation system on the Upper Mississippi River System there has been a gradual decline in the diversity and functionality of the river ecosystem. As awareness of this condition has grown, the public has demanded that steps be taken to restore degraded habitat on the river. Over the past decade, water level management has been used effectively on individual backwater lakes and

ponds to improve aquatic vegetation growth and restore degraded habitat on the Upper Mississippi River System. More recently, drawdowns of entire navigation pools have been pursued. Pool-scale drawdowns during the summer growing season were conducted in Pool 8 during 2001 and 2002, and in Pool 5 during 2005 and 2006. Pool 8 and Pool 5 each experienced an increase of aquatic vegetation on approximately 2,000 acres after the drawdowns. Monitoring showed that the vigorous vegetation response observed has resulted in increased populations of shorebirds, water fowl, and other biota, which has increased opportunities for hunting, fishing and birdwatching.

To implement these projects, comprehensive pre-project planning, modeling, engineering, monitoring, and collaboration with river partners were necessary to ensure that projects did not adversely impact commercial navigation, recreational usage, or fish and wildlife. This multi-purpose operation and maintenance of the Upper Mississippi River for both navigation and ecosystem restoration demonstrated that various river uses can be successfully accommodated.

SECTION 6

CORPS OF ENGINEERS RECREATION PROGRAM

6. CORPS OF ENGINEERS RECREATION PROGRAM

GENERAL

6.01 While the 9-foot navigation system was authorized in 1930, the operation and maintenance of recreation areas was not authorized until Congress passed the Flood Control Act of 1944 (Public Law 78-534). As a result the Corps has constructed and operates recreation areas and/or visitor centers at most of the lock and dam sites and at various locations within the navigational pools. In some cases recreation areas are managed directly by the Corps, and in other cases they are managed by Fish and Wildlife Service or are leased to a state or local government for management at the local level.

DEVELOPED RECREATION AREAS

6.02 The Corps operates four recreation areas and two visitor centers within the project. Additionally, most Lock and Dam sites have visitor areas available to the public. A brief summary of the Corps operated recreation sites, visitor centers and lock and dam public use areas follow:

<u>Millstone Landing</u> – This 5 acre site is located in Houston County, Minnesota, approximately 3 miles north of New Albin, Iowa. The site is located in the backwaters, right descending bank, adjacent to mile 677 in Pool 9. Facilities include vault toilets, a one-lane launching ramp, courtesy dock, a 22-space car-and-trailer parking lot and kiosk. Bank fishing is also available.

Bad Axe Landing – This 5 acre site is located in Vernon County, Wisconsin, approximately 4 miles south of Genoa, Wisconsin in Pool 9. The site is on the left descending bank of the river at mile 675 in Pool 9. A one-lane boat-launching ramp, courtesy dock and a 20-space car-and-trailer parking lot are provided for users. Additional facilities include two picnic sites, vault toilets and kiosk. Bank fishing is also available.

Blackhawk Park – This 75 acre area is located in Vernon County, Wisconsin, approximately 3 miles north of De Soto, Wisconsin. It is on the left descending bank of the river between miles 670 and 671, and is the largest public use facility in Pool 9. Facilities include approximately 165 campsites, many with electrical hookups. Ample picnic sites, potable water, a shower building and vault toilets are provided. Additional facilities include 2 boat-launching ramps, reserveable picnic shelters, and associated parking. Plenty of shoreline exists for bank fishing as well. Blackhawk Park is also an approved dredged material placement site. On occasion dredged material is placed at the park and used to elevate land areas and rehabilitate existing park facilities. The development plan for this park is contained in Part III of the St. Paul District's Master Plan for Public Use Development.

Jay's Lake Landing – This site is a 3-acre Corps-managed recreation area located in Grant County, Wisconsin, approximately 2 miles south of Bagley, Wisconsin. It is in the backwaters of the left descending bank adjacent to mile 622 in Pool 10. Public use facilities include a one-lane boat-launching ramp, courtesy dock, parking spaces for 30 cars and trailers, 4 picnic sites, vault toilets and an informational kiosk. Bank fishing is also available.

<u>Upper St. Anthony Falls Visitor Center</u> – Upper St. Anthony Falls Lock and Dam is located in downtown Minneapolis, Minnesota, on the right descending bank of the river and adjacent to the historic Mill District. The Morgan J. Tschida Visitor Center exists at this lock site, and provides visitors an excellent view of the lock and dam, falls, and stone arch bridge which crosses the river, in addition to interpretive and educational displays, restrooms and parking facilities.

Lock and Dam No. 7 Visitor Center – Lock and Dam No. 7 Visitor Center is located approximately 2 miles north of La Crescent, Minnesota, on the right descending bank of the river. At the completion of the site's

major rehabilitation in 2002, the Corps restored the original control building, (which is also on the National Register of Historic Places), to a visitor center. The displays in the center and surrounding grounds interpret Corps missions such as the operation of the locks and dams, channel maintenance, environmental stewardship and recreation management, water safety and items of interest in Pools 7 and 8.

<u>Recreation Areas at Lock and Dam Sites</u> – Most of the Lock and Dam sites have areas where visitors can observe the lock site and watercraft locking through procedures. These visitor areas provide parking, restrooms, benches, interpretive displays and education materials.

RECREATION SITES LEASED FROM THE CORPS OR MANAGED BY THE FISH AND WILDLIFE SERVICE

6.03 There are approximately 30 sites along the Mississippi River owned in fee title by the Corps that are leased to other agencies or entities and operated as recreation areas. The Corps coordinates with the lease holders on the development or rehabilitation of these areas in addition to assisting with unique management items, special events, or problems that may arise. These sites are listed in Attachment 3 at the end of this document and shown on the Land Use Allocation Plates attached to this plan. In addition to the aforementioned leased areas, there are 11 Corps owned access areas that are operated and maintained by the Fish and Wildlife Service under the conditions of the Cooperative Agreement.

RECREATION AREAS AND ACCESS POINTS ALONG THE MISSISSIPPI RIVER

6.04 Not all developed recreation and boat access areas are managed by federal agencies. Some are located on publically owned state or local lands and many are located on private property. A comprehensive list of all these sites is shown in Attachment 3.

THE RECREATION WORK GROUP

6.05 In addition to the management of developed recreation areas, much emphasis is placed on managing recreational activities that occur on the river outside of these developed areas. Such activities include boating, swimming, waterskiing, and use of undeveloped island beaches for day use and camping. The Recreation Work Group (RWG), a sub-group of the River Resources Forum, is charged with developing an approach to managing river wide recreational activities that balances well with other resource uses such as fish and wildlife management and navigation. This group provides direction to the Corps and other resource agencies concerning all aspects of river wide recreation management.

6.06 One of the products produced by the RWG is a study of recreational boating use throughout the Upper Mississippi River system. This is an ongoing study that was initiated in 1989 and continues through the present day. The study consists of boating use data which has been obtained from aerial photographs collected over the many years of the study. In general, aerial photographs have been taken every other year over the main channel of the river and boats are counted and classified by type and activity. This data can then be used in determining management actions such as permitting new marinas, or creating beach management plans.

