

What do you need to know to manage the fishery? The role of Michigan's Fisheries Research Program

Gary Whelan Fisheries Division July 2022



Key Components

- Policy and purpose
- Staff and facilities
 - Broadly trained
- Expertise in a broad array of areas
 Diverse portfolio
- Excellence in information produced
 Peer-reviewed science for management



Mission

"To provide information, models, technical analyses, and expert advice to make possible science-based management of Michigan's fishery resources."



How Done

- By providing the following information to fisheries managers:
 - Timely fisheries, aquatic community, and habitat information from surveys and assessments
 - Better ways to manage and sample fisheries
 - Provide information about key fisheries topics to the public
 - Timely, scientifically-based and peer-reviewed information and decision support tools to decision-makers



Key Mission Areas

- Regulation evaluation and assessment
- Stocking evaluation and assessment
- Landscape analysis to support management
- Habitat analysis
- Climate change analysis
- Fish community and population assessment
- Great Lakes fisheries assessment
- Human dimensions and socioeconomics
- Invasive species
- Supporting Tribal Consent Decree
 Implementation



Statewide Responsibility Across Michigan's Aquatic Resources

- Aquatic
 - Great Lakes (38,575 sq. miles)



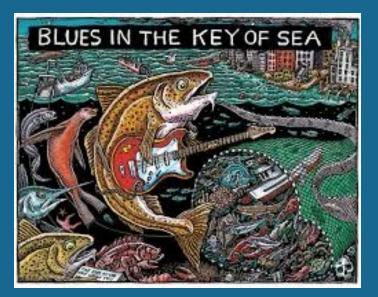
- Approx. 11,000 inland lakes (1,305 sq. miles)
- 36,000-72,000 miles of streams/flowing water
- 154 species of fish
 - 27 non-native species
- Many species of invertebrates
 - 10 species of crayfish
 - 43 species of native mussels......



Research Section

- Who are these people
- What do they do
- Where do they work

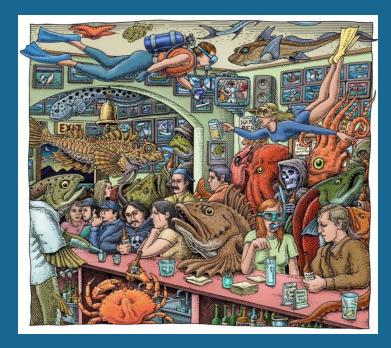






Research Staff and Budget

- 46 staff and 28 creel clerks
 - Managers/Senior Researchers
 - MSU faculty
 - Biologists
 - Boat Captains
 - Technicians
 - GIS specialist
 - Librarian
 - Trades Helper
 - Creel Clerks
- Annual Budget = \$8.4 million
 - 22 DJ Projects
 - 4 SWG Projects
 - 5-10 Externally Funded Projects





