Supplement Appendix B

Electric Motor Areas and Slow, No Wake Areas: Background, Descriptions, and Rationale for Alternative E.

Supplement to Draft Environmental Impact Statement and Comprehensive Conservation Plan, Upper Mississippi River National Wildlife and Fish Refuge (Refuge).

This appendix provides background information, specific descriptions, and rationale for the establishment of Refuge Electric Motor Areas and Slow, No Wake Areas proposed in Alternative E of the supplement to the Draft Environmental Impact Statement and Comprehensive Conservation Plan. Additional information on these areas is provided in Chapter 1 (section 1.4.5.5) of the Draft EIS/CCP, with specific locations, objectives, and rationale provided in Objective 5.2 in Alternative E of the Supplement to the Draft EIS/CCP. These documents are available on the Refuge planning web site: http://www.fws.gov/midwest/planning/uppermiss

Background

When the Refuge was established in 1924, the Mississippi River floodplain was a braided maze of backwater channels and sloughs. Much of this unique habitat disappeared when the locks and dams went into operation. However, in the upper reaches of many pools, this unique bottomland habitat remains and offers fish, wildlife, and people a refuge from the sights and sounds of a modern and mechanized world. Many backwater areas are preferred breeding and nesting areas for species sensitive to certain human disturbance. Also, these more remote areas of the Refuge are an important component of the river experience to many. Technology in the form of jet skis, bass boats, shallow water motors such as Go-Devils^{TM}, airboats, and hovercraft has made the shallow backwaters of the Refuge accessible to more and more people, and introduced more and more noise, wildlife disturbance, and user conflict. The declining opportunity to experience the quiet and solitude of the backwaters was cited by many citizens during scoping meetings.

The single existing electric motor area on the Refuge is located at Mertes Slough, near Winona MN in Pool 6. This area was purchased from St. Mary's University of Minnesota in 1986. The electric motor provision was established in 1990 under Refuge fishing regulations published in the Federal Register in 1990 (50 CFR Chapter 1, 33.53) that permitted fishing on the condition that "only hand powered boats or boats with electric motors are permitted on Mertes' Slough in Buffalo County, Wisconsin." A major purpose of this regulation was to minimize disturbance of the Mertes Slough (St. Mary's) great blue heron colony. The colony continues to be active today.

Under Alternative E, the Refuge proposes to establish a total of 6 Electric Motor Areas on the Refuge encompassing 1,947 acres, and 8 Slow, No Wake Areas encompassing 10,569 acres. (See Tables 1, 2 and 4, and maps in the Executive Summary of Alternative E). These areas are defined as follows:

- **Electric Motor Areas.** Areas closed year-round to all motorized vehicles and watercraft except watercraft powered by electric motors or non-motorized means. The possession of other watercraft motors is not prohibited, only their use. For example, anglers could switch to an electric trolling motor when entering these areas.
- **Slow, No Wake Areas.** From March 16 through October 31 in these areas, watercraft must travel at slow, no-wake speed and no airboats or hovercraft are allowed. Respective state definitions for what constitutes "slow, no/wake" speed or operation will apply as appropriate.

Electric Motor Areas and Slow, No Wake Areas will help reduce disturbance to backwater fish nurseries and sensitive backwater wildlife such as raptors, black terns and other colonial nesting birds, and furbearers in keeping with the wildlife mission of the Refuge. It will also address the need to provide areas of quiet and solitude sought by many users of the Refuge, and thus provide a balanced approach in line with the focus of this alternative. This balancing of needs and desire of user groups, and within user groups, is becoming more important as visitation grows, technology advances, and the use of such technology increases (for example jet skis, mud motors, airboats, and hovercraft). The seasonal prohibition of airboats and hovercraft in the Slow, No Wake Areas recognizes the innate and virtually unavoidable noise levels produced by these types of watercraft. The seasonal approach also allows the use of airboats and hovercraft during the trapping season and for about half of the waterfowl hunting season when it is 60 days or longer. Due to the size and scope of the Refuge, space and time restraints are deemed a fair approach to watercraft use on the Refuge in keeping with the overall goal of providing high quality and sustainable wildlife-dependent recreation and opportunities for other recreation.