6.07 Historic dredging practices necessary to maintain the 9-foot navigation channel were the primary contributor in creating sandy beach sites along the main channel. Historically channel maintenance activities kept many of the sites replenished with sand, free of woody vegetation and undesired plants, and thus, very popular for day-use and camping by thousands of recreational users on the project. Most of these beach sites were zoned as recreation/low-density in the Land Use Allocation Plan maps.

6.08 However, since the GREAT I study, changes in channel maintenance operations have impacted the historically established beach sites. Dredging volumes have decreased, and plans such as the Channel

Maintenance Management Plan (CMMP) have been developed to maximize beneficial use and to dispose of material in confined placement sites or out of the floodplain. Without the periodic placement of dredged material on the beaches, many of these sites have re-vegetated and/or eroded to a point where their use for recreation is greatly diminished.

6.09 In addition to the GREAT I report recognizing the value of these beaches, user surveys and informational gathering forums in recent years have heard the public routinely voice their desire for well maintained beach sites for recreating opportunities. At the direction of the River Resources Forum (RRF), the Recreation Work Group (RWG) has been tasked with updating and/or developing recreation beach management plans for each pool within the St. Paul District's 9-foot navigation project. Not being able to depend solely on channel maintenance activities for beach management, the RWG is developing the plans with additional management options in mind such as placing smaller quantities of dredged material at the sites, re-grading and/or re-shaping existing material, removing undesired vegetation and working with local groups to secure funding and perform routine clean-up and maintenance. The ultimate goals of the plans are to accomplish beach management in a way that will minimize environmental impacts, reflect sound design, and be operationally practical and implementable. Future beach planning recommendations may result in a change in the land use zoning within the LUAP. All plans will have endorsement from participating river management partners.

6.10 The Upper Mississippi River National Wildlife and Fish Refuge has defined it's Beach Management and Maintenance Policy in the approved Comprehensive Conservation Plan. That policy reads as follows:

"The Refuge will play an active role in completing beach management plans with the Corps of Engineers and the states for all pools within the Refuge, and supports active public involvement in the process. However, the Refuge will in general only concur with maintenance of beaches on remnant dredged material islands or existing dredged material placement sites adjacent to the main channel of the river that are designated "low density recreation" in current Land Use Allocation Plans, or those not otherwise closed to use. Maintenance should be limited to the minimum reshaping, leveling, and vegetation clearing needed to ensure safe access and to facilitate the camping experience. Top dressing with sand should only be done under special circumstances. The scope and extent of all maintenance will be on a site-by-site basis as determined by the respective District Manager in consultation with the Corps of Engineers and the respective state. The Refuge will continue to request the closure of openings to dredged material placement sites after emptying on Service-acquired lands and Corps-acquired lands due to concerns with crowding, large group behavior issues, steep slopes, and shoreline drop-offs. Enforcement of non-wildlife-related recreation in empty placement sites left open on Corps of Engineers-acquired lands will not be the responsibility of the Refuge."

INTERPRETIVE PROGRAMS

6.11 The goal of the interpretation program on the Mississippi River, 9-foot navigation project, is to inform and educate the public by enhancing their understanding of the history, operation, and purpose of the project as well as impressing upon the visitor the importance of the water resource and the need for environmental ethics and recreational safety. Interpretation is also used to aid management objectives by interpreting management activities and relating wise use of resources to the visitors. Interpretation can help gain public support by promoting an understanding of the Corps of Engineers' programs and activities.

6.11 Public support for environmental stewardship and recreation resource management is promoted through a p2ogram of public information, education, and participation. Features of this program may include planned interpretive presentations to recreation users, local schools, and special interest groups which describe principles of good environmental stewardship and recreation management on Corps land. Spontaneous contact between the visiting public and Corps employees may occur daily on project lands and has a large impact on the

visitors. Unplanned interaction provides an opportunity for the Corps employee to relate important information and educate the public in a less conventional setting. Passive interpretation opportunities occur at the Corps Visitor Centers and public use areas at the lock and dams, in addition to kiosks and bulletin boards at the other Corps managed recreation areas.

6.13 The Corps also partners with river management agencies and groups to provide interpretive and educational opportunities about the project and interagency efforts.

SECTION 7

LAND AND WATER MANAGEMENT

7. LAND AND WATER MANAGEMENT

SHORELINE MANAGEMENT (AND OTHER LAND USE DESIGNATIONS)

7.01 This update of the Land Use Allocation Plan does not constitute a change in the policy or procedures related to the project's shoreline management program. The Corps of Engineers Shoreline Management Plan, which outlines the Corps policy concerning placement of private structures on Corps property is available at the Corps office in La Crescent, Minnesota. The U.S. Fish and Wildlife policy concerning private structures is summarized in paragraph 4.05 of this document.

7.02 It is the policy of the Corps of Engineers to minimize private exclusive use activities on project lands and waters owned in fee. On the Mississippi River, 9-foot channel project, this use is managed in accordance with the Corps Shoreline Management Program. Prior to the late 1980's, no management plans existed which governed the shoreline management activities on Corps land. Individuals were allowed to build and maintain structures for their own exclusive use and were generally authorized under a real estate agreement from the St. Paul District. These structures were typically stairways to the water, boat docks, boathouses and related structures such as storage sheds. The Corps philosophy regarding the appropriateness of allowing private exclusive use has been more clearly defined over the years. Regulations and policies are now in place which provide Corps projects with the guidance to develop plans for managing such use.

7.03 On the Upper Mississippi River, 9-foot channel project, the Shoreline Management Plan (SMP) for managing private exclusive use was completed and approved in 1988. The plan summarizes the purpose for shoreline management at this project, discusses history and past policies, provides definitions pertinent to the program, addresses administrative procedures, lists conditions of shoreline use permit, identifies and defines land use designations, and identifies areas where shoreline use may continue and where new structures may be allowed. Areas of shoreline where private use currently exists and may continue to exist are identified as either "grandfathered areas" or "limited development areas." Grandfathered areas are typically zoned as wildlife management and only the continuation of the historic use will be allowed to continue; no new additional structures can be permitted. However, in limited development areas, which are typically zoned as recreation low density, historic private use and, potentially new use such as docks and stairways, may be allowed provided the conditions of the SMP are met. Shoreline use permits are used for water based structures such as docks, while land based items like decks and sheds are covered by a special use license.

7.04 In addition to the SMP defining and identifying land use designations such as limited development and grandfathered areas, it also discusses the zoning of four other types of areas; public recreation, prohibited access, voluntary avoidance and protected areas. Section 6 of this document covers public recreation areas. Prohibited access areas are provided as a management option to ensure the protection of ecosystems or the visiting public. The only Corps-managed prohibited access area resides above and below each lock and dam and at spillways associated with the earthen embankments. These areas are delineated with Coast Guard approved buoys restricting water access due to safety concerns. The Fish and Wildlife Service has several restrictive land and water designations including Closed Areas, Waterfowl Hunting Closed Areas, Electric Motor Areas, and Slow, No Wake Areas that protect sensitive areas for wildlife. Many of these areas are seasonal in nature to protect waterfowl during the fall migration. These areas are identified by signs and maps and area administered by the Upper Mississippi River National Wildlife and Fish Refuge in accordance with the Refuge Comprehensive Conservation Plan and the Cooperative Agreement. Detailed information on theses areas is found in the refuge Comprehensive Conservation Plan.