We are located throughout the state



What gets done where? Species, Waters, Topics





Marquette Fisheries Research Station





Marquette Fisheries Research Station

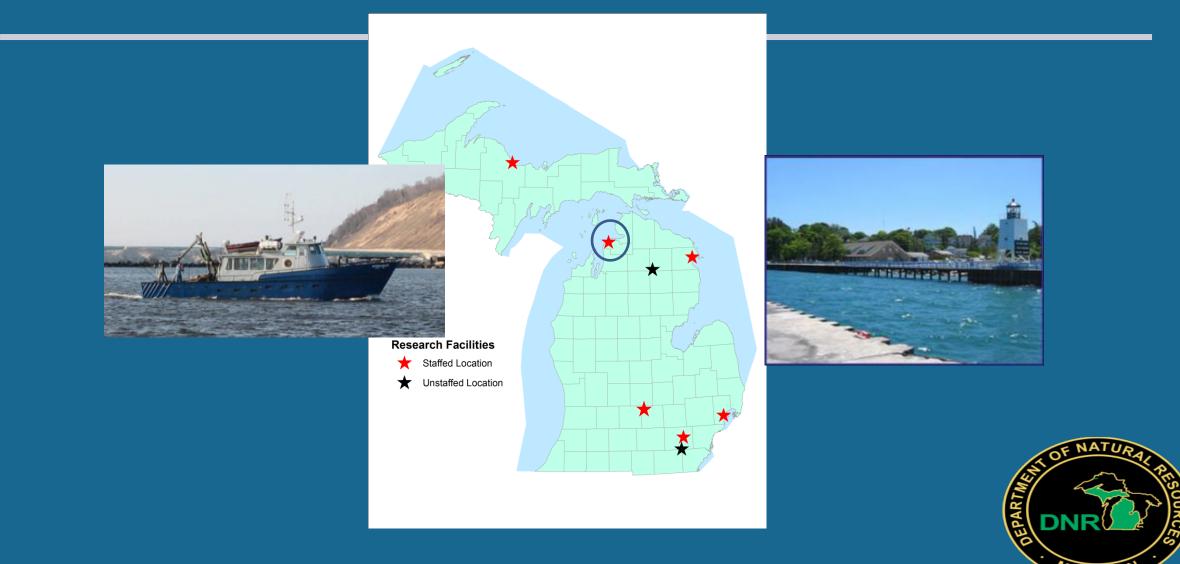
- Key Species
 - Lake Trout
 - Lake Whitefish and Cisco
 - Lake Sturgeon
 - Walleye
 - Smallmouth Bass
 - Brook and Brown Trout
 - Arctic Grayling
- Key areas of emphasis
 - Population and movement dynamics
 - Great Lakes and inland trout regulation analysis
 - Rehabilitating species
 - Habitat mapping
 - Stream trout
 - Water withdrawal analysis
 - Support Tribal Consent Decree data needs
- Researchers Baker, Sitar, Zorn







Charlevoix Fisheries Research Station



Charlevoix Fisheries Research Station

- Key Species
 - Pacific salmonids
 - Lake Trout
 - Lake Whitefish, Bloater and Lake Herring
 - Alewives
 - Round Goby
 - Yellow Perch
 - Smallmouth Bass
- Key areas of emphasis
 - Population and movement dynamics
 - Nearshore community ecology
 - Food webs and forage fish stability
 - Great Lakes regulation analysis
 - Support Tribal Consent Decree data needs
- Researchers Clapp, Turschak, Jonas





Alpena and Hunt Creek Fisheries Research Stations



Alpena and Hunt Creek Fisheries Research Stations

- Key Species
 - Lake Trout
 - Lake Whitefish and Lake Herring
 - Pacific salmonids
 - Walleye
 - Yellow Perch
 - Round Goby and other forage species
 - Arctic Grayling
- Key areas of emphasis
 - Population and movement dynamics
 - Food webs and forage fish stability
 - Species rehabilitation
 - Cormorant control assessment
 - Great Lakes Saginaw Bay regulation analysis
 - Support Tribal Consent Decree data needs
- Researchers He, Fielder







Lake St. Clair Fisheries Research Station



Lake St. Clair Fisheries Research Station

- Key Species
 - Lake Sturgeon
 - Walleye
 - Yellow Perch
 - Smallmouth Bass
 - Muskellunge
 - Brook and Brown Trout
- Key areas of emphasis
 - Population and movement dynamics
 - Food webs and forage fish stability
 - Species rehabilitation
 - Species of Greatest Conservation Concern
 - Great Lakes Lake Erie regulation analysis
 - Acoustic habitat mapping
 - Stream fish dynamics
- Researchers Wills, Hessenauer, Briggs







