

## SURVEY PERFORMANCE REPORT

State: Michigan

Project No: F-61-R-6

Survey No: 230462

Title: Charter Boat catch and effort from the Michigan waters of the Great Lakes.

Period Covered: October 1, 2021– September 30, 2022

**Survey Objective:** Obtain a continuous annual record of the charter fishing catch, effort, and catch rate of the major sport fish in the Michigan waters of the Great Lakes.

**Summary:** Beginning in 2022, online reporting became mandatory for all charter operators. Charter Program staff continue to work with Electric Edge to “fine tune” the online reporting system and complete development of additional sub-modules within the program. As of the end of FY2022, MDNR was monitoring reporting from 632 charter operators, for operations on 765 charter boats.

In 2021, a total of 86,961 charter anglers participated in 22,665 excursions on the Michigan waters of lakes Michigan, Huron, Erie, Superior, and the St. Clair system (including the major tributaries) totaling 484,494 hours fishing. The most numerous species in the 2021 harvest was Lake Trout *Salvelinus namaycush* (69,270 fish), followed by Walleye *Sander vitreus* (68,099), Yellow Perch *Perca flavescens* (24,908), Chinook Salmon *Oncorhynchus tshawytscha* (24,815), Coho Salmon *Oncorhynchus kisutch* (13,812), Rainbow Trout *Oncorhynchus mykiss* (7,335), Smallmouth Bass *Micropterus dolomieu* (1,525), and Brown Trout *Salmo trutta* (172). Sea Lamprey incidence on Chinook Salmon and Lake Trout remained at low levels; approximately 3% for both species in Lake Huron, 2% in Lake Superior, and <1% in Lake Michigan.

**Findings:** Approach 1 was scheduled for fiscal year 2022, and progress is reported below.

### **Approach 1. Obtain a continuous annual record of the charter fishing catch, effort, and catch rate of the major sport fish in the Michigan waters of the Great Lakes.**

**Job 1. Survey design and coordination.**—Sport catch and fishing effort by the charter fishing industry is key fisheries information used directly in management decisions; reporting of this information is required under State of Michigan Public Act 451 (Part 445) of 1994. The survey design involves a census of charter operators identified from: (1) a list of operators who submitted catch reports the previous year; (2) review of the DNR LED list of individuals who applied for and/or received a certificate of inspection for a fishing vessel; and (3) individuals who applied for and/or received a Sport Trolling License. Charter reporting results in a continuous annual record of (1) charter fishing effort, and (2) number, type, and location of fish caught and harvested by charter anglers.

Modifications to the information collected and the online data collection system have been ongoing throughout the years of the study and have been described in previous performance reports. Charter reporting is one module of a three-component reporting system called FACTS (Fishing Activity and Catch Tracking System) developed for MDNR Fisheries by Electric Edge, an information technology contractor hired by the State of Michigan; the other two modules are commercial fisheries reporting and wholesale fisheries reporting. Initial public rollout of the new FACTS system occurred in early 2019, with full mobile application implemented in June 2019. Beginning in 2022, online reporting became mandatory for all charter operators. Charter Program staff continue to work with Electric Edge to “fine tune” the system and complete development of additional sub-modules within the program.

CFRS personnel emphasized the importance of accurate reporting throughout the entire season via telephone conversations and written (email) correspondence with charter operators. In addition, between October 1, 2021 and September 30, 2022, program personnel attended and made presentations at Michigan Sea Grant workshops, Michigan Charter Boat Association meetings, fisheries workshops, citizen advisory meetings, and other public and agency meetings; some of these were virtual meetings. These workshops and meetings provided an opportunity to: (1) share local and lake-wide fishing data; (2) educate charter operators about the importance of accurate and timely data reporting; (3) explain how to interpret results and how the data are used to address fisheries management concerns; (4) address questions and get feedback about the program; (5) promote and provide updates on the online reporting system; and (6) promote positive and trusting relationships between the public and the DNR.

**Job 2. Conduct surveys and process samples.**—In Spring 2022, CFRS personnel sent (by email) annual reporting instructions to identified charter operators. With these instructions, operators were reminded (1) they are required by law to complete and submit monthly reports to the DNR by the tenth day of the month following the month of fishing, and (2) of penalties for non-reporting. Program personnel completed daily checks of the FACTS system to monitor for reporting compliance. As of the end of FY2022, MDNR was monitoring reporting from 632 charter operators, for operations on 765 charter boats.

**Job 3. Manage data, maintain databases.**—In 2022, data entry was completed solely online by charter operators. Errors from online reporting were reviewed and corrected using email or telephone. In some cases, CFRS staff did not receive reports by the due date; therefore, delinquent notices were sent via email to charter operators who had not filed a report for a particular month. And as these notices did not always elicit a response from charter operators, CFRS staff continued close coordination with LED to identify reasons for noncompliance. These actions enabled CFRS staff to identify those operators who failed to submit reports for acceptable reasons (e.g. stopped fishing during the middle of the season or were out of business), thereby reducing the percentage of noncompliant operators. Furthermore, the coordination effort enabled staff to identify and add operators who were absent from the database, improving the accuracy of effort and catch totals for the following year. The increased coordination between CFRS staff and LED, initiated in 2016, works very well and was continued in 2022. CFRS staff provided a current listing of charter operators who were delinquent on reports to LED; LED district conservation officers and support staff contacted the charter operators in person or via phone and requested the operator submit monthly reports. The interaction between LED and charter operators is crucial to achieving monthly reporting compliance from some operators. In most years, LED enforcement actions have increased compliance to >99% by the end of January.

**Job 4. Analyze data, modeling.**—Data analyses and summaries included operator reporting compliance; fishing effort, harvest, catch, harvest rate, and catch rate by lake, statistical district, and port; and rates of Sea Lamprey *Petromyzon marinus* incidence on charter-caught fish. Data were incorporated into and complemented analyses by other Fisheries Division staff, university collaborators, and multi-agency working groups.

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**Job 5. Write reports**.—This annual progress report was prepared as scheduled.

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