OUTGRANTS ON PROJECT LANDS

7.05 To date, there are approximately 360 outgrants on Corps fee title lands within the project. These outgrants exist in the form of park and recreational and commercial leases, special use licenses and easements.

Many of the park and recreation and commercial outgrants are for the management of Corps recreation areas (including marinas) by other governmental agencies or private groups. All are listed in Attachment 3 at the end of this document. Many of the special use licenses are managed in conjunction with shoreline use permits which are discussed in the aforementioned paragraph on shoreline management. Other special use licenses may exist for encroaching structures such as decks or other unique and isolated activities like air monitoring stations, communication structures (radio transmitters/towers, etc.). Most easements exist for right-of-way activities such as roads, storm sewer outfalls, electrical transmission lines, etc. Many of the outgrants are considered to be "out of the Refuge," by the Fish and Wildlife Service, while others are not and require close coordination between the Corps, Fish and Wildlife Service, and others, when making management decisions.

BOUNDARIES

7.06 It is the policy of the Corps to maintain the integrity of the project boundary so that encroachments and other forms of unauthorized private use can be identified, cured and/or eliminated with minimal impact to public lands. Hundreds of miles of Government property boundary lines exist within the 9-foot navigation channel project. Boundaries which exist on highly developed lands such recreation, shoreline management and outgranted areas have been resurveyed, beginning in the early 1980s. These property lines are inspected on an annual basis and non-compliance issues, re-signing or in some cases. Relocating and re-establishing monuments are promptly addressed.

Other property boundaries which lie on project lands and are located within the Upper Mississippi River National Wildlife and Fish Refuge are inspected and in some cases, resurveyed on an as needed basis. The Corps and the Fish and Wildlife Service work jointly to inspect and maintain boundary lines of mutual interest.

SECTION 8

PUBLIC INVOLVEMENT SUMMARY

8. PUBLIC INVOLVEMENT SUMMARY

8.01 The Corps of Engineers released public notices which invited the public to comment on the draft master plan. Notices were published in local newspapers and posted on the Corps of Engineers website. The Corps also held several coordination meetings with various government agencies throughout the planning process.

8.02 By the end of the public comment period several constructive comments were received from various government agencies, river interest groups, and involved citizens. All public comments identifying areaspecific or site-specific recommendations that affect land use allocation were studied carefully, and appropriate changes were made in the land use allocation maps. Letters responding to their comments were prepared and sent to the individual commenter.

SECTION 9

ENVIRONMENTAL ASSESSMENT

CEMVP-PM-E

MEMORANDUM FOR RECORD

SUBJECT: Environmental Compliance Review for the Updated Land Use Allocation Plan (LUAP).

1. Reference:

a. Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) (signed 11 August 1983) for the Upper Mississippi River Land Use Allocation Plan Master Plan for Public Use Development Iowa, Minnesota, and Wisconsin.

b. Land Use Allocation Plan (LUAP) 2009

2. The St. Paul District has updated the (LUAP) for project lands. The updated LUAP was developed in close coordination with the other major Federal landowning agency on the river, the U.S. Fish and Wildlife Service (FWS), who provided the details of their land use change over the years including all lands that they acquired since 1983 and land that they no longer manage. Coordination with the states included acquiring data to incorporate their land ownership on the LUAP, and incorporating their comments on proposed land use changes throughout the updating process. The draft updated LUAP was distributed to partners at the River Resources Forum meeting on April 28 for comment, and was released to the public for a 30 day review period August 2nd, 2009. Comments were received and addressed during this process with no significant issues being raised.

3. The updates identify the land use changes for specific areas from one land use to another, identifying newly acquired properties to the LUAP, identifying lands created either by natural accretion or island building, highlighting dredge disposal areas on the maps, adding state owned/managed land to the document, and updating all text, graphs and tables with respect to federal lands.

4. The overall percentage change of land use from 1983 to the current 2009 LUAP shows no appreciable changes (Attachment 1). While there have been some minor shifts in management priorities within these lands there are no appreciable effects on social resources, natural resources, or cultural resources. Any site specific land use changes in the future require environmental evaluation and NEPA documentation as appropriate.

5. It is my determination that there is no appreciable change in impacts from what was described in the EA for the 1983 LUAP. Therefore, no further NEPA documentation is required at this time for the updating of the Land Use Allocation Plan 2009.

BIRKENSTOCK Digitally signed by BIRKENSTOCK. TERRY.1.230543743 .TERRY. Discussion Content, ou=DoD, ou=PKI, ou=USA, cn=BIRKENSTOCKTERRY. J.1230543743 Date: 2009.10.15 18:01:08-05'00'

Terry J. Birkenstock Chief, Environmental and Economic Analysis Branch

Enclosures

Attachment 1 – LUAP Land Use Change Summary

Definitions of Land Use

Recognizing that the Upper Mississippi River is a multi-purpose resource, the LUAP seeks to balance and enhance fish and wildlife management and recreation management actions while maintaining the river's navigation system. Although state lands are shown on the new LUAP maps, policies outlined in this plan are limited to the federal land base. All federally owned acres above normal pool levels are allocated to one of five land use categories which are as follows:

<u>Project Operations</u> – These lands are required for siting or storing facilities, structures, or equipment necessary for authorized project purposes. This category includes lock and dam facilities, areas restricted for safety, major dredged material disposal sites, and Corps maintenance facilities. Recreational uses of such lands may be considered appropriate on a case-by-case basis.

<u>Recreation/Intensive-Use</u> – These lands are allocated for use as developed public areas for intensive recreational activities, including areas for concessions and quasi-public development. An intensive-use recreation area is generally defined as an area where relatively traditional recreation predominates, such as a campground, picnic area, or swimming area. Such areas generally require extensive facility development and maintenance.

<u>Recreation/Low-Density</u> – These lands are allocated for non-intensive, low-density recreation use. Low-density or dispersed recreation (RLD) occurs generally throughout a large area and is not confined to a specific place. Such recreation includes scattered, individual outdoor recreation activities. RLD areas normally are not identified with developed facilities or with areas of intense group concentration. Typical activities on such lands include hiking, backpacking, hunting, primitive camping, horseback riding, and cross-country skiing.

The primary purpose of designating RLD areas along the main channel of the river is to provide boat-beaching, primitive camping, and picnicking areas for river recreationists. At selected sites in some of these locations, dredged material may be used in the future to maintain open, sandy conditions desired by river recreationists.

In the RLD buffer zone around RIU areas, the only foreseeable development would be the creation of trails compatible with intensive recreation use.

<u>Wildlife Management</u> – These lands are allocated for fish and wildlife and provide opportunities for wildlife/wildlands-related recreation. Hunting, fishing, trapping, bird watching, photography, and canoeing are examples of such recreation. Other dispersed forms of recreation such as primitive camping, boating, swimming, cross-country skiing, and hiking are also permitted. However, wildlife habitat and population needs take precedence over public use levels. Designated portions of such lands are reserved as waterfowl sanctuaries ("closed areas") during migration periods, limiting certain uses.