Institute of Fisheries Research and Saline Fisheries Research Station



Institute of Fisheries and Saline Fisheries Research Station

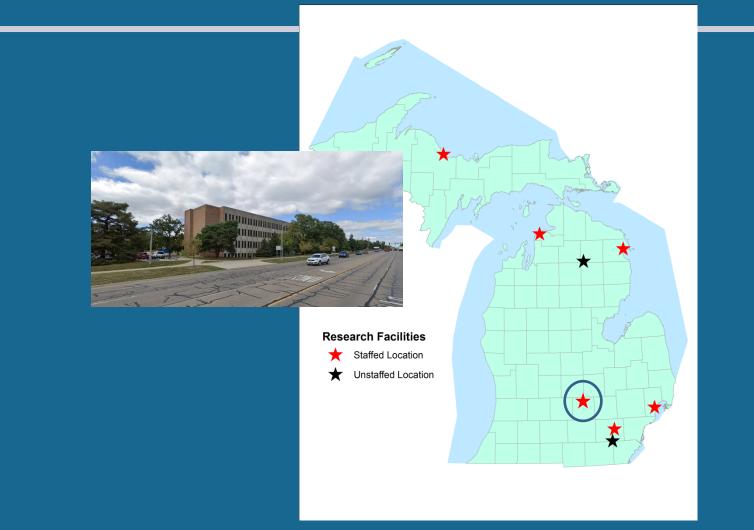
- Key Species
 - Lake Herring
 - Inland lake fish communities
 - Freshwater mussels
- Key Areas of Emphasis



- Inland lake, river and stream ecology and analysis
- Landscape analysis
- Climate change and adaptation
- Sampling standardization
- State Wildlife Action Plan and species of greatest conservation need
- Creel Census program research and development
- Division publications and library
- Researchers Su, Wehrly



Lansing and MSU Stations (PERM and QFC)





Lansing and MSU Stations (PERM and QFC)

- Key Species
 - Lake Sturgeon
 - Arctic Grayling
 - Red Swamp Crayfish
- Key Areas of Emphasis
 - Population and decision support modeling including SDM
 - Genetics analysis
 - Fish health and pathogen analysis
 - Landscape analysis development
 - Climate change and adaptation
 - Invasive species
 - Stream fish and habitat analysis
 - Statistical analysis of large and complex datasets
 - Creel Census
 - Ecological and fisheries history
 - Environmental analysis of development projects
- Researchers Claramunt, Whelan, Bence, Brendan, Infante, Hayes, Loch, Roth, Scribner









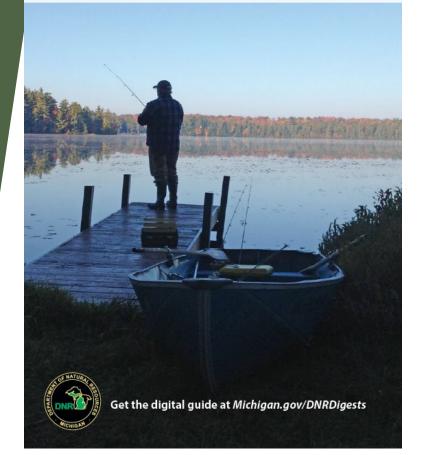
Questions or Comments

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2022 Michigan Fishing Guide

Rules apply from April 1, 2022 – March 31, 2023



Upcoming Fisheries Orders Update

Fisheries Division

Seth Herbst, Ph.D.

Regulatory Affairs Unit Manager

July 14, 2022

Fisheries Order Proposal Process

Addressing biological and/or social concerns

Local Fisheries Division review

Proposal form developed

Fisheries Division Basin Team Review

Stakeholder/Angler input ; Advisory Committee feedback ; Social surveys

Update Proposal form

Multi-division Fisheries Regulation Review Committee

Fisheries Chief approval -----> NRC --->



Fisheries Order "Screening" Considerations

Regulation ideas & proposals

Biological rationale and effect on fish population(s) Public trust responsibility, supporting data, alignment with management goals

Effect on angler opportunities & enforceability

Angler support Representative feedback

Regulatory complexity Fisheries Order Recommendation(s)