Electric Motor Areas and Slow, No Wake Area designations only affect the means of navigation in these areas, and all current uses would be allowed (fishing, hunting, camping, wildlife observation, etc.) in accordance with current regulations or those proposed elsewhere in Alternative E. Proposals in this alternative also reflect the substantial public comment received about proposed electric motor areas and suggestions to use slow, no wake designations versus electric motor areas to meet concerns of wildlife disturbance and user conflict while not unduly restricting public access and use. Three areas originally proposed in Alternative D were dropped from any designation after further review and consideration of public comment.

Descriptions and rationales, concerning natural resource values and public use values, for establishing electric motor areas and slow, no wake areas are provided below.

Electric Motor Areas

Pool 5 - Island 42 Electric Motor Area

Minnesota, RM 749.8 - 747.6, 459 acres, Winona District

Background: Island 42 was proposed as an electric motor area in Alternative D and remains as such in Alternative E.

Resource Rationale: The proposed Island 42 Electric Motor Area is a complex of braided islands and shallow backwater sloughs that provides important habitat for puddle ducks, wading birds, beaver, and muskrat. An active bald eagle nest is present. Quiet motors and associated slow speeds of electric motors would reduce disturbance of wildlife.

Public Use Rationale: The area can be accessed easily from Halfmoon Landing (about 1.5 miles) or the new Upper West Newton Chute Landing (0.1 miles). The area will provide quiet hunting, fishing and boating away from the busy areas of the main channel and West Newton Chute.

Pool 5A - Snyder Lake Electric Motor Area

Minnesota, RM 735.0 - 734.0, 182 acres, Winona District

Background: Snyder Lake was proposed as an electric motor area in Alternative D and remains as such in Alternative E.

Resource Rationale: From a natural resource standpoint, this area is typical of other marsh and backwater areas of the Refuge and provides habitat for a variety of fish and wildlife species that would benefit from reduced disturbance afforded by an electric motor area.

Public Use Rationale: The proposed Snyder Lake Electric Motor Area includes a relatively small protected backwater that will provide potential off-channel camping experiences for persons using the adjacent canoe trail established in 2005. The area will also provide quiet opportunities for duck hunting, trapping and ice fishing.

Pool 6 - Mertes Slough Electric Motor Area

Wisconsin, RM 727.0 - 726.0, 222 acres, Winona District

Background: The existing Mertes Slough Electric Motor Area will continue as such in Alternative E.

Resource Rationale: Mertes Slough was established in 1990 to minimize disturbance to the Mertes Slough (St. Mary's) rookery which remains active today. Quiet motors and associated slow speeds of electric motors already reduce disturbance of wildlife in this area.

Public Use Rationale: The area provides quiet opportunities for hunting, fishing, trapping, ice fishing, cross-country skiing and wildlife observation. There is a Refuge boat landing at Mertes Slough.

Pool 7 – Browns Marsh Electric Motor Area

Wisconsin, RM 708.0 - 711.0, 829 acres, La Crosse District

Background: The Brown's Marsh Electric Motor Area was first proposed in Alternative D and covered 966 acres. Under Alternative E, the size is reduced to 829 acres to accommodate boat access by gas powered motors to private land.

Resource Rationale: A protected shallow backwater along the Black River, the proposed Browns Marsh Electric Motor Area provides important habitat for puddle ducks, wading birds, beaver, and muskrat. One active bald eagle nest was found in 2005. Quiet motors and associated slow speeds of electric motors will reduce disturbance to wildlife.

Public Use Rationale: This area is located within 0.1 mile to a small canoe access (Lytles) with nearby shallow water amenable to paddle or electric motor watercraft. Designating this isolated wetland as an electric motor area maintains the integrity of a canoeing/kayaking experience to those who value relatively secluded/quiet conditions for hunting, fishing, trapping, and wildlife observation.

