STUDY FINAL REPORT

State: Michigan **Project No.:** F-80-R-1

Study No.: 686 **Title:** Impact of hydropower facilities on water quality: an assessment of observed effects and potential for impacts in new facilities

Period Covered: October 1, 1999 to September 30, 2000

Study Objective: (1) based on current data, determine whether existing facilities violate temperature or dissolved oxygen standards (2) determine which factors associated with facility design or operation appear to contribute most heavily to violations of these standards (3) from selected facilities representing a continuum from low to high impact, determine how fish populations respond to changes in water quality and substrate (4) determine changes in substrate size composition due to the impoundment (5) determine if fish population changes are more closely related to changes in water temperature, dissolved oxygen, substrate, or a combination of all three factors

Findings: Results of this study are given in the following report:

Lessard, J. L. 2000. Temperature effects of dams on coldwater fish and macroinvertebrate communities in Michigan. M.S. Thesis, Michigan State University, East Lansing, MI.

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