Upcoming Fisheries Orders Recommendations

FO recommendations in August

- FO-204: Spawning Closures
 - 3 recommendations: adjust closures on Houghton Lake tributaries and a boundary issue
- FO-206: Special Regulations for Warmwater species on Select Waters
 - 16 recommendations: Northern Pike, Muskellunge, Bass
- FO-215: Statewide Regulations for Warmwater Species
- FO-226: Hook and Line Restrictions During Walleye Spawning Runs
 - Each have 1 recommendation related to regulatory consolidation



Upcoming Fisheries Orders Recommendations

FO recommendations in September

- FO-200: Inland River and Stream Trout and Salmon Regulations
 - 3 recommendations: Changing types and address boundary issue
- FO-210: Designated Trout Streams for Michigan
 - 4 recommendations: Remove from designation and addressing naming issue
- FO-254: Inland Lake Trout and Salmon Regulations
 - 3 recommendations: Changing types

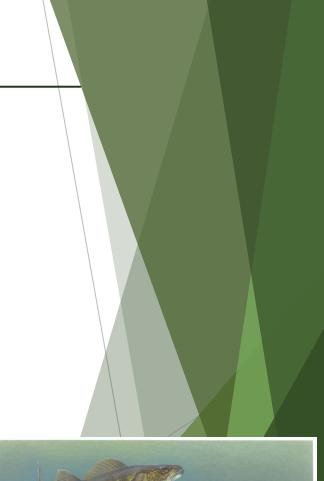
Upcoming Fisheries Orders Recommendations

- FO-206: Special fishing regulations for warmwater species on select waters
 - Several Northern Pike regulatory recommendations
 - Align with objectives described within the Northern Pike Management Plan
 - Supported with data obtained from fisheries surveys or through partnerships with anglers
 - Proposals that lack supporting biological data
 - Request staff to conduct surveys or work with anglers to obtain data

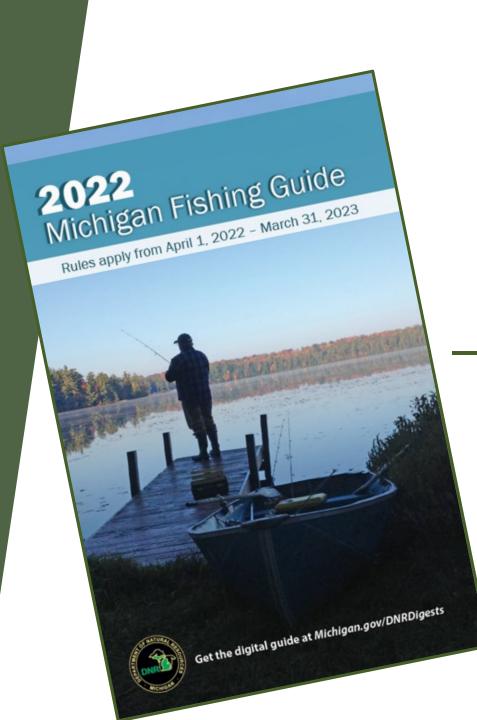


Saginaw River Walleye Regulations

- Fisheries Order 206.22
 - Expanded Walleye harvest opportunity in the Saginaw River
 - Six additional weeks
- Saginaw Bay and Saginaw River will have the same regulations in 2023
 - All year possession season
 - 8 fish daily possession limit and 13" min size limit
- Currently Walleye regulations for these waters are contained within three Fisheries Orders
- Recommendation will maintain same Walleye regulations, but will consolidate into FO-215







Thank You!

Questions?