Pool 10 – Hoosier Lake Electric Motor Area

Wisconsin, RM 624.8 – 624.0, 162 acres, McGregor District

Background: Under Alternative E, the proposed Hoosier Lake Electric Motor Area replaces the Bagley Bottoms Electric Motor Area proposed in Alternative D. The Glass Lake sector (627 acres) was dropped from the Bagley Bottoms Electric Motor Area and only Hoosier Lake is retained. Glass Lake was excluded because it is extremely shallow and receives little use at this time.

Resource Rationale: The Hoosier Lake area is important habitat for puddle ducks, geese, beaver and muskrat. Habitat values of this area are adversely affected by disturbance due to changing watercraft propulsion technology and increased human activity, and direct habitat damage by watercraft. Quiet motors and associated slow speeds of electric motors will reduce disturbance of wildlife.

Public Use Rationale: Hoosier Lake Electric Motor Area is close to a small boat landing with nearby shallow water amenable to paddle or low power watercraft. It provides an opportunity to use the Refuge by those who value relatively secluded/quiet conditions for hunting, fishing trapping and wildlife observation.

Pool 11 – Guttenberg Ponds Electric Motor Area

Iowa, RM 614.0 - 614.8, 93 acres, McGregor District

Background: The proposed Guttenberg Ponds Electric Motor Area remains the same in Alternatives D and E.

Resource Rationale: The area covers impoundments originally constructed by the Service for the Guttenberg fish hatchery. Portions of the old berm/water control structures are now breached allowing watercraft access during some river level stages. The area provides excellent wetland habitat for waterfowl, beaver and muskrat. A bald eagle nest is located adjacent the area shore. A trumpeter swan pair utilizes the area for nesting and brood rearing. Quiet motors and associated slow speeds of electric motors will reduce disturbance of wildlife.

Public Use Rationale: The area provides an opportunity to use the Refuge by those who value relatively secluded/quiet conditions for fishing, trapping and wildlife observation.

Slow, No Wake Areas

Pool 4 - Nelson-Trevino Slow, No Wake Area

Wisconsin, RM 762.5 - 760.0, 2,626 acres, Winona District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above).

Resource Rationale: Nelson-Trevino is a designated Research Natural Area, one of four on the Refuge, where management objectives are to preserve examples of major ecosystem types, to provide research and educational opportunities for scientists, and to contribute to the national effort to preserve a full range of genetic and behavioral diversity for native plants and animals, including endangered and threatened species. Bald eagles nest in the area and is home to the massasauga rattlesnake, a candidate species for the Endangered Species List. Slow speeds and restricting loud motorized access for much of the year, especially during the sensitive spring and summer seasons, will reduce disturbance of wildlife.

Public Use Rationale: This large area offers unique possibilities for quiet activities such as canoeing, kayaking, wildlife observation, snowshoeing, cross-country skiing and quiet hunting and fishing. The area is currently a Refuge closed area (closed to hunting during the state duck season), but under Alternative E, will become an area open to duck hunting, thus providing duck hunters a quiet area for the first 30 days of the duck season (see definition of Slow, No Wake Area above). Deer and small game hunting and trapping will also be allowed in the Nelson –Trevino area.

Pool 5A – Denzers Slough Slow, No Wake Area

Minnesota, RM 733.0 - 732.0, 83 acres, Winona District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above).

Resource Rationale: Denzer's Slough provides important habitat for puddle ducks, geese, beaver and muskrat. Slow speeds and restricting loud motorized access for much of the year, especially during the sensitive spring and summer seasons, will reduce disturbance of wildlife.

Public Use Rationale: Although camping will be rustic and limited, the area will provide a place for canoeists to quietly explore and view wildlife. The area is along a new canoe trail and will also provide quiet hunting and trapping opportunities.

Pool 7 – Black River Bottoms Slow, No Wake Area

Wisconsin, RM 708.8 - 711.0, 1,146 acres, La Crosse District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above).

