

## Executive Summary

Lake sturgeon is a potamodromous fish found in many large rivers and lakes in North America. Michigan is in the center of its historic range. Populations in and around Michigan were estimated to number in the hundreds of thousands. Since the mid-nineteenth century, exploitation and habitat degradation have resulted in a substantial decline. Today, these populations are believed to be at 1% of their former size. As a result, Michigan Department of Natural Resources listed lake sturgeon as a state threatened species (Section 36505 (1a), Part 324, Endangered Species Protection, of Act No. 451 of the Public Acts of 1994).

The primary goal of this strategy is to conserve and rehabilitate self-sustaining populations of lake sturgeon to a level that will permit delisting as a threatened species. The sub-goals are to first, conserve and rehabilitate self-sustaining populations, second, where populations have been extirpated, re-establish self-sustaining populations, and lastly when the first two areas are near completion and when opportunities arise establish self-sustaining populations in waters within lake sturgeon's suspected historic range.

This rehabilitation strategy describes the known life history of lake sturgeon including distribution and abundance, reproduction, sub-adult and adult habitat requirements, food preferences, movement patterns, and genetics. It also makes conclusions about what is known and lists area where more information is needed.

Protection and rehabilitation of lake sturgeon habitat is critical. The strategy evaluates present and potential habitat available to lake sturgeon. Criteria were developed to assess rivers and lakes in Michigan for populations and habitat. These criteria and the collective knowledge of the committee members, were used to determine an order for rehabilitation and enhancement work. A set of objectives based on each sub-goal is detailed.

The strategy also describes the difficulties managing lake sturgeon. Rochard et al. (1990) lists three major obstacles to rehabilitating sturgeon worldwide: effects of fishing, physical obstacles for migrating fish, and physical effects on spawning and nursery areas. These problems and others exist in Michigan. Harvest, barriers, sea lamprey control, physical alteration of habitat, water quality, and contaminants are discussed and recommendations to minimize or remove their effects on lake sturgeon suggested.

Finally, a summary of action items is included.

This rehabilitation strategy is the result of several years of meetings and discussions of the Lake Sturgeon Committee, Fisheries Division, Michigan Department of Natural Resources and the comments of many reviewers.