Wildlife management (WM) areas are generally large tracts of forest and wetlands. Most of the WM lands are managed for wildlife purposes by the FWS as part of the Upper Mississippi National Wildlife and Fish Refuge, and they are likely to continue under such management.

<u>Natural Areas</u> – These lands are allocated to preserve scientific, ecological, historical, archeological, or aesthetic values and to protect threatened and endangered species. Public uses that do not adversely affect the protected resources may be allowed on a case-by-case basis.

Tables

Table 1 PERCENTAGE OF AREA UNDER PROPOSED LAND USE DESIGNATION FROM 1983 LUAP

Pool	<u>Project</u> <u>Operations</u>	<u>Intensive –</u> <u>Use</u>	<u>Low –</u> <u>Density</u>	Natural Area	<u>Wildlife</u> <u>Management</u>	<u>Totals</u>
SAF	<u>100.0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0</u>
<u>1</u>	<u>100.0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0</u>
<u>2</u>	<u>9.1</u>	<u>9.1</u>	<u>56.8</u>	<u>0</u>	25.0	<u>100.0</u>
<u>3</u>	0.8	<u>0.5</u>	<u>4.6</u>	<u>0</u>	<u>94.1</u>	100.0
<u>4</u>	<u>1.4</u>	<u>1.0</u>	<u>5.7</u>	<u>34.1</u>	<u>57.8</u>	100.0
<u>5</u>	<u>6.8</u>	<u>0</u>	<u>8.1</u>	<u>0</u>	<u>85.1</u>	100.0
<u>5A</u>	<u>5.6</u>	<u>3.7</u>	<u>1.3</u>	<u>1.7</u>	<u>87.7</u>	<u>100.0</u>
<u>6</u>	<u>9.0</u>	<u>1.0</u>	<u>8.0</u>	<u>6.0</u>	<u>76.0</u>	<u>100.0</u>
<u>7</u>	<u>1.6</u>	<u>0.7</u>	<u>4.9</u>	<u>0</u>	<u>92.8</u>	<u>100.0</u>
<u>8</u>	<u>1.9</u>	<u>15.7</u>	<u>6.3</u>	<u>0.8</u>	<u>75.3</u>	<u>100.0</u>
<u>9</u>	<u>0</u>	<u>1.4</u>	<u>1.7</u>	<u>0.3</u>	<u>96.6</u>	<u>100.0</u>
<u>10</u>	0.2	<u>1.4</u>	<u>5.0</u>	<u>0</u>	<u>93.4</u>	100.0
<u>TOTALS</u>	<u>1.5</u>	<u>3.0</u>	<u>4.1</u>	<u>1.7</u>	<u>89.7</u>	<u>100.00</u>

Table 2 PERCENTAGE OF AREA UNDER PROPOSED LAND USE DESIGNATION

	Wildlife Management		Recreation Intensive Use		Recreation Low Density		Natural Area		Project Operations	
	COE	FWS	COE	FWS	COE	FWS	COE	FWS	COE	FWS
SAF	0	0	0	0	0	0	0	0	100	0
1	0	0	0	0	19	0	0	0	81	0
2	0	0	0	0	20	0	0	0	80	0
3	91	0	1	0	7	0	0	0	1	0
4	20	24	1	0	1	1	3	48	1	1
5	46	45	0	0	4	0	0	0	5	0
5A	59	36	0	0	1	1	0	0	3	5
6	5	92	1	0	0	0	0	0	2	0
7	29	68	0	0	1	1	0	0	1	0
8	31	60	4	0	2	1	0	0	1	1
9	34	55	1	0	0	0	0	9	0	0
10	19	79	1	0	1	0	0	0	0	0
Total	31.8	56.7	1.1	0	1.2	.3	.3	7	1.2	.3
Combined totals	88.5		1.1		1.5		7.3		1.5	

TABLE 3 SUMMARY OF PROPOSED LAND USE CHANGES (1) (APPROXIMATE ACRES)

NA	1	****					
	1	WM	RLD	WM	PO	RIU	WM
	sed						
	ation						
<u>WM</u>	Ī	<u>RIU</u>	<u>RIU</u>	<u>RLD</u>	<u>RLD</u>	<u>RLD</u>	<u>PO</u>
0	(0	0	0	0	0	0
0	(0	0	0	0	0	0
0	(0	0	0	2	0	0
0	~	0	0	5	0	0	0
0	(0	1	0	0	0	0
0	(0	1	1	0	0	0
0	(0	0	0	0	0	0
0	(0	2	0	0	0	0
0	(0	1	2	0	0	0
37	(12	1	0	0	20	0
0	(0	0	15	0	0	6
0	(3	0	0	0	0	0
37		15	6	23	2	20	6
		37					37 15 6 23 2 20 measuring acreages in locations where the Corps owns a narr

(1) Because of the difficulty in measuring acreages in locations where the Corps owns a narrow strip of shoreline, this table does not reflect changes in such areas.

(2) Key Abbreviations:	WM – Wildlife management
	RIU – Recreation/intensive-use
	NA - Natural area
	RLD - Recreation/low-density
	PO - Project Operations

The overall percentage change from 1983 to now is unchanged for Wildlife Management lands and Project Operation lands where 89% of the land is still designated as Wildlife Management, and 1.5% of the land is still designated as Project Operations.

Recreation Intensive Use (RIU) and Recreation Low Density (RLD) use both decreased from 1983 to 2009, (RIU) went from 3% to 1.1%, and RLD from 4.1% to 1.5% currently. Natural Areas, however, increased from 1.7% in 1983 to 7.3% of the total area currently.

Although the percentages decreased, the total number of acreages designated as RIU and RLD remained fairly constant due to the land that has been acquired since 1983 (total acres increased from 64,072 acres in 1983 to 66,972 acres currently). Change also occurred due to RLD land that was lost to erosion. The majority of the RLD land is long linear beaches along the rivers edge, making it very susceptible to erosion.

ATTACHMENTS

ATTACHMENT 1

Limited Development Areas

POOL	AREA NAME	ALLOCATION	LIMITS OF AREA
3	Sturgeon Lake Area	Recreation Low-Density	All of Recreation Low-Density area
4	Beef Slough	Recreation Low-Density	All of Recreation Low-Density area
5	West Newton Chute	Recreation Low-Density	Mile 748.2 to Mile 749.8
5	Buffalo City	Recreation Low-Density	From Indian Point south to end of Recreation Low-Density area
7	Trempealeau	Recreation Low-Density	From north end of Recreation Low-Density area south approximately 1,600 feet
7	Brice Prairie	Recreation Low-Density	From Halfway Creek north to culvert (excluding Recreation Intensive Use area)
7	French Island	Recreation Low-Density	From dike landing north to Nelson Park
10	Jay's Lake	Recreation Low-Density	From boat ramp north to include all of the Recreation Low-Density area (excluding Recreation Intensive Use area)
10	Willie's Resort	Recreation Low-Density	All of Recreation Low-Density area
10	Abels Island North	Recreation Low-Density	All of Recreation Low-Density area
10	Abels Island South	Recreation Low-Density	All of Recreation Low-Density area

