TATES OF THE

DEPARTMENT OF THE ARMY

MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS P.O. BOX 80 VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO ATTENTION OF:

CEMVD-PD-SP

29 September 2010

MEMORANDUM FOR Commander, Rock Island District, ATTN: CEMVR-PM-M

SUBJECT: Upper Mississippi River Restoration - Environmental Management Program (UMRR-EMP), Snyder Slough Backwater Complex Habitat and Enhancement Project (HREP), Grant County, Wisconsin, Fact Sheet

- 1. Reference memorandum, CEMVR-PM-M, 02 August 2010, subject as above.
- 2. Subject fact sheet is approved for continued HREP planning (encl 1).
- 3. The MVD point of contact is Elizabeth Ivy, CEMVD-PD-SP, (601) 634-5310.

Encl

CHARLES B. BARTON

Chief, District Support Team for

St. Louis, Rock Island, and

St. Paul

SNYDER SLOUGH BACKWATER COMPLEX

HABITAT REHABILITATION AND ENHANCEMENT PROJECT
GRANT COUNTY, WISCONSIN
UPPER MISSISSIPPI RIVER RESTORATION –
ENVIRONMENTAL MANAGEMENT PROGRAM
ROCK ISLAND DISTRICT

FACT SHEET

I. LOCATION

The project is located between river miles 595-599 in Pool 11 of the Upper Mississippi River (UMR) and lies within the UMR National Wildlife and Fish Refuge (NWR). The 2,000 acre Snyder Slough Backwater Complex extends along the left descending bank (Wisconsin Side) of the main channel. The closest community to the project area is Potosi, Wisconsin, located approximately 3 miles downstream (figure 1).

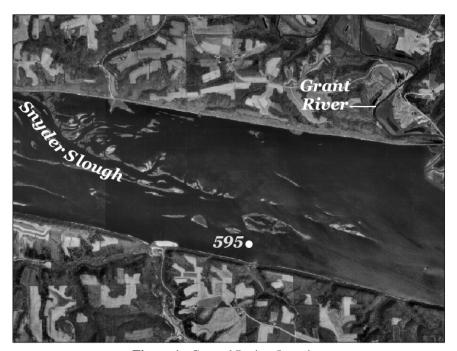


Figure 1. General Project Location

II. EXISTING RESOURCES

The Snyder Slough Complex includes backwater lakes, sloughs, flowing channels, and remnant islands. Though degraded, this important backwater area supports a diverse population of wildlife including ducks, geese, swans, pelicans, eagles, and muskrats. Figure 2 shows existing habitat conditions; figure 3 shows 2000 landcover and acreages.

III. PROBLEM IDENTIFICATION

Island erosion, island dissection and sedimentation have greatly reduced the quality of much of the floodplain and aquatic habitat in this location. Historically, this area was used by migratory waterbirds, but the use has been low since 1990 when aquatic vegetation declined in the area. In 2005, there was an increase in aquatic vegetation due to favorable water clarity conditions and a corresponding increase in waterfowl use. However, the observed 2005 aquatic vegetation coverage is not expected to remain stable due to continued wind fetch and current and static summer water levels.

Fishery resources in the area are poor for backwater species. Surveys conducted in 2004 and 2005 did not locate any quality centrarchid overwintering habitat within the project area. The closest overwintering habitat is located approximately 3 miles upstream in the Bertom/McCartney backwater area, or approximately 6 miles downstream at the Mud/Zollicoffer Lakes backwater complex.

IV. PROJECT GOALS

Project goals are derived from the Environmental Pool Plans, Pools 11 through 22; the Habitat Needs Assessment; and Reach Planning efforts. These project goals are consistent with the systemic goals adopted by Environmental Management Program Coordinating Committee and the Navigation Environmental Coordination Committee in January of 2008.

