

## PREFACE

In 1966 the State of Michigan made a major policy decision to mount a full-scale program to rehabilitate the fisheries resource of its Great Lakes waters. To supplement the sea lamprey control and lake trout rehabilitation programs then in progress by the United States and Canadian governments, Michigan introduced coho and chinook salmon from the Pacific. It also revamped its entire hatchery system to produce these new species along with steelhead, rainbow and brown trout in sufficient quantities to restructure the fish populations in these huge inland seas. After the early success of the coho salmon in 1967, optimism for the total success of the program ran extremely high.

In a report to Michigan people in 1967, I made the following comments.

"The 50 million acres of the upper Great Lakes have been (and the process is continuing) dealt a series of staggering blows. We have felt the effects of overexploitation of the fisheries, an invasion of a super parasite--the sea lamprey, a population explosion of still another invader--the small but pestilential alewife, and worst of all, the start of a degrading of these sparkling, deep blue waters by pollution.

"To save, restore, and enhance the fisheries of the Great Lakes we must apply positive action--research, planning, investment, and management. The rewards can be great from a resource with the magnitude of the Great Lakes. The product will be an assurance now and for the future of food, recreational opportunity, and a large economic gain. Perhaps tens or even hundreds of millions of dollars will be added to Michigan's economy in the next few years if a trout and salmon recreational fishery can be developed to meet an overwhelming public demand."

During the past two years a close look has been taken at both the economic and biological impact of this fisheries restoration program. This report is a careful appraisal of the value created by the new Great Lakes fishery to the people of Michigan and the surrounding areas. The net economic worth of this program, as will be shown, has indeed surpassed some 20 million dollars a year, and has a benefit-cost ratio of greater than 10 to 1. The effort expended has been great, but the rewards have been many times greater.

However, there also have been other important benefits. Once considered a nuisance and a liability, the alewives are now a major source of food for the highly prized and valuable trout and salmon. The Great Lakes are being restored to a higher level of improved water quality each succeeding year; the new fishery has exerted considerable influence in this most gratifying trend. The net effect of these factors has been a tremendous enhancement of the Great Lakes' recreational opportunities.

Much of the work reported here has been funded under the Anadromous Fish Act as has much of the program under discussion. Michigan is grateful to the United States government and the Fisheries and Wildlife Service for supporting these studies.

There is no longer any question that the eight Great Lakes states and all their people working cooperatively with the United States and Canadian governments can complete the total job of fisheries restoration in the Great Lakes.

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