ATTACHMENT 2

Grandfathered Areas

POOL	MILE	AREA NAME	ALLOCATION	NUMBER OF DOCKS	NUMBER OF BOATHOUSES
4	757	Robinson Lake	Wildlife Management	20	0
4	757	Teepeeota Point	Wildlife Management	16	0
4	757	South of Nelson	Wildlife Management	2	0
4	754	Peterson Lake	Wildlife Management	28	0
4	753	LD 4 Dike	Wildlife Management	6	0
4	753	LD 4 (Fish Float)	Wildlife Management	1	0
5	747.5	Prichard Lake	Wildlife Management	19	0
5	747.5	Indian Point	Wildlife Management	3	1
5	745	Weaver	Wildlife Management	0	0
5	742	Minnieska	Wildlife Management	0	0
5	741-743	Lower Spring Lake	Wildlife Management	Leased	0
7	712-713	Long Lake	Wildlife Management	3	0
7	712-713	Round Lake	Wildlife Management	2	0
8	691	Brownsville Bay	Wildlife Management	1	19
8	690	Lawrence Lake	Wildlife Management	3	19
8	689	North of Stoddard	Wildlife Management	1	3
8	688	Wildcat Creek	Wildlife Management	1	31
8	687	Stoddard	Wildlife Management	1	1
8	687	North of Shellhorn	Wildlife Management	1	14
8	686	Shellhorn	Wildlife Management	1	0
8	686	South of Shellhorn	Wildlife Management	1	5
8	684	Reno	Wildlife Management	0	0
9	676	Millstone	Wildlife Management	0	0
9	665	North of Lansing	Wildlife Management	13	5
9	656.1	Heytman's Station	Wildlife Management	4	0

Note: Since the initial Shoreline Management Plan was approved, structures at Weaver, Minnieska, Reno, and Millstone Landing have either been removed by the owner or the permits were terminated by the Corps. No further structures will be allowed in these areas.

ATTACHMENT 3

Recreational Access Inventory by Pool

Key to Abbreviations

COE	Corps of Engineers
CTY	County Government

FWS U.S. Fish and Wildlife Service

IA State of Iowa

LG Local Government MN State of Minnesota PVT Private WI State of Wisconsin

	ST ANTHONY FALLS										
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables				
863.0 R	BROOKLYN PARK PUBLIC ACCESS	LG	MN	Yes	No	Yes	Yes				
860.3 L	ANOKA COUNTY REG. PARK	CTY	MN	Yes	No	Yes	Yes				
857.8 R	NORTH MISSISSIPPI PARK	LG	MN	Yes	No	No	No				
854.8 L	BOOM ISLAND PARK	LG	MN	Yes	No	Yes	Yes				
853.9 R	UPPER ST. ANTHONY'S FALLS LOCK	COE	MN	No	No	Yes	No				

	POOL 1							
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables	
852.1 L&R	EAST RIVER FLATS REGIONAL PARK	LG	MN	No	No	No	No	
849.9 R&L	MINNEAPOLIS ROWING CLUB	PVT	MN	No	No	No	No	

	POOL 2										
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables				
845.9 L	HIDDEN FALLS REGIONAL PARK	LG	MN	Yes	No	Yes	Yes				
845.0 L	WATERGATE MARINA	PVT	MN	Yes	No	Yes	No				
842.2 R	LILYDALE REGIONAL PARK	LG	MN	Yes	No	Yes	Yes				
840.1 R	HARRIET ISLAND REG. PARK	LG	MN	Yes	No	Yes	Yes				
839.7 R	ST. PAUL YACHT CLUB	PVT	MN	No	No	Yes	No				
832.5 R	SOUTH ST. PAUL ACCESS	LG	MN	Yes	No	Yes	Yes				
832.2 L	NEWPORT ACCESS	LG	MN	No	No	No	No				
830.6 R	TWIN CITY MARINA	PVT	MN	Yes	No	Yes	No				
830.4 R	RIVER HEIGHTS MARINA	PVT	MN	Yes	No	No	No				
830.3 R	CASTAWAYS	PVT	MN	Yes	No	No	No				
829.8 L	ST. PAUL PARK ACCESS	LG	MN	Yes	No	Yes	Yes				
829.5 L	WILLIE'S HIDDEN HARBOR	PVT	MN	Yes	No	Yes	No				
826.2 R	RIVER GROVE HARBOR	PVT	MN	Yes	No	No	No				
822.2 L	GREY CLOUD ISLAND	LG	MN	Yes	No	Yes	Yes				
821.4 R	BUD'S LANDING	PVT	MN	Yes	No	No	No				
820.2 R	SPRING LAKE PARK	MN	MN	Yes	No	No	No				
814.5 R	LAKE REBECCA PARK	LG	MN	Yes	No	Yes	Yes				

	POOL 3										
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables				
814.5 R	HASTINGS PUBLIC ACCESS	LG/MN	MN	Yes	No	Yes	No				
814.3 L	HUB'S BAIT	PVT	MN	Yes	No	Yes	No				
813.8 L	KING'S COVE MARINA	PVT	MN	Yes	No	Yes	No				
813.3 R	HASTINGS MARINA	PVT	MN	Yes	No	No	No				
811.4 R	POINT ST.CROIX MARINA	PVT	WI	No	No	Yes	Yes				
811.2 L	JAQUES PUBLIC ACCESS	LG	WI	Yes	No	Yes	No				
811.1 L	MISS-CROIX YACHT HARBOR	PVT	WI	No	No	Yes	No				
807.7 R	VERMILLION RIVER PUBLIC ACCESS	MN	MN	Yes	No	No	No				
804.9 R	MN DNR PUBLIC ACCESS	MN	MN	Yes	No	No	No				
804.7 R	NORTH LAKE PUBLIC ACCESS	MN	MN	Yes	No	No	No				
800.2 R	TREASURE ISLAND CASINO MARINA	PVT	MN	No	No	Yes	Yes				
799.9 L	DIAMOND BLUFF LANDING	LG	WI	Yes	No	No	No				
799.4 R	STURGEON LAKE PUBLIC ACCESS	MN	MN	Yes	No	No	No				
797.0 R	VERMILLION RIVER LANDING	MN	MN	Yes	No	No	No				

