



ENVIRONMENTAL MANAGEMENT

Water Management Plans

Assessment of Options for Round Goby Removal in Pefferlaw Brook Client and Location: Ontario Ministry of Natural Resources and Ontario Federation of Anglers and Hunters; Lake Simcoe, Canada

In an effort to control the spread of an invasive fish species, Round Goby, into Lake Simcoe, **GREENLAND** was retained as part of an environmental management plan initiated by the Ontario Federation of Anglers and Hunters (OFAH) to determine options for removing Round Goby from Pefferlaw Brook and its river-mouth in Lake Simcoe. One of the options using Rotenone was implemented by the Ministry of Natural Resources (MNR) with the help of Fisheries and Oceans Canada (FOC) in the fall of 2005.

A comprehensive modeling exercise, including a hydraulic model and a chemical dispersion model along with field measurements and observations, was conducted to predict and assess application requirements for Rotenone to ensure fish kill while also minimizing the amount of chemical loaded to the system. The study included various options for removing the Round Goby from Pefferlaw Brook and made recommendations based on the modeling work, incorporated with **GREENLAND**'s expertise and experience regarding environmental management practices, water resources and flow and water quality monitoring.

