## **STUDY PERFORMANCE REPORT**

State: Michigan

**Project No.:** <u>F-81-R-5</u>

Study No.: <u>230662</u>

**Title:** <u>Inventory and classification of Michigan</u> rivers and river fish communities.

Period Covered: October 1, 2003 to September 30, 2004

- Study Objective: (1) Extend and modify as necessary models under development for Lower Peninsula rivers that describe site-specific fish habitat variables using watershed-scale variables to rivers of the Upper Peninsula; (2) Using variables defined in (1), classify Michigan river habitats into distinct types; (3) Determine composition of Upper Peninsula river fish communities from historic data and electrofishing surveys; (4) Extend and modify as necessary models predicting fish populations and community characteristics from site-specific and watershed-scale habitat variables that are being developed for Lower Peninsula rivers to include Upper Peninsula rivers; (5) Classify Michigan river fish communities into distinct types based on habitat classification; (6) Evaluate interactions between water temperature and fish community dynamics, including distribution and abundance for Michigan river fish communities.
- **Summary:** Geographic information systems (GIS) analysis is ongoing. A single stream temperature logger deployed in 2003 was retrieved and additional temperature data were provided by Michigan Technological University. Additional stream temperature data are being collected by management units. Watershed scale data are being assembled in a format compatible with GIS analysis, analysis is continuing, and work on the study final report is underway. The schedule of this study was amended accordingly for 2004-05.

Findings: Jobs 5 and 6 were scheduled for 2003-04, and progress is reported below.

- Job 5. Title: <u>Analyze data.</u>–Data analysis is ongoing and incomplete. This progress report was prepared on schedule.
- Job 6. Title: <u>Write Final Report.</u>-Work on the final report is underway but incomplete at this time. The final report is expected to be complete by spring, 2005.

Prepared by: Edward A. Baker Date: September 30, 2004