



**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), Delair Division Habitat Rehabilitation and Enhancement Project (HREP), Pike County, Illinois, Fact Sheet

1. Reference memorandum, CEMVR-PM-M, 02 August 2010, subject as above.
2. Subject fact sheet was resubmitted on 24 September 2010 and is approved for continued HREP planning (encl 1) with the following stipulations:
  - a. The array of alternatives investigated should include a non-structural alternative and a levee removal and/or relocation alternative.
  - b. Any tentative recommendation is cleared with MVD prior to public release of a draft document.
3. The MVD point of contact is Elizabeth Ivy, CEMVD-PD-SP, (601) 634-5310.

A handwritten signature in black ink that reads "Charles B. Barton".

CHARLES B. BARTON  
Chief, District Support Team for  
St. Louis, Rock Island, and  
St. Paul

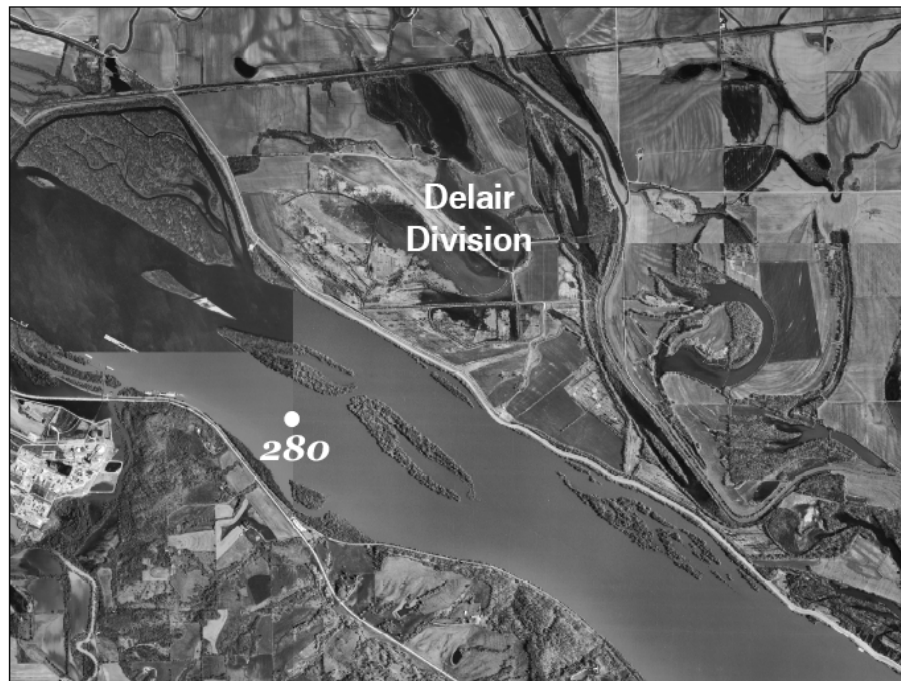
Encl

**DELAIR DIVISION**  
**HABITAT REHABILITATION AND ENHANCEMENT PROJECT**  
**PIKE COUNTY, ILLINOIS**  
**UPPER MISSISSIPPI RIVER RESTORATION –**  
**ENVIRONMENTAL MANAGEMENT PROGRAM**  
**ROCK ISLAND DISTRICT**

**FACT SHEET**

**I. LOCATION**

The Delair Division (Division) of the Great River National Wildlife Refuge (NWR) is a 1,730-acre complex of wetland, bottomland forest, and wet meadows located along the left descending bank of the Mississippi River between river miles 278 and 281. The entire Division lies within Pool 24, 5 miles west of Pleasant Hill, Illinois, in Pike County and is managed by the U.S. Fish & Wildlife Service (USFWS) (figure 1).



**Figure 1.** General Project Location

**II. EXISTING RESOURCES**

When originally acquired, the area was almost entirely cropland. Much of the Division has been restored to native habitat types. Ten wetland units (about 450 acres total) are managed to re-create the historic water regime of the Upper Mississippi River (UMR) and to promote growth of native wetland vegetation and invertebrates. These units receive heavy use by migrating waterfowl, shorebirds, marsh and wading birds, and other wetland-dependent wildlife.