		POOL 4					
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables
794.2 L	EVERT'S RESORT	PVT	WI	Yes	Yes	Yes	No
792.7 L	WI CHANNEL BOAT LAUNCH	WI	WI	Yes	No	No	No
792.7 L	MR. SIPPI	PVT	WI	No	Yes	Yes	Yes
791.4 R	BAY POINT MUNICIPAL ACCESS	LG	MN	Yes	No	Yes	Yes
791.4 R	OLE' MISS MARINA AT BAY POINT	PVT	MN	No	No	Yes	No
791.3 R	RED WING YACHT CLUB	PVT	MN	Yes	No	No	No
791.2 R	RED WING MARINA	PVT	MN	No	No	Yes	Yes
790.8 L	TRENTON ISLAND YACHT CLUB	PVT	WI	No	No	No	No
790.6 L	ISLAND CAMPGROUND & MARINA	PVT	WI	Yes	Yes	Yes	Yes
788.9 R	BILL'S BAY MARINA	PVT	MN	No	No	Yes	No
788.7 R	COLVILL MUNICIPAL PARK	LG	MN	Yes	No	Yes	Yes
786.8 L	BAY CITY VILLAGE PARK	LG	WI	Yes	Yes	Yes	Yes
779.7 L	MAIDEN ROCK VILLAGE PARK	LG	WI	Yes	Yes	Yes	Yes
779.0 R	MISSISSIPPI RIVER BEACH ACCESS	LG	MN	Yes	No	Yes	No
776.4 R	HANSEN'S HARBOR	PVT	MN	Yes	No	Yes	No
775.4 R	HOK-SI-LA PARK PUBLIC ACCESS	LG	MN	Yes	No	Yes	Yes
774.2 R	DIGGER'S BOAT AND BAIT	PVT	MN	Yes	No	Yes	Yes
774.2 L	STOCKHOLM MUNICIPAL PARK	LG	WI	Yes	Yes	Yes	Yes
772.8 R	LAKE CITY MARINA	PVT	MN	Yes	No	Yes	Yes
772.1 R	ROSCHEN PARK PUBLIC ACCESS	LG	MN	Yes	No	Yes	Yes

	Р	OOL 4 contin	ued				
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables
770.3 L	DEER ISLAND BOAT LANDING	LG	WI	Yes	No	No	No
767.3 R	MAPLE SPRINGS PUBLIC ACCESS	MN	MN	Yes	No	No	No
767.1 L	DAN'S PEPIN MARINA	PVT	WI	Yes	No	Yes	No
766.9 L	PEPIN PUBLIC LANDING	LG	WI	Yes	No	No	No
764.8 R	CAMP LACUPOLIS	PVT	MN	Yes	Yes	Yes	Yes
763.5 L	CHIPPEWA RIVER LANDING	WI	WI	Yes	No	No	No
760.6 R	IKE'S PARK ACCESS	LG	MN	Yes	No	Yes	Yes
760.6 R	MISSISSIPPI PARKSIDE MARINA	PVT	MN	Yes	No	Yes	Yes
760.2 L	BEEF SLOUGH INFORMAL	FWS	WI	No	No	No	No
760.2 L	BEEF SLOUGH LANDING	FWS	WI	Yes	No	No	No
760.2 L	PONTOON SLOUGH LANDING	FWS	WI	Yes	No	No	No
760.2 R	INDIAN SLOUGH LANDING	FWS	WI	Yes	No	No	No
760.1 R	WABASHA MUNICIPAL DOCK	LG	MN	Yes	No	Yes	Yes
759.4 R	WABASHA MARINA	PVT	MN	No	No	Yes	Yes
758.5 L	CEDAR RIDGE RESORT	PVT	WI	No	No	No	No
756.4 R	WILCOX LANDING	MN	MN	Yes	No	Yes	No
755.0 L	BUFFALO RIVER LANDING	FWS/LG	WI	Yes	No	No	No
754.7 L	RIECK'S LAKESIDE PARK	LG	WI	No	Yes	Yes	Yes
754.7 R	PETERSON LAKE LANDING	FWS	MN	Yes	No	No	No
754.0 L	ALMA MARINA	PVT	WI	Yes	No	Yes	No
753.8 L	TANK POND LANDING	LG	WI	Yes	No	No	No

	POOL 5										
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables				
752.8 R	LOCK 4 DIKE WALK-IN	COE	MN	No	No	No	No				
752.7 R	PIONEER LANDING	MN	MN	Yes	No	No	No				
751.6 L	ALMA LANDING	LG/WI	WI	Yes	No	Yes	No				
749.8 R	UPPER WEST NEWTON LANDING	COE/MN	MN	Yes	No	Yes	No				
748.0 L	GREAT RIVER HARBOR	PVT	WI	Yes	Yes	Yes	Yes				
747.5 R	HALFMOON LANDING	FWS	MN	Yes	No	Yes	Yes				
747.3 R	HALFMOON CANOE LANDING	FWS	MN	No	No	Yes	Yes				
746.9 L	BELVIDERE SLOUGH LANDING	WI	WI	Yes	No	No	No				
746.8 R	GOOSE LAKE LANDING	MN	MN	Yes	No	Yes	No				
744.6 R	WEAVER LANDING	FWS	MN	Yes	No	Yes	No				
744.3 L	BUFFALO CITY LANDING	LG	WI	Yes	No	No	No				
742.4 L	UPPER SPRING LAKE LANDING	LG	WI	Yes	No	No	No				
741.8 R	MINNEISKA PUBLIC ACCESS	MN	MN	Yes	No	Yes	No				
741.2 L	LOWER SPRING LAKE LANDING	FWS	WI	Yes	No	No	No				

		POOL 5A					
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables
738.2 L	WHITMAN DAM WILDLIFE AREA	WI	WI	Yes	No	No	No
737.7 R	BASS CAMP RESORT	PVT	MN	Yes	Yes	Yes	Yes
737.0 L	BAY'S END RESORT	PVT	WI	Yes	No	Yes	Yes
736.8 L	INDIAN CREEK RESORT	PVT	WI	No	No	Yes	Yes
735.8 L	MERRICK STATE PARK	WI	WI	Yes	Yes	Yes	Yes
735.0 L	MERRICK STATE PARK SOUTH	WI	WI	Yes	Yes	Yes	Yes
732.8 L	FOUNTAIN CITY BOAT DOCK	LG	WI	Yes	No	No	No
732.1 L	LOWER FOUNTAIN CITY LANDING	LG	WI	Yes	No	No	No
731.3 R	MINNESOTA CITY BOAT CLUB, INC	PVT	MN	Yes	No	No	No
730.8 R	VERCHOTA LANDING	FWS	MN	Yes	No	No	No
728.7 R	MC NALLY LANDING	FWS	MN	Yes	No	No	No
728.7 L	BUFFALO COUNTY PARKING AREA	CTY	WI	No	No	No	No

		POOL 6					
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables
728.2 R	PRAIRIE ISLAND CAMPGROUND	PVT	MN	Yes	Yes	Yes	Yes
728.0 L	BREEZY POINT MARINA	PVT	WI	Yes	No	No	No
726.1 L	DICK'S MARINA	PVT	MN	No	No	Yes	No
726.1 L	CITY HARBOR PUBLIC ACCESS	LG	MN	Yes	No	No	No
725.7 L	LATSCH ISLAND EAST	FWS	WI	Yes	No	No	No
725.6 L	LATSCH ISLAND PARK AND LANDING	LG	MN	Yes	No	Yes	Yes
724.8 R	WINONA YACHT CLUB	PVT	MN	No	No	No	No
724.7 R	ST. CHARLES STREET PUBLIC ACCESS	LG	MN	Yes	No	No	Yes
723.7 R	EAST 5TH STREET PUBLIC LANDING	LG	MN	Yes	No	No	No
720.6 R	HOMER RAMP	LG	MN	Yes	No	No	No
719.5 L	TREMPEALEAU WILDLIFE REFUGE	FWS	WI	Yes	No	No	No
718.0 R	KOA/RIVERSIDE PARK	PVT	MN	Yes	Yes	Yes	Yes
717.2 L	PERROT STATE PARK	WI	WI	Yes	Yes	Yes	Yes
714.4 L	SUNSET BAY MARINA	PVT	WI	No	No	Yes	Yes
714.4 L	TREMPEALEAU PUBLIC LANDING	LG	WI	Yes	No	Yes	Yes
728.2 R	PRAIRIE IS. PARK AND CAMPGROUND	PVT	MN	Yes	Yes	Yes	Yes
728.0 L	BREEZY POINT MARINA	PVT	WI	Yes	No	No	No
726.1 L	DICK'S MARINA	PVT	MN	No	No	Yes	No
726.1 L	CITY HARBOR PUBLIC ACCESS	LG	MN	Yes	No	No	No
725.7 L	LATSCH ISLAND EAST	FWS	WI	Yes	No	No	No
725.6 L	LATSCH ISLAND PARK AND LANDING	LG	MN	Yes	No	Yes	Yes
724.8 R	WINONA YACHT CLUB	PVT	MN	No	No	No	No

