STUDY PERFORMANCE REPORT

State: Michigan	Project No.: F-80-R-7	

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, 2006

Study Objectives:

- 1. Develop a conceptual model that identifies the objectives, constraints, and major components of the fish stocking program (see Figure 1).
- 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: No progress was made on this study due to reassignment of principle investigator Zhenming Su to other duties.

Findings: Jobs 1, 2, and 10 were scheduled for 2005-06, and progress is reported below.

- **Job 1. Title:** <u>Develop conceptual model.</u>—No progress was made on this job due to reassignment of Zhenming Su to other duties.
- **Job 2. Title:** <u>Design off-site angler survey.</u>—No progress was made on this job due to reassignment of Zhenming Su to other duties.
- **Job 10. Title:** Write annual performance report. This annual progress report was prepared as scheduled.

Prepared by: <u>Kevin E. Wehrly</u> Date: <u>September 30, 2006</u>