Maintain, Enhance, and Create Quality Habitat for All Native and Desirable Plant, Animal and Fish Species

- restore backwater and riverine fish habitat
- increase fish habitat in secondary channels
- restore habitat for aquatic and semi-aquatic mammals, reptiles and amphibians
- create freshwater mussel habitat
- maintain habitat for bald eagles and other raptors
- enhance non-waterfowl migratory bird habitat
- maintain waterbird nesting habitat
- create conditions conducive to establishing emergent, submergent, and floating vegetation
- create isolated wetlands
- maintain floodplain forest habitat
- maintain and enhance an interspersion of flowing channel habitat
- control or eliminate invasive exotic species

Maintain, Enhance, Restore, and Emulate a Sustainable Ecosystem (Natural Water Levels, Sediment Transport and Deposition Regime, and Distribution of Water Flows Across the Mississippi River Floodplain)

- maintain, enhance, create more natural sediment transport and deposition
- decrease suspended solid concentrations
- decrease bedload
- emulate more natural seasonal water elevations
- restore ecological benefits of the flood pulse
- minimize adverse effects of elevated water table on soil moisture conditions
- manage gradient from main channel to backwater areas during below bankfull events
- optimize flow at varying discharges at specific locations
- reduce wind fetch in open water areas (e.g., backwaters and impounded areas) to less than 1,000 feet
- minimize adverse effects of elevated water table on soil moisture conditions

V. PROPOSED PROJECT

The proposed project actions include restoring and protecting existing islands to provide floodplain habitat, optimize flows distribution, reduce impact of wind and wave actions, and enhance and protect vegetation. The project would also include planting trees for future eagle nesting, sand areas for turtle nesting, and mud flats for waterfowl and shorebird loafing and feeding areas. Backwater dredging would be performed to increase connectivity and bathymetric diversity for fisheries. Forest diversity could be enhanced through planting, elevating islands, and forest management. Additional features include providing isolated wetlands and riffle pools. Other actions include controlling invasives and habitat management (figure 4).

The above proposed features will protect, enhance, and restore quality wetland habitat for all native and desirable plant, wildlife, and fish species. Targeted animals include eagles, mussels, fish, turtles, migrating waterfowl, mammals, and waterbirds. Targeted plants include emergent vegetation such as arrowhead, burreed, and bulrush; submersed vegetation such as wild celery and sago pondweed; and floodplain vegetation such as swamp white oak and button bush.

VI. IMPLEMENTATION CONSIDERATIONS

The presence of the Higgins eye pearly mussel (*Lampsilis higginsi*) at various locations in Pool 11 could constrain or limit some actions proposed in this area. Plan formulation should consider the possibility of using channel maintenance generated sand as a potential source of material for construction of some islands proposed.

VII. FINANCIAL DATA

All project lands are owned by the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service (USFWS) and are managed as part of the UMR National Wildlife and Fish Refuge. The estimated cost for the general planning, design, and construction of the actions noted above is \$16 million. Since this project is located on an NWR, it is 100 percent federally funded. The USFWS is responsible for operation and maintenance costs.

VIII. STATUS OF PROJECT

The project was submitted to the Fish and Wildlife Interagency Committee on January 12, 2006 and accepted by the River Resources Coordinating Team on January 24, 2006, and reaffirmed as a priority project in May 2010.

Partnering organizations include the USFWS, the U.S. Army Corps of Engineers, the Iowa Department of Natural Resources, and the Wisconsin Department of Natural Resources.

IX. POINTS OF CONTACT

Marvin Hubbell, U.S. Army Corps of Engineers, Rock Island District, Program Manager, 309-794-5428 Tim Yager, U.S. Fish and Wildlife Service, McGregor District Manager, 563-873-3423 Jeff Janvrin, Wisconsin DNR, Mississippi River Habitat Specialist, 608-785-9005