Resource Rationale: The Black River Bottoms is important to a wide variety of wildlife using floodplain forest and a backwater channel/wetland community complex, including: ducks and geese, sandhill cranes, wading birds, nesting bald eagles, otter, beaver, muskrat, and deer. Four bald eagle nests are located in this area; three were active in 2005. Bald eagles, an Endangered Species, are listed as a Resource Conservation Priority for the U.S. Fish and Wildlife Service in Region 3. Slow speeds and restricted loud motorized access for much of the year, especially during the sensitive spring and summer seasons, will reduce disturbance of wildlife.

Public Use Rationale: In the past, access into this area was limited. As a result waterfowl found refuge in the numerous "potholes" within the area during the open hunting season. Waterfowl hunters willing to invest the time/effort required to access the area generally found birds and few other hunters. With recent advances in propulsion technology and availability (airboat, go-devil, beavertail), more people are finding this area accessible. With increased hunting pressure, daytime use of the area by waterfowl during fall migration appears to have changed. Now, fewer birds use the area by day except on those days when new migrants arrive or when new feeding sites become available due to a raise in water levels. Waterfowl have also adjusted by moving into the area at night to feed. Restricting loud motorized access for part of the season will provide a quality hunting experience to those willing to spend the time/effort to access the area. Further, this designation enhances the quality and opportunity for wildlife observation in this area through much of the annual cycle.

Pool 8 – Blue/Target Lake Slow, No Wake Area

Minnesota, RM 696.0 - 699.0, 1,836 acres, La Crosse District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above).

Resource Rationale: The main habitat components include emergent marsh, rooted floating aquatic plants such as water lilies, and wet meadow. This area provides excellent wetland habitat for migratory birds and furbearers. Three bald eagle nests are located in the area and one was active in 2005. One of the largest nesting colonies of black terns on the Upper Mississippi River is located on

Blue Lake. Black terns are listed as a Resource Conservation Priority for the U.S. Fish and Wildlife Service in Region 3. Puddle and diving ducks, geese, and swans use the area during migration. Wood ducks, another species listed as a Resource Conservation Priority, use the area for brood-rearing, molting, and as an evening roost site. Ruddy duck ducklings, a rare summer occurrence on the Refuge, were observed on Blue Lake in August 2004. Ruddy ducks typically nest near the water in emergent vegetation. In the recent past, concentrations of hooded mergansers have been observed using Blue Lake as an evening site in mid-June. Hooded mergansers are listed in the Partners in Flight Bird Conservation Plan for Dissected Till Plains. American bitterns, another species listed as a Resource Conservation Priority, have been observed in the recent past during migration. Least bitterns, American coots, common moorhens (Resource Conservation Priority), and Virginia and sora rails use the area during migration and for nesting. Yellow and black-crowned night herons (Resource Conservation Priority) are also present. In the past, a yellow-crowned night heron nesting colony was found in the area. Increased use of Blue/Target Lakes by sandhill cranes has been observed. Slow speeds and restricted loud motorized access for part of the season would reduce disturbance of wildlife especially during the critical spring and summer season.

Public Use Rationale: In the past, access into this area was generally by smaller boats and skiffs moving at relatively slow speeds. Now, changing propulsion technology and availability (airboat, go-devil, beavertail, personal watercraft) is increasing use of the area by such craft. Slow speeds and restricting loud motorized access for part of the season would reduce disturbance to the public.

The area provides an opportunity to use the Refuge by those who value relatively secluded/quiet conditions for hunting, fishing, trapping, wildlife observation, and cross country skiing. Access is provided at a number of nearby locations.

Pool 8 – Root River Slow, No Wake Area

Minnesota, RM 694.0 - 696.0, 695 acres, La Crosse District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above).

Resource Rationale: The habitat in this area is bottomland forest and marsh bisected by numerous channels. The area provides excellent wetland habitat for waterfowl, wading birds, shorebirds, beaver, and muskrats. Wood ducks have used the area as an evening roost site in the past. There are four eagle nests in the area; two were active in 2005. A heron rookery is no longer active. Slow speeds and restricting loud motorized access for much of the year, especially during the sensitive spring and summer seasons, would reduce disturbance to wildlife.

