STUDY PERFORMANCE REPORT

State: Michigan	Project No.: <u>F-80-R-8</u>
Study No.: <u>230722</u>	Title: Implications of lakeshore development for fishery resources in Michigan

Period Covered: October 1, 2006 to September 30, 2007

Study Objectives: Develop models integrating information from the literature and from new data collections to predict the response of fish populations and communities to lakeshore development.

Summary: This study is nearing completion, and a draft manuscript has been developed. This manuscript synthesizes this work and prior work on modeling relationships between habitat conditions and fish population dynamics. The dearth of information available in the literature that is directly applicable to models for largemouth bass leads me to question whether defensible models could be built without field work designed to directly address key questions.

Findings: Jobs 2 and 5 were scheduled for 2006-07, and progress is reported below.

Job 2. Title: Write manuscript summarizing modeling work.—The draft manuscript synthesizing prior work and this work is not yet completely refined and formatted for submission for publication, but is nearly complete and I anticipate submitting it within this year. The title of this draft manuscript is "Linking fish population dynamics to habitat conditions: insights from the application of a process-oriented approach to several Great Lakes species" with a target journal being the Canadian Journal of Fisheries and Aquatic Sciences.

Job 5. Title: <u>Prepare annual report and communicate program results.</u>—This report was prepared as scheduled.

Prepared by: <u>Daniel Hayes</u> **Dated:** <u>September 30, 2007</u>