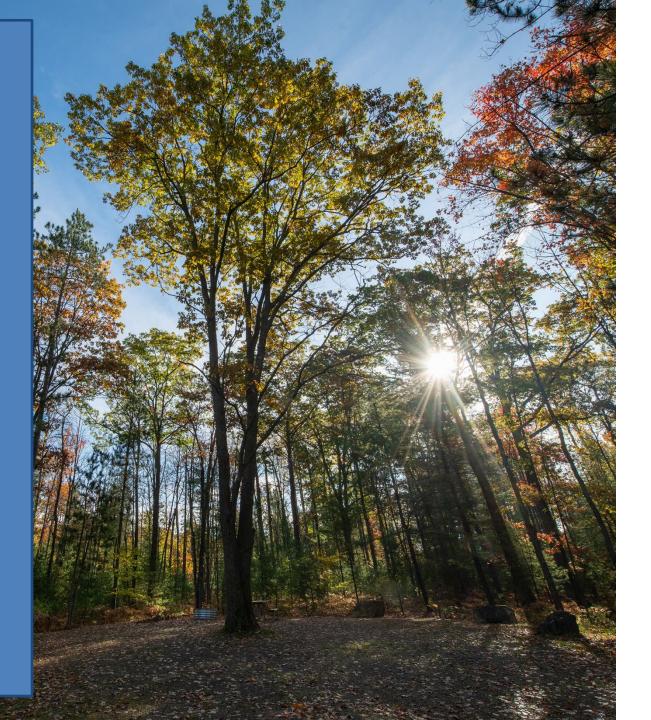
Seth Herbst, Ph.D. ASRA Unit Manager Herbsts1@Michigan.gov



