



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

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Fisheries Division
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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



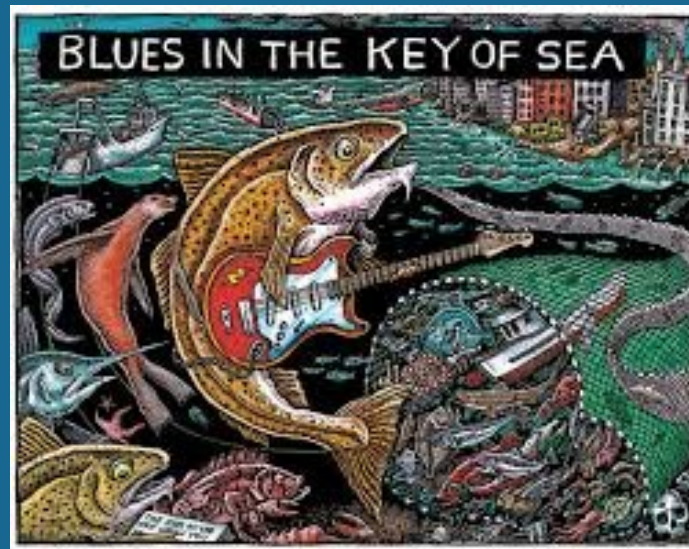
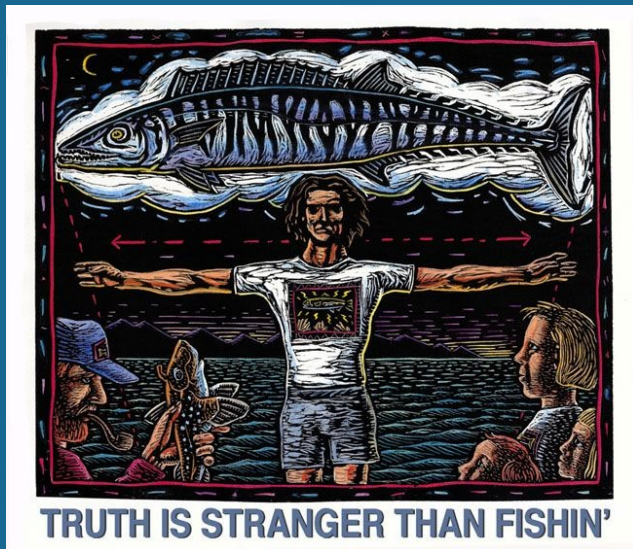
Statewide Responsibility Across Michigan's Aquatic Resources

