

LAKE CHAUTAUQUA

HABITAT REHABILITATION AND ENHANCEMENT PROJECT

**La Grange Pool
Illinois Waterway River Miles
124.0 – 129.5**

**Mason County, Illinois
Rock Island District**



RESOURCE PROBLEM:

Both Upper and Lower Lake Chautauqua are important links in the chain of resting, feeding, and wintering areas for migratory waterfowl and certain endangered species (the bald eagle and peregrine falcon) along the Mississippi Flyway. Prior to construction, sediments introduced to the lakes by Illinois Waterway flood events have decreased depths and degraded local water quality. The soft, flocculent lake bottoms were not conducive to the establishment of submergent and emergent vegetation necessary to support fish and waterfowl populations. Water level control was very limited due to the break in the cross dike levee and the poor condition of the perimeter levee.

PROJECT FEATURES:

- * Construct a 41,000-gpm pump station designed to service the Upper and Lower Lakes;
- * Construct stop log water control structure (Lower Lake);
- * Replace existing radial gate water control structure (Upper Lake);
- * Raise the elevation of the existing cross dike and Upper Lake perimeter levee;
- * Excavate 19,000 feet of drainage channels (Lower Lake);
- * Construct a submerged side channel entrance stone closure structure; and,
- * Construct boat ramp and access road for management access to Upper Lake.

PROJECT OUTPUTS:

The project has greatly increased the availability of reliable waterfowl and fish habitat at the Lake Chautauqua National Wildlife Refuge. Increased Upper Lake water control provides periodic dewatering and flood control capability. Upper Lake water quality improvement has resulted in an excellent fishery.

The dredging of the access channel and construction of the pump station has resulted in a reliable water source and dewatering capability for both the upper and lower lakes. The rock closure structure is reducing the amount of sediment that is entering the entrance channel and has increased side channel fish habitat. Improved lower lake water control has resulted in more reliable production of moist soil vegetation to benefit of migratory waterfowl and other bird species. Excavating drainage channels in the lower lake has provided the capability to more fully dewater the lower lake resulting in maximum moist soil plant production and less chance for botulism outbreaks.

FINANCIAL DATA:

General design costs were \$1,700,000, and construction costs are estimated at \$12,300,000. Annual costs for operation, maintenance, and repair are estimated at \$30,000 and will be the responsibility of the U.S. Fish and Wildlife Service.

STATUS:

Construction was substantially complete in November 1998. A dedication ceremony was held July 7, 1999. As of December 2003, construction is complete and final contract close-out including update of the project operation and maintenance manual is nearing completion. The first major performance evaluation manual is being assembled. USFWS has been operating and managing the site.