Public Use Rationale: In the past, access into this area was generally by smaller boats moving at relatively slow speeds. Now, changing propulsion technology and availability (airboat, go-devil, beavertail, personal watercraft) is increasing use of the area by such craft. Safety and general use conflicts with power craft, especially high power craft, appear to be increasing within the wider channels within the area. The Slow, No Wake designation provides those who value relatively secluded and quiet conditions for hunting, fishing, trapping, and wildlife observation with an opportunity to use the Refuge through much of the year. The distance to the nearest boat landing is about 0.5-mile

Pool 9 – Reno Bottoms Slow, No Wake Area

Minnesota, RM 679.2 - 681, 3,402 acres, McGregor District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above).

Resource Rationale: Reno Bottoms is one of the largest remaining examples of what approximates pre-lock and dam habitat conditions within the Refuge. The area includes the northern portion of the Reno Bottoms Research Natural Area, one of four on the Refuge, where management objectives are to preserve examples of major ecosystem types, to provide research and educational opportunities for scientists, and to contribute to the national effort to preserve a full range of genetic and behavioral diversity for native plants and animals, including endangered and threatened species. The area is important to a wide variety of wildlife using the upland forest, backwater channel/ wetland community complex; including: ducks, swans, sandhill cranes, nesting bald eagles, beaver, muskrat and deer. The habitat values of this relatively isolated area are adversely affected by disturbance due to changing watercraft propulsion technology and increased human activity, and direct habitat damage by watercraft. Slow speeds and restricting loud motorized access for much of the year, especially during the sensitive spring and summer seasons, will reduce disturbance of wildlife.

Public Use Rationale: Reno Bottoms was suggested by some of the public as a motorless area during CCP scoping meetings. It is one of the largest remaining areas with reduced motor boat traffic because of reduced accessibility. Access to the area by hand carried small craft is easily available via Dam 8, and the area provides good conditions for paddle powered craft. Safety and general use conflicts with power craft, especially high speed power craft, are increasing within the few flowing channels within the area. The Slow, No Wake designation provides those who value relatively secluded and quiet conditions for hunting, fishing, trapping, and wildlife observation with an opportunity to use the Refuge through much of the year.

Pool 12 – Nine Mile Island Slow, No Wake Area

Iowa, RM 571.7 - 574.5, 454 acres, Savanna District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above). The size of the proposed Slow, No Wake area has been reduced from 567 acres to 454 acres to accommodate public concerns about use of beach areas on the upper end of the island complex.

Resource Rationale: From a natural resource standpoint, this area is typical of other marsh and backwater areas of the Refuge and provides habitat for a variety of fish and wildlife species that would benefit from reduced disturbance afforded by a slow, no wake area.

Public Use Rationale: This area is a fairly shallow area where larger boats cannot access and is offset from main channel or main slough areas to avoid conflicts with other users. It is a destination point, located adjacent to, but not within a travel corridor. In addition, it is large enough in size to allow a quality experience. The Slow, No Wake designation provides those who value relatively secluded and quiet conditions for hunting, fishing, trapping, and wildlife observation with an opportunity to use the Refuge through much of the year.

Pool 14 – Princeton Slow, No Wake Area (formerly Rock Creek)

Iowa, RM 506.0 - 506.7, 327 acres, Savanna District

Background: This area was proposed as an Electric Motor Area in Alternative D and is proposed as a Slow No Wake Area in Alternative E to provide more balance between the needs and desire of user groups (see introduction background above). The name was changed because the area is not directly associated Rock Creek; Princeton is a more appropriate designation.

Resource Rationale: From a natural resource standpoint, this area is typical of other marsh and backwater areas of the Refuge and provides habitat for a variety of fish and wildlife species that would benefit from reduced disturbance afforded by a slow, no wake area.

Public Use Rationale: This area is a fairly shallow area that larger boats cannot access and is offset from the main channel and major slough areas to avoid conflicts with other users. It is a destination point, located adjacent to, but not within a busy travel corridor. In addition, it is large enough in size to allow a quality experience. The Slow, No Wake designation provides those who value relatively secluded and quiet conditions for hunting, fishing, trapping, and wildlife observation with an opportunity to use the Refuge through much of the year.