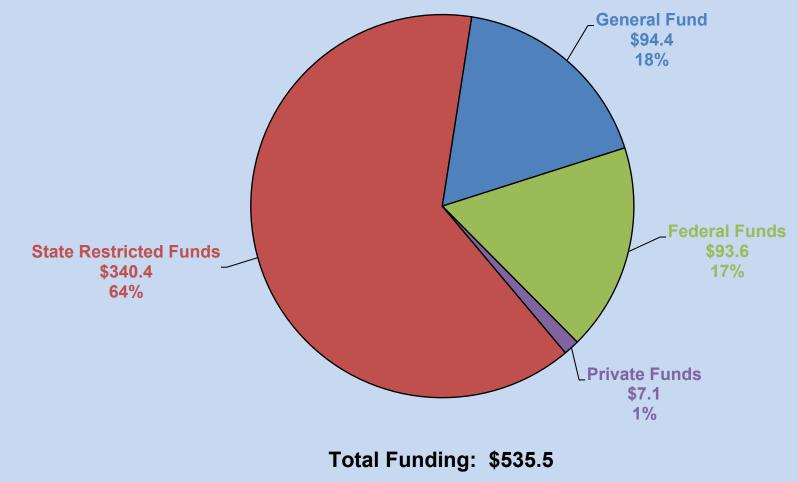
Budget Update

Chief Budget Officer Erik Eklund

July 14, 2022

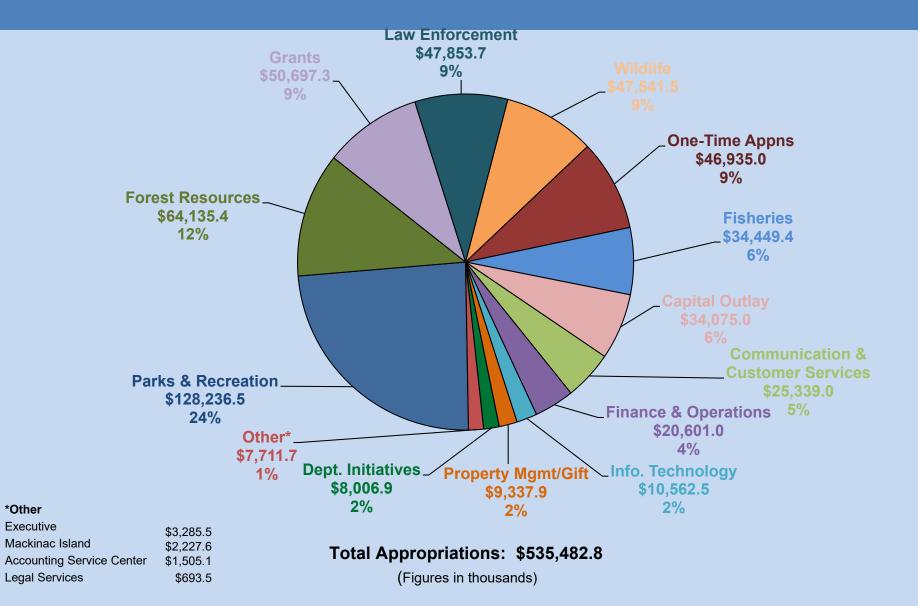


FY 2023 DNR Budget by Fund Type

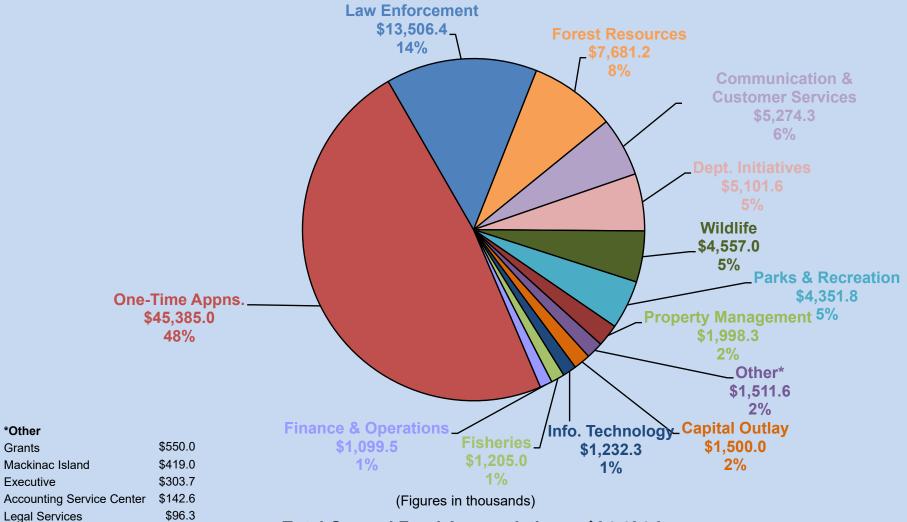


(Figures in millions)

FY 2023 DNR Budget by Program



FY 2023 DNR General Fund Budget



Total General Fund Appropriations: \$94,404.0

Ongoing Investments

- State Park System Operations: \$13.6 million increase from restricted funds
- Capital Outlay Infrastructure Improvements: \$6.9 million increase from various funds
- State Trail Operations: \$3.1 million increase from restricted funds
- Short-Term Worker Recruitment and Retention: \$906,100 increase from restricted funds
- Michigan History Center Programs in State Parks: \$850,000 increase from restricted funds

Ongoing Investments

- Emergency Response and Wildfire Suppression: \$751,900 increase from General Fund
- Tribal Relations and Fisheries Co-Management: \$652,800 increase from General Fund
- Body Cameras for Conservation Officers: \$600,000 increase from General Fund
- MiConnect Outdoors Credit Card Processing Fees, Maintenance, and Support: \$350,000 increase from restricted funds
- Spending Authorization for Pheasant License Fee Revenue: \$100,000 increase from restricted funds

One-Time Investments

- Fish Hatchery Infrastructure Improvements: \$30 million from General Fund
- Natural Resources Equipment Modernization: \$11.6 million from \$1.6 million restricted funds and \$10 million General Fund
- Great Lakes Vessel Modernization: \$4 million from General Fund

One-Time Investments

- Chronic Wasting Disease Testing: \$500,000 from General Fund
- Digitization of Archival Records: \$485,000 from General Fund
- Body Cameras for Conservation Officers: \$400,000 from General Fund

Boilerplate Changes

Sec. 507. Antlerless Deer License Discounts
 – Deleted

- Sec. 1201. Chronic Wasting Disease Testing
 - Retained; requires the DNR to have a check station or drop box in certain areas before the 2023 deer hunting season

FY 2022 Supplemental Appropriations

- Shooting Range Development, Enhancement, and Restoration Projects: \$7.65 million from federal
- Short-Term Worker Recruitment and Retention: \$6.4 million from federal and restricted funds
- Increased Fuel Costs: \$845,000 from General Fund

Questions?



