
Upper Mississippi River System Environmental Management Program

Fact Sheet

GODAR REFUGE WETLAND HABITAT RESTORATION

Illinois River, Illinois

Location: Godar Refuge is located on the west bank of the Illinois River, in Calhoun County, between river miles 25 and 27 (Figure 1). The refuge lies along the bank of Dark Chute, a side channel formed by Hurricane Island to the north and Diamond Island to the south. The property is owned by the Corps and is managed through a cooperative agreement with the Illinois Department of Natural Resources (IDNR). IDNR manages the refuge for waterfowl through the manipulation of water levels for moist soil plant production, and supplemental plantings to enhance and expand the forage base.

Resource Problem: The number one pollutant in the Illinois River is silt. The river's sediment load continues to fill in backwaters and degrades the wetland habitats along the river system. A recent (1999) topographic survey map of the crop field adjacent to the actual wetland basin at Godar was compared to 1979 white-line topographical maps. While the actual contour lines looked very similar, the 1999 contours had increased by 2 feet. An archaeological investigation at Godar, that included soil core borings, supports the map finding of a 2+ feet of sediment deposits in the field. Presently the wetland basin is almost completely perched, of the 300 plus acre basin--perhaps 50 acres retains water when the river is at normal pool. A pump station installed at the site in 1981, has had to be repaired extensively, and it is basically too small to handle an expanded refuge area.

Project: The proposed project includes the construction of: (1) a riverside berm, (2) an interior berm and 36" stop-log structures , (3) drainage ditch cleaning, and (4) a pump and 48" CMPs (Figure 2).

A riverside berm would begin along the south bank of Michael Creek, and would run eastward to the river. From that location, it would run south along the bank to river mile 25.3. Much of the berm would be at the elevation of the existing high bank, with the rest of the berm being to "fill in the low spots". Clearing for the structure would be minimal. The berm would be constructed along the east side of an agricultural field that runs parallel to the river (i.e. 12,000 feet long, and 1,000 feet wide). Borrow material for the berm would be taken from the field itself.

A second berm would be constructed along the west side of the same agricultural field. This berm would be approximately 11,000 feet long and would include stop-log water control structures (4 - 36" CMPs gravity drains with riser pipes). There would be little or no clearing associated with this construction work, and the borrow material would once again come from the agricultural field. The construction of this berm would create the third and highest terrace in the refuge.