- 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

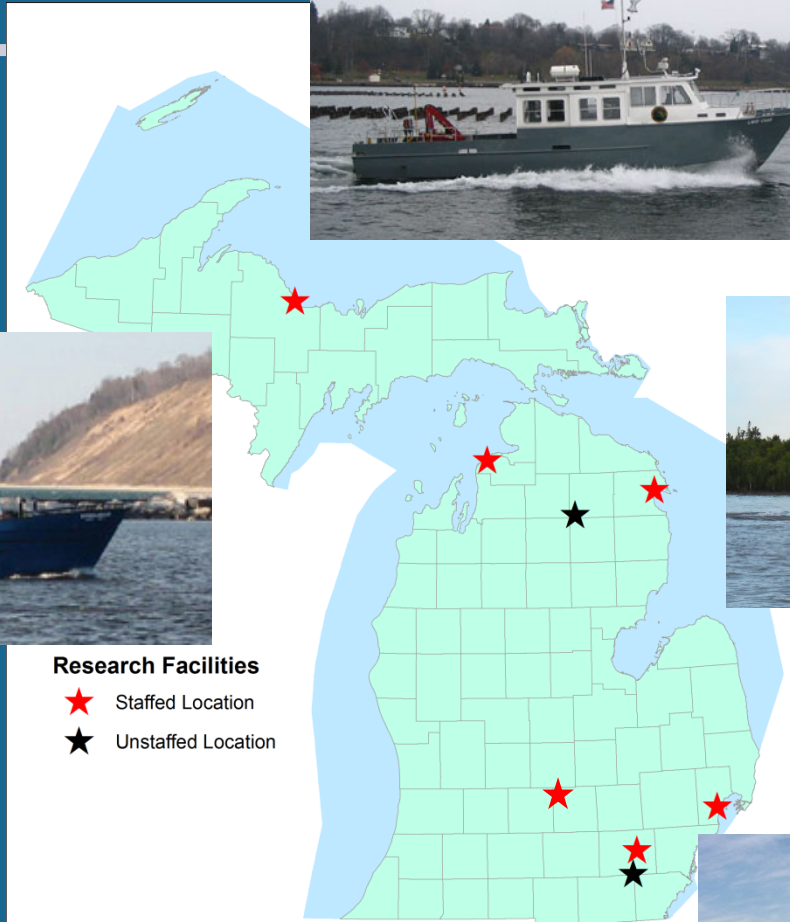


Research Staff and Budget

- 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

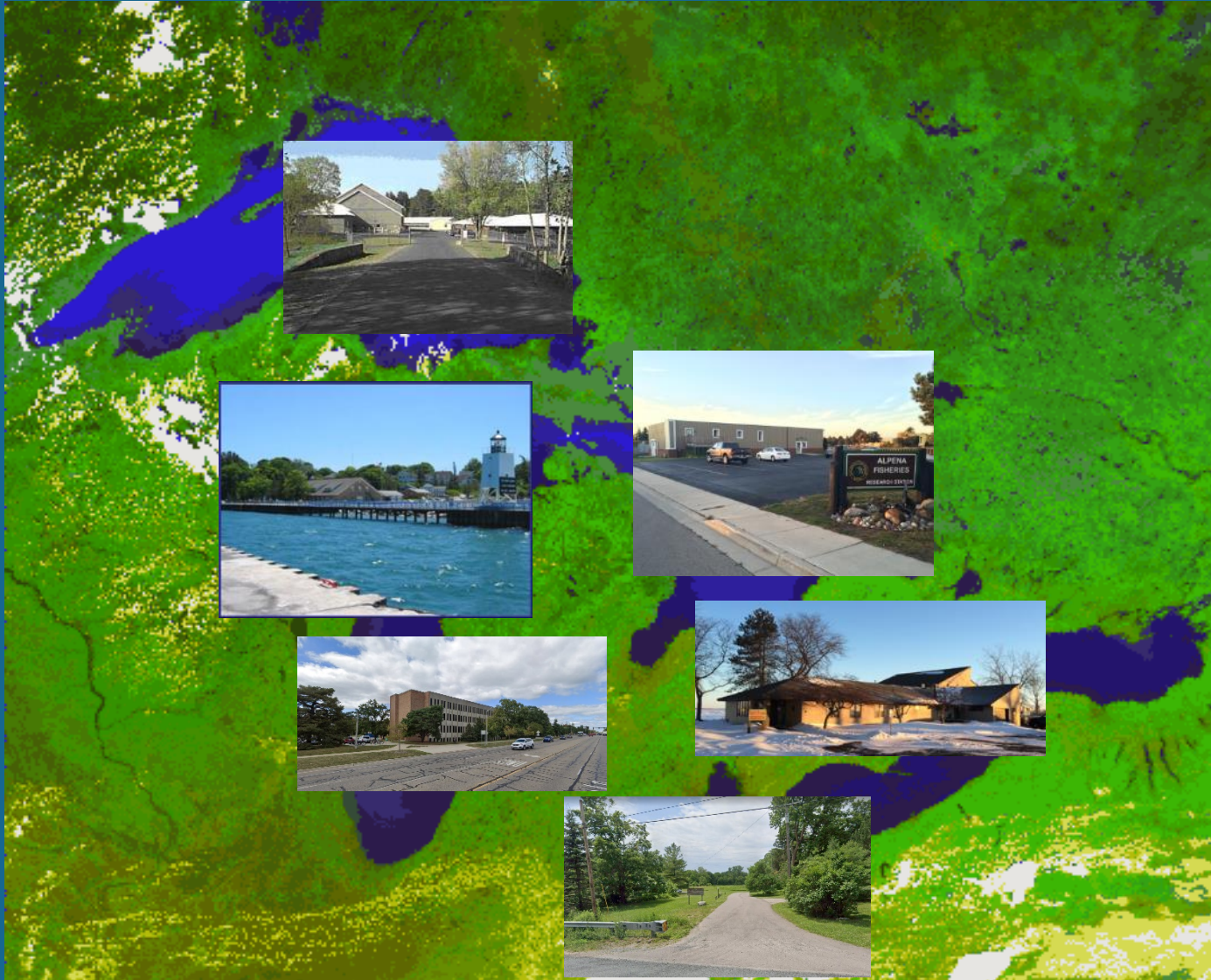


Research Facilities

- ★ Staffed Location
- ★ Unstaffed Location



What gets done where? Species, Waters, Topics



Marquette Fisheries Research Station

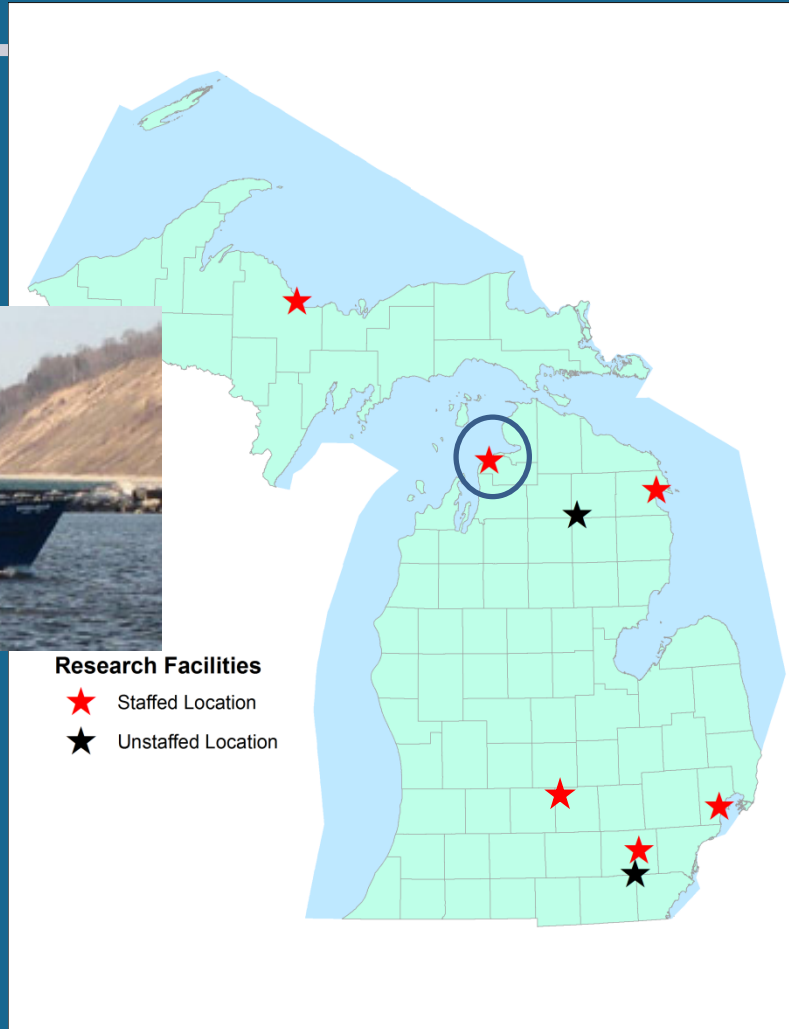


