

The EMP: A Success Story

The Environmental Management Program has been an enormous success.

RESULTS: More than 40 projects have been completed, impacting about 67,000 acres of fish and wildlife habitat. About eight projects are currently under construction. Projects currently on the list to implement, awaiting funding, would improve another 75,000 acres of habitat.

In the St. Paul District, Phase I and II of the Pool 8 project have seen amazing restoration of habitat, using good civil engineering practices and the natural forces of the river. The Finger Lakes Project (Pool 5), Spring Lake Peninsula project (pool 5). Cold Springs Project (Pool 9), and Bussey Lake in Pool 10 all have resulted in **better fish habitat and better fishing! Water quality** in Long Lake has been improved by a water control structure (pool 7). Guttenberg Waterfowl Ponds now provide **optimum water levels** for waterfowl food production. More than 2 miles of existing islands and riverbank have been stabilized to **protect 1,500 acres of backwater habitat.**

Farther south, in the Rock Island District, Browns Lake (Pool 13) has seen a **dramatic increase in water quality**, and Potters Marsh (Pool 13), the Princeton Refuge (Pool 14), and Big Timber (Pool 17) have much-**improved fisheries**. Lower Pool 11 has experienced **improved water quality, fisheries and vegetation**. **New feeding and resting areas** for migratory waterfowl have been created at Pleasant Creek, IA (pool 13), Spring Lake, IL (pool 13) and Princeton, IA (pool 14). And near Long Island (pool 21) EMP managers have rehabilitated backwater habitat and planted tracts of food producing **hardwood trees**.

In the St. Louis area, consolidation of sediments in Swan Lake has resulted in **increased migratory waterfowl**, while dikes at Pharrs Island and Stag island dikes are creating **off channel, deep water, over wintering habitat**. Dresser Island, Stump Lake (IL River), Cuivre Island, and Clarksville Refuge have seen **improved overall habitat** through reduction of sediment and improvement of water level management.

On the Illinois River, Lake Chautauqua in the La Grange Pool has seen **increased waterfowl and fisheries**, while Peoria Lake has seen a **tenfold increase in waterfowl use**. Banner Marsh has experienced improved overall habitat because of protection of spring-fed backwater areas from frequent sedimentation events. And at Calhoun Point, the confluence of the Illinois and Mississippi Rivers, bottomland hardwoods have been restored.

ACKNOWLEDGEMENT: **EMP managing agencies have received numerous awards for outstanding engineering.** Both the Trempealeau Refuge Project (Pool 6) and the Pool 8 project have received engineering recognition from the Minnesota Society of Professional Engineers. The latter additionally received the Environmental Award of Excellence from the Chief of Engineers and the Design Team of the Year award from Chief's office. The Swan Lake project on the Illinois River received the 2004 Chief of Engineers Design and Environmental Award.

INNOVATION: EMP management has advanced technologically since its creation.

Managers have learned to use natural river dynamics when possible to provide more sustainable projects. They have developed innovative design techniques to reduce cost and/or increase effectiveness, and they use adaptive management to increase effectiveness and processes. In the St. Louis District, managers created innovative water level management structures that utilized surplus material from Melvin Price Locks and Dam at Batchtown, Swan Lake, and upcoming Calhoun Point projects.

PARTNERSHIP: The EMP has formed an **exemplary partnership** of Federal and State agencies and the public for decision making which is both scientifically and politically sound. Partnering provides for a rich blend of scientific and management perspectives for project design and implementation, and has created extensive planning documents, the Habitat Needs Assessment and Environmental Pool Plans, to improve the project selection process.

RESEARCH BASE: Undergirding all the practical, managerial successes of the EMP is the Long Term Resource Monitoring Program (LTRMP), which has provided critical collection, analyses, research and modeling of the environmental components of vegetation, water quality, fishes and invertebrates. The LTRMP was one of the pioneers in geo-spatial information systems, documenting land use/land cover mapping and analysis. The LTRMP data is vital for planning, design, and assessment of restoration and rehabilitation projects. **It is the LTRMP that provides a knowledge base for effective, cost-efficient habitat projects and then documents their success.**

Its applications, however, reach far beyond the EMP. Data from the Lake City Field Station alone has been extremely helpful for 16 area entities: governmental units and agencies, universities, partnerships, corporations, and non-governmental organizations. Client entities appreciate the LTRMP for the completeness, accessibility, consistency of its data and for the service orientation of its staff. The LTRMP data speeds up permit processing, assists local land use planners, and provides for wastewater treatment planning. It is used for regulatory compliance, management and assessment, modeling and research, and education.

The LTRMP (Long Term Resource Monitoring Program) continues to be the most consistent, comprehensive large river monitoring program in the world. More than 200,000 data observations have been collected to evaluate important short- and long-term changes associated with ecological components of the UMRS (Upper Mississippi River System).

DESPITE UNDERFUNDING: Despite its great success, the EMP has never been fully funded. As a result, many projects have been backlogged and the LTRMP is functioning on a starvation diet. Legislation promising equal funding for lock modernization and environmental enhancements would build and expand on EMP successes. But that proposal has not been voted into law. In the meantime, we do have an excellent program, the EMP, which deserves to be fully funded.