

Small Scale Drawdown Habitat Project, Buffalo City, Wis.

Location/Description

Part of the Corps of Engineers' Environmental Management Program, a drawdown of a small backwater area on the Upper Mississippi River was proposed to restore or enhance aquatic plant species. Impoundments on the Upper Mississippi River for navigation have slowed the natural sediment transport during low to normal flow conditions, and seasonal water level fluctuations have been reduced, which has increased backwater sedimentation and reduced germination of aquatic plant species.

The project consisted of a drawdown to permit germination of seeds in the bottom sediments. Potential sites of 5 to 200 acres in pools 3 through 10 were identified and screened. Candidate sites were primarily shallow areas lacking emergent aquatic vegetation, having a flocculent substrate, and able to provide useful information about the impacts of a drawdown.

Lizzy Pauls Pond in pool 5 was selected. It is a 52-acre pond within the Upper Mississippi River National Wildlife and Fish Refuge. The outlet of the pond was closed to isolate the area, and water was pumped out to simulate the lower natural summer water level conditions. Pre- and post-drawdown conditions were monitored to document changes in vegetation and bottom sediments.



Status

A drawdown was implemented at Lizzy Pauls Pond in 1997. Although the desired extent of drawdown was not achieved because of heavy rainfall and the natural bottom elevations of the pond, the vegetative response was good. No further drawdowns are planned for this site.

Authority

The Small Scale Drawdown Habitat Project at Lizzy Pauls Pond was implemented under the authority of the Upper Mississippi River System - Environmental Management Program in accordance with a definite project report dated May 1997. The Environmental Management Program was authorized by Section 1103 of the Water Resources Development Act of 1986 and reauthorized by the Water Resources Development Act of 1999.

The project was planned and implemented as part of a cooperative effort of the U.S. Army Corps of Engineers; the U.S. Fish and Wildlife Service; the Minnesota, Wisconsin, and Iowa Departments of Natural Resources; and local interests.

Fiscal

Project planning and implementation costs were 100 percent Federal because the project was on lands managed as a national wildlife refuge. The cost includes the site screening and selection process. Because the project was a one-time effort, it has no operation and maintenance costs.

Federal cost \$97,000

Non-federal cost \$0

Total cost \$97,000