Marquette Fisheries Research Station

- 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

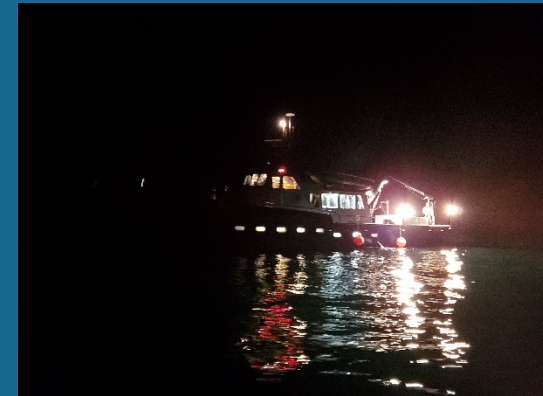


Charlevoix Fisheries Research Station



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

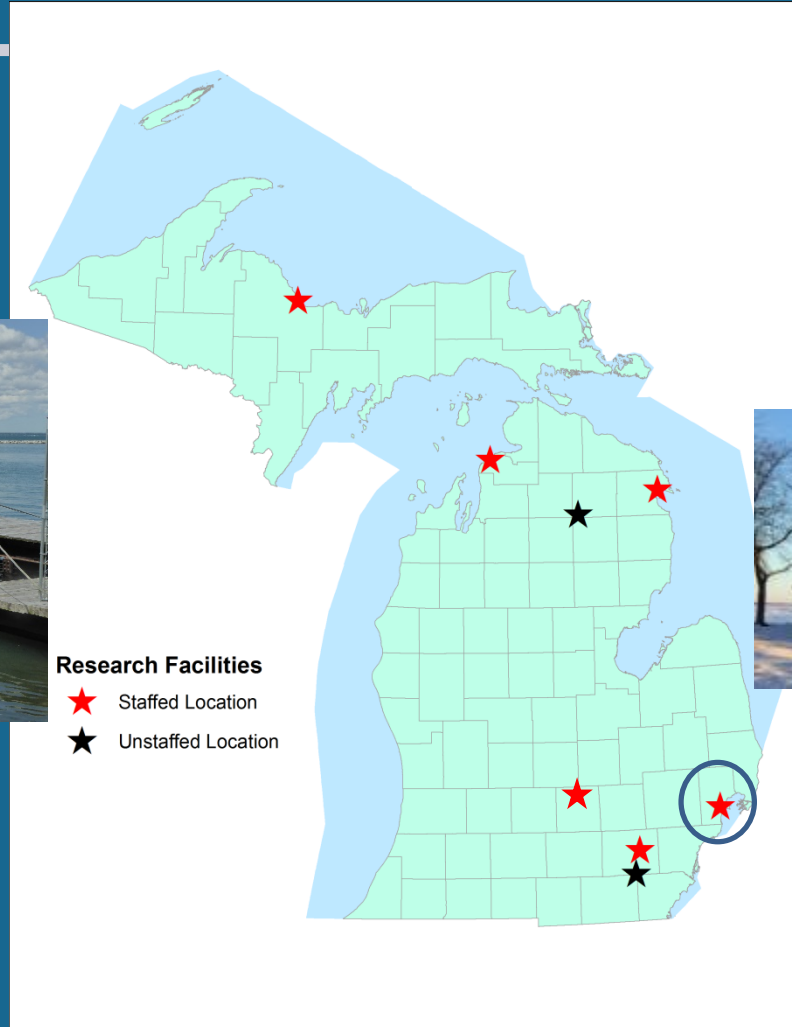


Alpena and Hunt Creek Fisheries Research Stations

- 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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