POOL 6 continued								
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables	
724.7 R	ST. CHARLES STREET PUBLIC ACCESS	LG	MN	Yes	No	No	Yes	
723.7 R	EAST 5TH STREET PUBLIC LANDING	LG	MN	Yes	No	No	No	
720.6 R	HOMER RAMP	LG	MN	Yes	No	No	No	
719.5 L	TREMPEALEAU WILDLIFE REFUGE	FWS	WI	Yes	No	No	No	
718.0 R	KOA/RIVERSIDE PARK	PVT	MN	Yes	Yes	Yes	Yes	
717.2 L	PERROT STATE PARK	WI	WI	Yes	Yes	Yes	Yes	
714.4 L	SUNSET BAY MARINA	PVT	WI	No	No	Yes	Yes	
714.4 L	TREMPEALEAU PUBLIC LANDING	LG	WI	Yes	No	Yes	Yes	

		POOL 7					
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables
714.0 L	TREMPEALEAU LANDING	WI	WI	Yes	No	Yes	No
713.7 L	LARRY'S LANDING	PVT	WI	Yes	No	Yes	No
713.6 R	SUNSET BAY	PVT	WI	Yes	No	No	No
713.5 L	THIRD LAKE ACCESS NORTH	WI	WI	Yes	No	Yes	No
713.5 L	THIRD LAKE ACCESS SOUTH	WI	WI	Yes	No	Yes	No
713.5 L	SECOND LAKE ACCESS	WI	WI	Yes	No	No	No
713.4 L	ROUND LAKE LANDING	FWS	WI	Yes	No	No	No
713.3 L	LONG LAKE LANDING	FWS	WI	Yes	No	No	No
712.6 L	LONE TREE CANOE ACCESS	FWS	WI	No	No	No	No
710.8 L	LYTLES CANOE ACCESS	WI	WI	No	No	Yes	No
709.0 L	BRICE PRAIRIE WALKDOWN	WI	WI	No	No	No	No
708.5 L	COZY CORNER COTTAGES	PVT	WI	No	No	Yes	Yes
708.4 L	UPPER BRICE PRAIRIE LANDING	LG	WI	Yes	No	Yes	Yes
707.3 L	CLEARWATER RESORT	CL	WI	No	No	Yes	No
706.9 L	NORTHSHORE LANDING	PVT	WI	Yes	Yes	Yes	Yes
706.9 L	MOSEY'S LANDING	LG	WI	Yes	No	No	No
706.8 L	SCHAFER'S BOAT LIVERY	PVT	WI	No	No	Yes	No
706.8 R	DAKOTA RAMP	MN	MN	Yes	No	No	No
705.1 L	LA CROSSE SAILING CLUB	PVT	WI	No	No	Yes	Yes
705.0 L	NELSON PARK AND LANDING	СТҮ	WI	Yes	No	Yes	Yes
704.9 R	DRESBACH PARK	LG	MN	Yes	No	Yes	Yes
703.9 L	FISHERMAN'S ROAD LANDING	LG	WI	Yes	No	No	No
702.7 L	UPPER DIKE LANDING	СТҮ	WI	Yes	No	No	No

		POOL 8					
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables
703.0 L	BLACK RIVER FRENCH IS. LANDING	LG	WI	Yes	No	No	No
702.1 L	LOWER DIKE LANDING	CTY	WI	Yes	No	No	No
702.0 R	UPPER I-90 RAMP	MN	MN	Yes	No	Yes	Yes
701.7 R	LOWER I-90 RAMP	FWS	MN	Yes	No	Yes	Yes
701.4 L	BLACK'S COVE MARINA	PVT	WI	No	No	Yes	Yes
700.9 L	RICHMOND BAY LANDING	LG	WI	Yes	No	No	No
700.7 L	LOGAN STREET LANDING	LG	WI	Yes	No	No	No
700.6 L	AL'S MARINA	PVT	WI	No	No	Yes	No
700.6 L	CLINTON STREET LANDING	LG	WI	Yes	No	No	No
700.5 L	CLINTON STREET LANDING WEST	LG	WI	Yes	No	Yes	Yes
700.5 L	BOB'S BAIT SHOP MARINA	PVT	WI	No	No	Yes	Yes
700.3 L	FRENCH IS. YACHT CLUB	PVT	WI	Yes	No	Yes	Yes
700.2 L	BEACON BAY MARINA	PVT	WI	Yes	No	Yes	Yes
700.4 L	COPELAND PARK MARINA	PVT	WI	No	No	Yes	Yes
698.3 R	ALLEN'S BOAT LIVERY	PVT	MN	Yes	No	No	No
698.2 R	SPORTSMAN'S LANDING	MN	MN	Yes	No	No	No
697.5 R	PETTIBONE YACHT CLUB	PVT	WI	Yes	No	Yes	Yes
697.3 R	BIKINI YACHT CLUB	PVT	WI	No	No	Yes	Yes
696.7 L	LA CROSSE MUNICIPAL HARBOR	LG	WI	Yes	No	Yes	No
695.2 R	CHUT'S LANDING	PVT	WI	No	No	Yes	No
695.0 L	GREEN ISLAND RAMP	LG	WI	Yes	No	No	No
692.8 L	UPPER GOOSE IS. LANDING	CTY	WI	Yes	Yes	Yes	Yes
692.0 L	MAIN GOOSE IS. LANDING	CTY	WI	Yes	Yes	Yes	Yes
690.5 L	UPPER HUNTER'S POINT LANDING	CTY	WI	Yes	Yes	Yes	Yes
690.4 L	HUNTER'S POINT LANDING	CTY	WI	Yes	Yes	Yes	Yes
690.5 L	SHADY MAPLE WALKDOWN	WI	WI	No	No	No	No
690. 5 L	LAWRENCE LAKE MARINA	PVT	MN	Yes	No	Yes	Yes
688.4 R	WILDCAT PARK	СТҮ	MN	Yes	Yes	Yes	Yes
686.5 L	WATER'S EDGE MOTEL	PVT	WI	Yes	Yes	Yes	Yes
685.7 L	STODDARD PARK LANDING	LG	WI	Yes	No	Yes	Yes
681.4 R	RENO PUBLIC ACCESS	MN	MN	No	No	No	No
679.7 L	ENGH'S BOAT LIVERY	PVT	WI	Yes	Yes	Yes	Yes
679.3 L	GENOA HARBOR	LG	WI	Yes	No	No	No