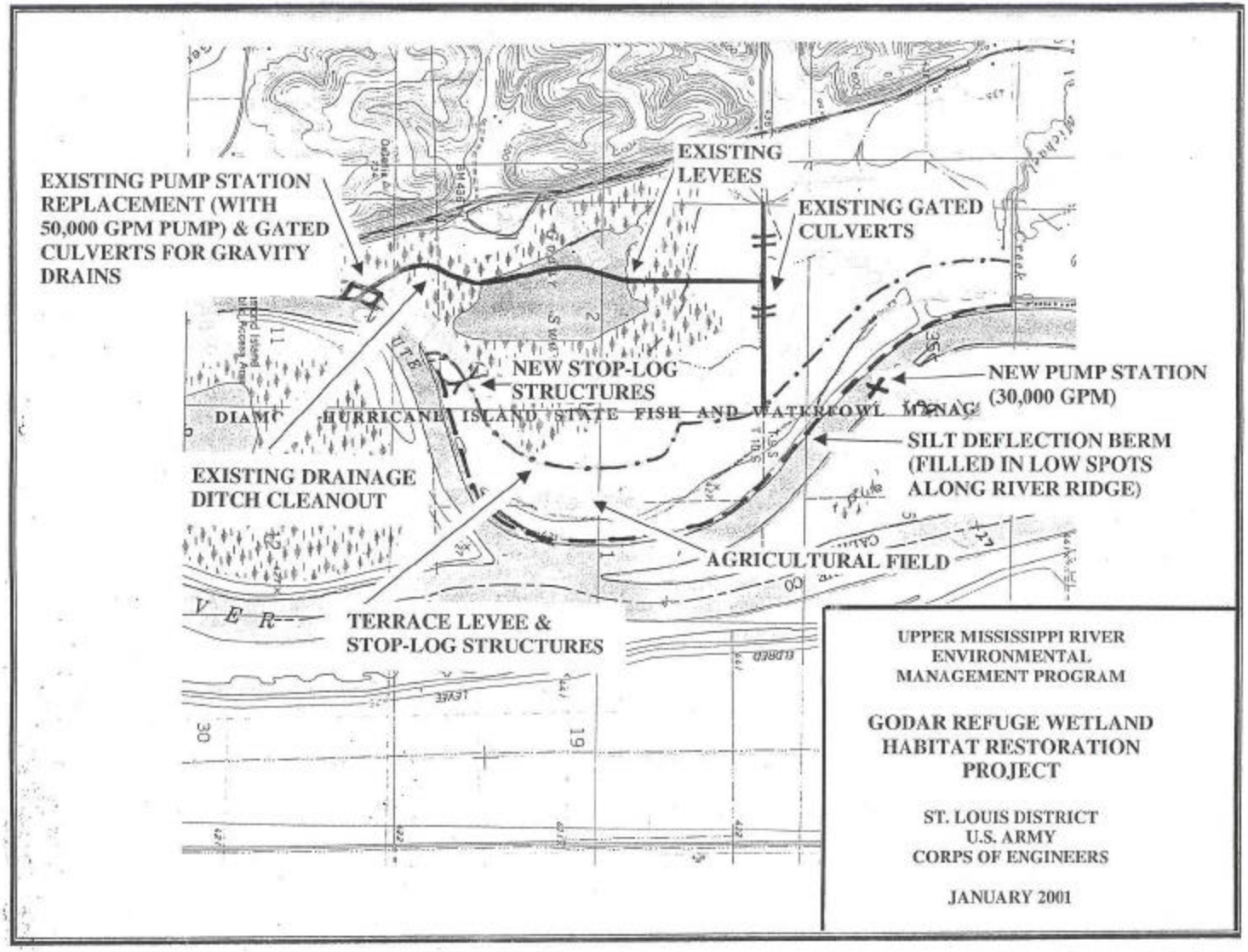
The final features would include the construction of a 30,000 GPM input pump, located near Dark Chute at river mile 26.7. A second pump station (50,000 GPM) would be constructed at the site of an existing two way pump station. An existing water supply ditch would be cleaned to accommodate the larger pumping capacity and 2-48"CMPs installed.

Project Outputs: The project would extend the life of the wetlands complex by directly reducing the annual sediment load entering the site. It would also add an additional 150+ acres of moist--soils habitat, a habitat with a documented use by over one hundred and sixty species of birds. The large concentrations of waterfowl utilizing this refuge during their migration would provide a readily available food source for

wintering Bald Eagles. During the summer, while the area is being dewatered, the site would attract large numbers of wading birds to feed on fish concentrated into shallow pools. The new pump systems would increase the reliability of producing the desirable moist--soils vegetation by an estimated 30%. The increased capacity would allow the site manager to meet his target dewatering schedule, and to obtain optimum plant growth and species diversity.

This proposed pump stations along with the stop-log structures, should be capable of meeting the sites water transfer requirements..

Financial Data: Total estimated base year costs for this project is $2,141,438 (or $2,569,726 fully funded). The estimated annual operations and maintenance cost is $10,000. All of the project features are on Corps owned General Plan lands. These lands are "managed as a national wildlife refuge" by IDNR under a Cooperative Agreement with the U.S. Fish and Wildlife Service and the Corps of Engineers. Under the provisions of Section 906 (e) of WRDA 1986, the projects first costs are 100 percent Federal. OMRR costs are the responsibility of the project's sponsor, IDNR.


EXISTING PUMP STATION REPLACEMENT (WITH 50,000 GPM PUMP) & GATED CULVERTS FOR GRAVITY DRAINS
EXISTING LEVEES
EXISTING GATED CULVERTS
NEW STOP-LOG STRUCTURES
NEW PUMP STATION (30,000 GPM)
SILT DEFLECTION BERM (FILLED IN LOW SPOTS ALONG RIVER RIDGE)
EXISTING DRAINAGE DITCH CLEANOUT
AGRICULTURAL FIELD
TERRACE LEVEE & STOP-LOG STRUCTURES
DIAMC HURRICANE ISLAND STATE FISH AND WATERFOWL MANAG
UPPER MISSISSIPPI RIVER ENVIRONMENTAL MANAGEMENT PROGRAM
GODAR REFUGE WETLAND HABITAT RESTORATION PROJECT
ST. LOUIS DISTRICT U.S. ARMY CORPS OF ENGINEERS
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