

STUDY FINAL REPORT

State: Michigan

Project No.: F-81-R-8

Study No.: 230679

Title: Ecological river classification as a basis for management of coldwater streams

Period Covered: October 1, 1998 to September 30, 2007

Study Objectives:

- 1) To complete the classification of Lower Peninsula rivers by including the remaining, smaller coastal rivers (most Lower Peninsula rivers were classified by Seelbach et al. 1997).
- 2) To review the classification boundaries and codings of all Lower Peninsula stream segments, in light of available data and experiences of field personnel. This revision will add major in-channel lakes, coding of individual tributary streams, current trout stocking prescriptions, and current stream classifications.
- 3) To develop criteria for classification of coldwater streams, and to then classify all stream segments as appropriate. Segment classifications will be compared with previous Fisheries Division Stream Classifications and changes will be recommended, if needed. Finally, a process for revision of classifications will be developed.
- 4) To develop stream criteria for trout stocking, and to then classify all stream segments as to their suitability for stocking to meet specific management objectives.

Findings: Job 8 was scheduled for 2006-07, and progress is reported below.

Job 8. Title: Publish reports. – A manuscript on the relationships between stream temperatures and trout distribution and abundance has been published in Transactions of the American Fisheries Society (see citation below). This publication completes this project.

Wehrly, K. E., L. Wang, and M. Mitro. 2007. Field-based estimates of thermal tolerance limits for trout: incorporating exposure time and temperature fluctuation. Transactions of the American Fisheries Society 136:365–374.

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