Approximately 500 acres of the Division are floodplain forest. The forest includes stands of silver maple, cottonwood and ash as well as stands of diverse and high quality hard mast species. However, the forest is heavily fragmented by small crop fields. Thirty-five acres of warm season grasses were planted in the 1980s to protect identified archeological sites.

The Division is located within the Sny Levee and Drainage District and is protected from flooding by the mainstem levee, which would allow effective restoration of historic floodplain habitat types to occur. Due to the low elevation and proximity to the river, portions of the Division receive year-round seep water. Figure 2 shows existing land cover data.

### **III. PROBLEM IDENTIFICATION**

According to the Habitat Needs Assessment (HNA), about 70 percent of the floodplain in Geomorphic Reach 8 (Pools 24 to 26) is leveed, and agriculture is the dominant land cover type. According to the HNA, “The environmental impacts of levees and the development they allow are extensive. Natural vegetation in leveed areas has been removed and largely converted to agriculture. Wetlands were filled and the floodplain behind levees has been drained and leveled.”

The Delair Division provides one of the few tracts of natural floodplain vegetation that exists within the 123,000 acres of agricultural lands that make up the Sny Island Levee District. Hundreds of acres of former agricultural lands have already been restored to wetland, forest, and grassland on Delair, but some resource issues remain.

The current forest acreage on the Division is interspersed with small crop fields and is heavily fragmented. Fragmented forests have reduced value for many species of nesting neotropical migrant songbirds.

Wetland management at the Division is still restricted by inadequate water control structures and water delivery systems. Also, timely management of wetlands that do not receive seep water is limited, but would be enhanced by the addition of two or three shallow groundwater wells.

### **IV. PROJECT GOALS**

Project goals are derived from the Environmental Pool Plans, Pools 11 through 22; the HNA; 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.

- reduce bottomland forest fragmentation and increase diversity by re-foresting 85 acres of agricultural fields for the benefit of neotropical migrant songbirds and other forest-dependent wildlife
- restore and enhance wetland habitat by improving water availability and delivery systems; improved management capabilities will allow better emulation of the historic UMR water level regime and higher quality wetland plant and invertebrate communities
- enhance plant species diversity of existing wet meadow areas.

Habitat Needs Assessment land cover types that will be enhanced by this project include:

wet floodplain forest  
seasonally flooded emergents  
semi-permanently flooded emergents  
wet meadow  
scrub-shrub  
mesic bottomland hardwood forest

## **V. PROPOSED PROJECT**

- plant bottomland hardwood tree species in several crop fields totaling about 85 acres
- maximize wetland potential by improving water control and delivery system (water control structures, drains, etc.)
- install two shallow groundwater wells to provide a reliable water source for several wetland units
- enhance diversity on 35 acres of wet meadows by planting a mixture of forb species
- excavate ditches

See figure 3 for proposed project features.

## **VI. IMPLEMENTATION CONSIDERATIONS**

Project features within the closed area must fit with the purpose of the closed area, and construction activities would be restricted during the waterfowl hunting season.

## **VII. FINANCIAL DATA**

The project features are located entirely on lands managed as a national wildlife refuge, so the project cost would be 100 percent Federal. The estimated total cost for planning, design, and construction is \$4,500,000. The USFWS would be responsible for operation and maintenance costs.

