

## STUDY FINAL REPORT

**State:** Michigan

**Project No.:** F-80-R-8

**Study No.:** 230520

**Title:** Evaluation of Michigan's inland fish stocking program and optimizing allocation of stocking resources by a system analysis

**Period Covered:** October 1, 2005 to September 30, 2007

### Study Objectives:

1. Develop a conceptual model that identifies the objectives, constraints, and major components of the fish stocking program.
2. Identify data and research needs for conducting stocking evaluation.
3. Identify criteria to quantify success of fish stocking and collect related data for these criteria by off-site angler surveys.
4. Build statistical models that quantify relationship between multiple measures of stocking success with stocking and non-stocking factors (e.g., travel costs, habitats, site attributes, and fishing regulations).
5. Use the stocking statistical models to predict consequences of different management scenarios on stocking success, to identify the critical trade-offs, risks, and uncertainties.
6. Use the relationship between angler-use and fish stocking in conjunction with historical fish stocking data to formulate an optimal reallocation of stocking resources.
7. Amend Michigan fish stocking guidelines to reflect stocking evaluation framework and specific criteria for selected species.
8. Update prescription process to include evaluation criteria.

**Summary:** This project was terminated September 30, 2007. Although Fisheries Division approved this project, budget shortfalls prevented funding of the mail survey, a critical component of the study. In addition, shortly after the project was approved, principal investigator Zhenming Su was reassigned to other duties and was unable to devote any time to the study. Consequently, no work on this study was ever initiated. Evaluating Michigan's inland fish stocking program remains a high priority and Fisheries Division may reinstate this project when funding and staffing levels improve.

**Prepared by:** Kevin E. Wehrly

**Date:** September 30, 2007