		POOL 9					
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables
677.8 L	DAIRYLAND POWER	PVT	WI	Yes	No	No	No
677.3 R	MILLSTONE LANDING	COE	MN	Yes	Yes	Yes	Yes
676.0 R	VISGER'S LANDING	FWS	MN	Yes	No	No	No
675.2 L	BAD AXE LANDING	COE	WI	Yes	No	Yes	Yes
673.3 R	NEW ALBIN ACCESS	FWS/IA	IA	Yes	No	Yes	Yes
672.7 L	VICTORY LANDING	LG	WI	Yes	No	No	No
671.3 L	BLACKHAWK, COUNTY RAMP	CTY	WI	Yes	Yes	Yes	Yes
671.2 L	BLACKHAWK PARK-MAIN	COE	WI	Yes	Yes	Yes	Yes
671.0 L	BLACKHAWK PARK-GREEN LAKE	COE	WI	Yes	Yes	Yes	Yes
670.7 L	BLACKHAWK HANDICAP PIER	COE	WI	No	Yes	Yes	Yes
669.6 L	EARL'S BOAT LANDING	PVT	WI	Yes	No	No	No
667.3 L	DE SOTO LANDING	LG	WI	Yes	No	No	No
665.3 L	WINNESHIEK SLOUGH LANDING	FWS/WI	WI	Yes	No	No	No
663.6 R	LANSING MARINA	PVT	IA	Yes	No	Yes	Yes
663.3 L	BIG SLOUGH LANDING	FWS/IA	WI	Yes	No	No	No
662.3 L	S & S RENTALS	PVT	IA	No	No	Yes	Yes
662.1 R	VILLAGE CREEK ACCESS	IA	IA	Yes	No	Yes	No
662.0 R	POWER PLANT FISHING ACCESS	IA	IA	No	No	No	Yes
660.6 L	RUSH CREEK WAYSIDE	WI	WI	No	No	No	No
658.1 L	FERRYVILLE LANDING	LG	WI	Yes	No	Yes	Yes
654.0 R	HEYTMAN'S LANDING	IA	IA	Yes	No	No	No
653.6 L	COLD SPRINGS LANDING	FWS/WI	WI	Yes	No	No	No
651.3 L	LYNXVILLE LANDING	LG	WI	Yes	No	No	No
651.0 L	HARRIS BOAT HARBOR	PVT	WI	No	No	Yes	Yes
649.8 L	HARBOR ROAD RAMP	PVT	WI	Yes	No	No	No

POOL 10								
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables	
646.9 R	HARPER'S FERRY LANDING	IA	IA	Yes	No	Yes	Yes	
646.8 L	GORDON'S BAY LANDING	WI	WI	Yes	No	Yes	No	
646.8 R	BABE'S BOAT DOCKS	PVT	IA	Yes	No	No	No	
646.6 R	BOARDMANS MARINA	PVT	IA	No	No	No	No	
646.4 R	DELPHEY BROTHERS MARINA	PVT	IA	No	No	No	No	
646.1 R	END OF THE LINE MARINA	PVT	IA	No	No	Yes	No	
644.0 R	LUNDS CAMP	PVT	IA	Yes	Yes	No	No	
643.2 R	NOBLE LANDING	IA	IA	Yes	No	Yes	Yes	
643.0 L	FRENCHMAN'S LANDING	PVT	WI	Yes	Yes	No	No	

POOL 10 continued								
River Mile	Name	Manager	State	Ramp	Camping	Toilets	Tables	
639.2 L	AMBROUGH SLOUGH LANDING	FWS	WI	Yes	No	No	No	
638.7 L	AMBROUGH SLOUGH ACCESS	WI	WI	Yes	No	No	No	
638.6 L	LAKEVIEW RESORT	PVT	WI	Yes	No	Yes	No	
638.4 L	WINNISHIEK MARINA	PVT	WI	Yes	Yes	Yes	Yes	
637.3 R	YELLOW RIVER ACCESS	IA	IA	Yes	No	No	No	
635.8 L	WEST CEDAR STREET LANDING	LG	WI	Yes	No	No	No	
635.7 L	MARINA RAMP	LG	WI	Yes	No	No	No	
635.6 L	NORTH WATER ST. LANDING	LG	WI	Yes	No	No	No	
635.6 L	PRAIRIE DU CHIEN MARINA	PVT	WI	No	No	Yes	No	
635.2 L	LAWLER PARK	LG	WI	Yes	No	Yes	Yes	
634.8 R	MARQUETTE CITY RAMP	IA	IA	Yes	No	Yes	No	
634.7 R	MISS MARQUETTE MARINA	PVT	IA	No	No	Yes	No	
633.5 L	LOCKWOOD ACCESS	LG	WI	Yes	No	No	No	
633.4 L	BIG RIVER CAMPSITE	PVT	WI	Yes	Yes	Yes	Yes	
632.4 R	BOATEL'S MARINA	PVT	IA	No	No	Yes	Yes	
632.3 R	MC GREGOR BOAT LANDING	LG	IA	Yes	No	No	Yes	
632.2 R	MC GREGOR HARBOR	PVT	IA	No	No	Yes	Yes	
629.5 L	WYALUSING STATE PARK	WI	WI	Yes	Yes	Yes	Yes	
627.5 L	WYALUSING PUBLIC ACCESS	CTY	WI	Yes	No	Yes	Yes	
627.1 R	SNY MAGILL ACCESS	NPS	IA	Yes	No	No	No	
625.6 R	CLAYTON LANDING	LG	IA	Yes	No	No	No	
625.6 R	BILL'S BOAT LANDING	PVT	IA	No	No	Yes	No	
625.5 R	TNT MARINA	PVT	IA	No	No	Yes	No	
624.2 L	BAGLEY BOTTOMS LANDING	FWS	WI	Yes	No	Yes	Yes	
622.4 L	RIVER OF LAKES RESORTS	PVT	WI	Yes	Yes	Yes	Yes	
621.8 L	JAY'S LAKE LANDING	COE	WI	Yes	Yes	Yes	Yes	
621.4 R	WILLIE'S RESORT	PVT	IA	Yes	No	No	No	
619.8 R	FRENCHTOWN PARK	CL	IA	Yes	Yes	Yes	No	
618.7 R	ISLAND MARINA	PVT	IA	Yes	No	Yes	No	
618.3 L	GLEN HAVEN PUBLIC ACCESS	CTY	WI	Yes	No	Yes	Yes	
616.6 R	BUSSEY LAKE LANDING	IA/LG	IA	Yes	No	Yes	Yes	
616.4 R	WINNEGAR MARINA	PVT	IA	No	No	Yes	Yes	
615.3 R	IA DNR FISHING ACCESS	IA	IA	No	No	No	No	
614.7 R	LAWSONS 615 LANDING	PVT	IA	Yes	No	No	No	
614.6 R	GUTTENBERG DOCK	IA/LG	IA	No	No	No	No	
614.5 R	GUTTENBERG LANDING	IA/LG	IA	Yes	No	Yes	No	