## **VIII. STATUS OF THE 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 in May 2010. Partnering organizations include the U.S. Army Corps of Engineers, the USFWS, and the Illinois Department of Natural Resources

## **IX. POINTS OF CONTACT**

Jason Wilson, Refuge Manager, U.S. Fish and Wildlife Service, Great River NWR, 573-847-2333  
Marvin Hubbell, EMP Manager, U.S. Army Corps of Engineers, Rock Island District, 309-794-5428  
Rick Mollahan, EMP Coordinator, Illinois Department of Natural Resources, 217-785-8264

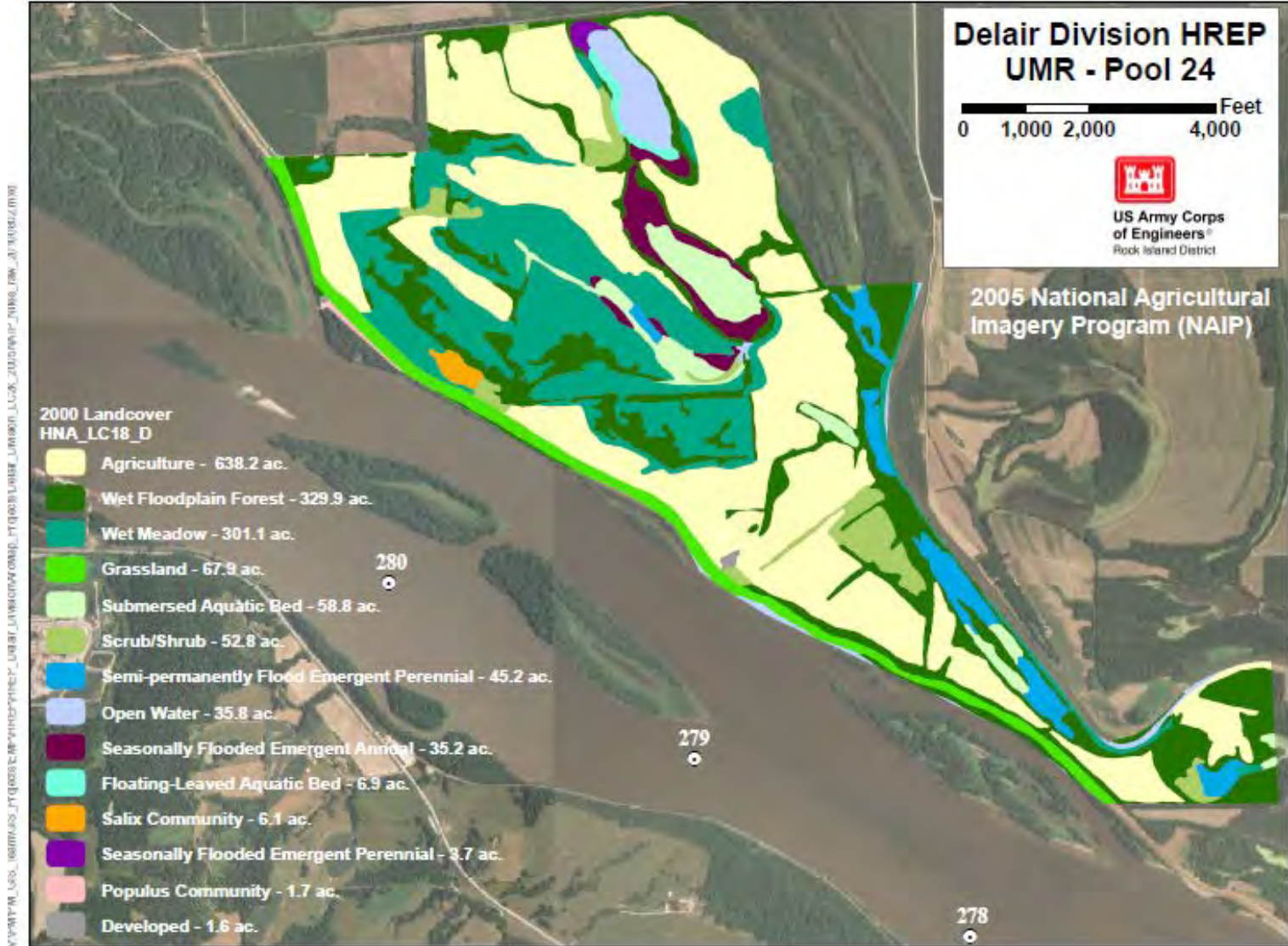
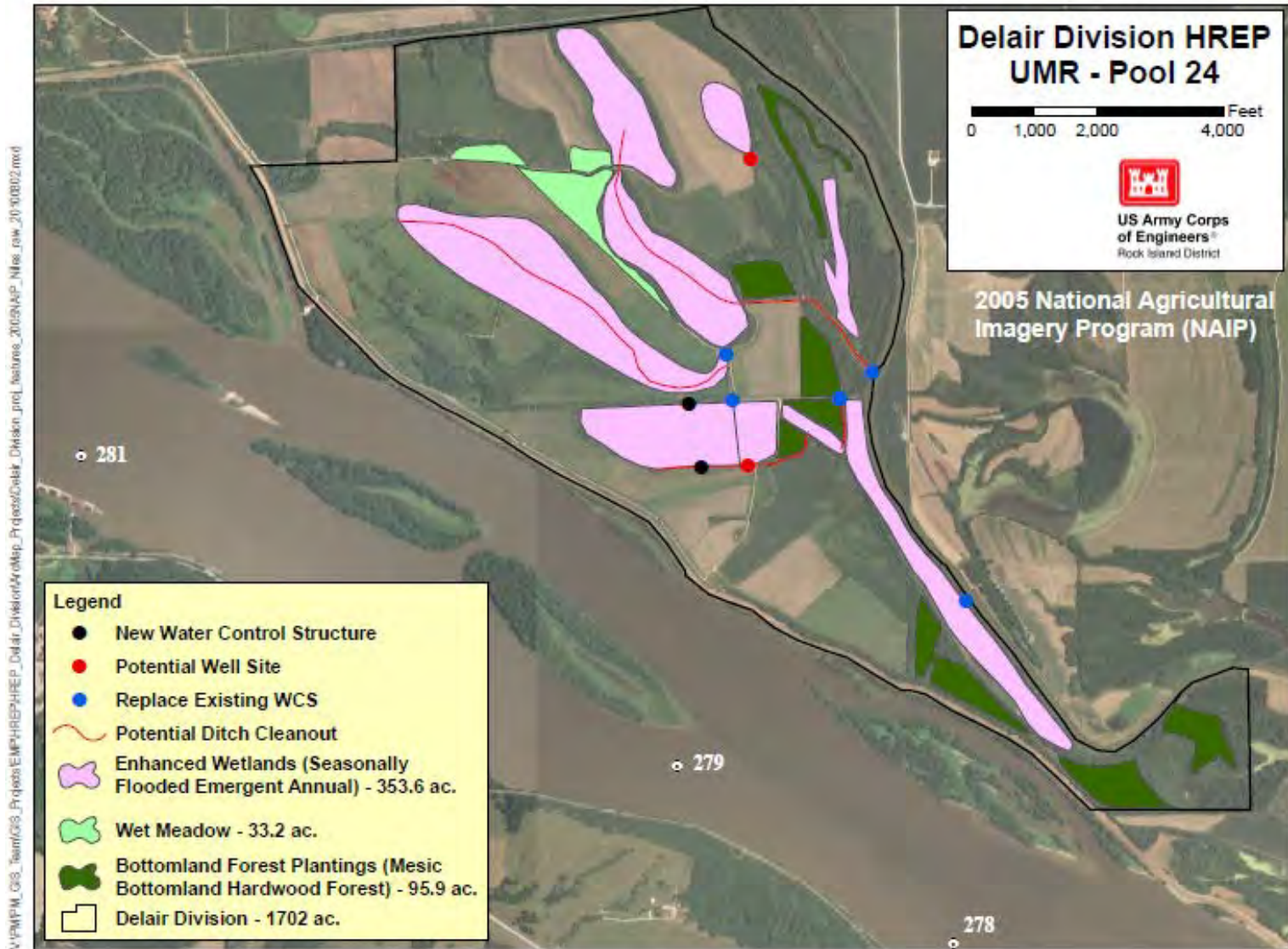


Figure 2. 2000 Land Cover Data



**Figure 3.** Proposed Project Features