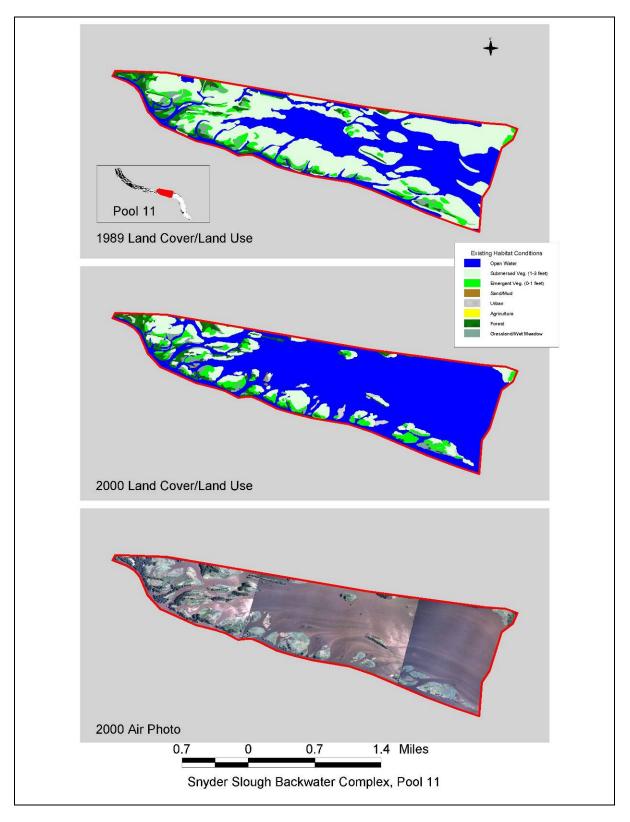


Figure 2. Existing Habitat Conditions

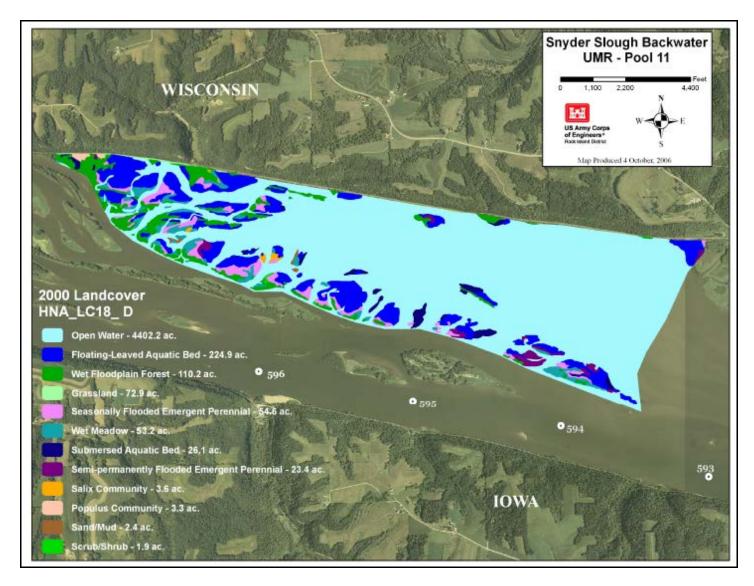


Figure 3. 2000 Land Cover Data

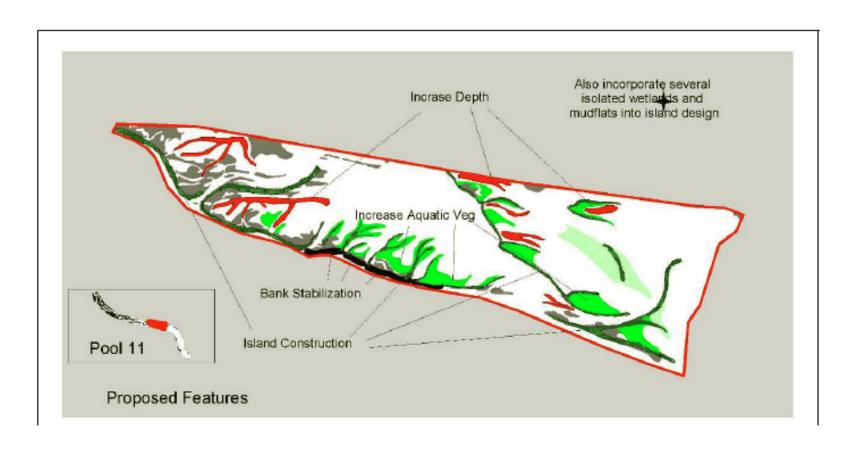


Figure 4. Proposed Project Features