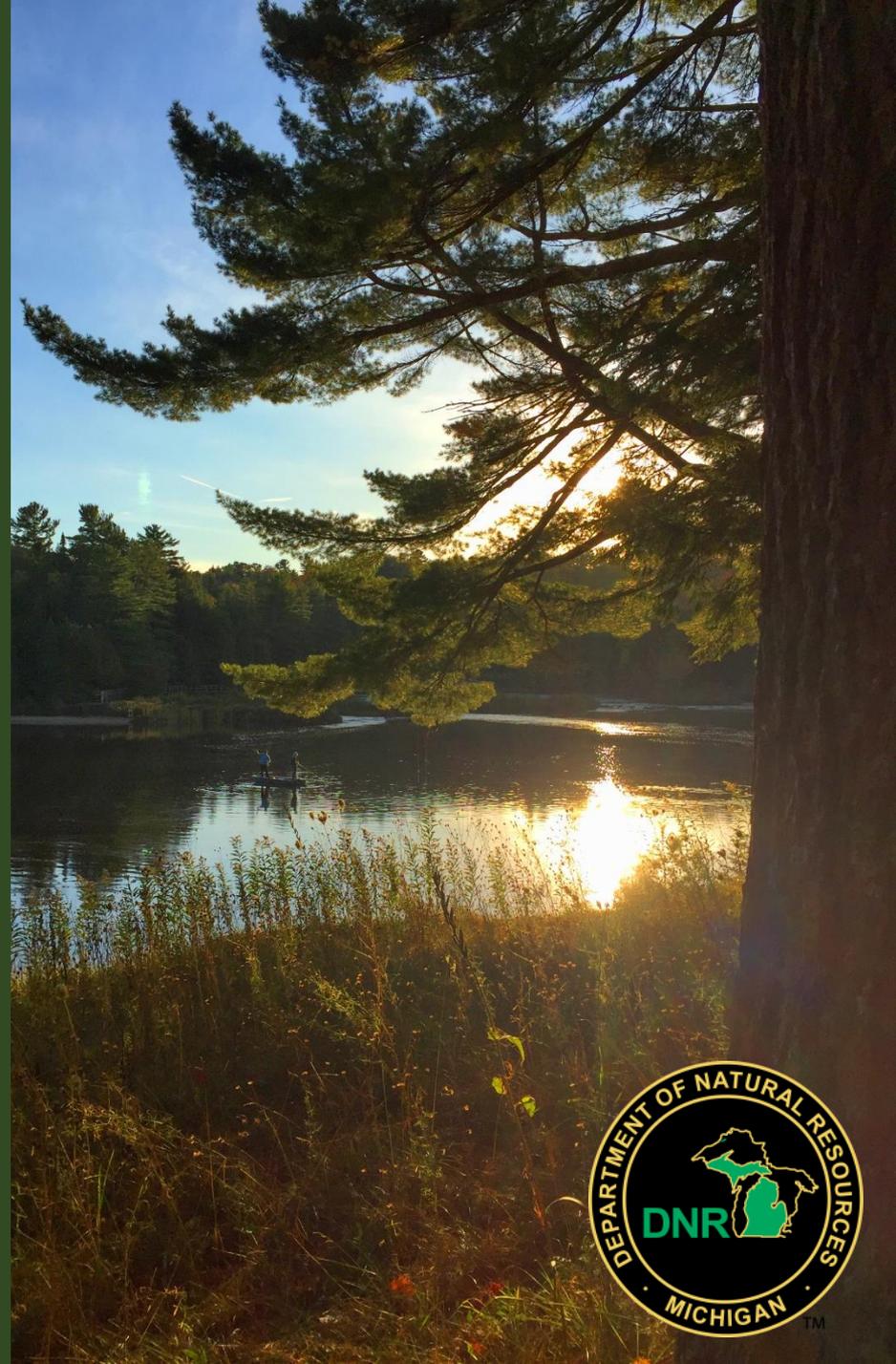


DNR Assessments and Management

Matt Diana
Fisheries Biologist
SLMMU
DNR Fisheries Division



What *are* Michigan's Fisheries?

- Over 150 different fish species
- Places they live:
 - Great Lakes (3,000 miles of shoreline)
 - More than 11,000 inland lakes
 - Tens of thousands of miles of rivers and streams

Michigan's state fish:
Brook Trout



DNR Management

- Public Trust
 - All waters of Michigan that have an inlet or outlet
- Direct Management
 - Any water with public access
 - Streams and rivers
 - Lakes with a public access site





SLMMU Biologist Coverage Areas

Unit Manager
Brian Gunderman

Biologist
Scott Hanshue

Biologist
Matt Diana

Technician Supervisor
Ed Pearce

Technicians
Matt Smith
Mike Wilson



Resource Assessment

- Status and Trends
 - Statewide monitoring
 - Random and Fixed sites
- Discretionary
 - specific management goals
- 110 lake and 144 stream surveys in 2017
- Creel
- Anglers (postcard surveys, angler logs, scale/spine collections)



Assessing a Fish Community

- What fish are here?



Assessing a Fish Community

- What fish are here?
- How many fish are there?



Assessing a Fish Community

- What fish are here?
- How many fish are there?
- How big are they?



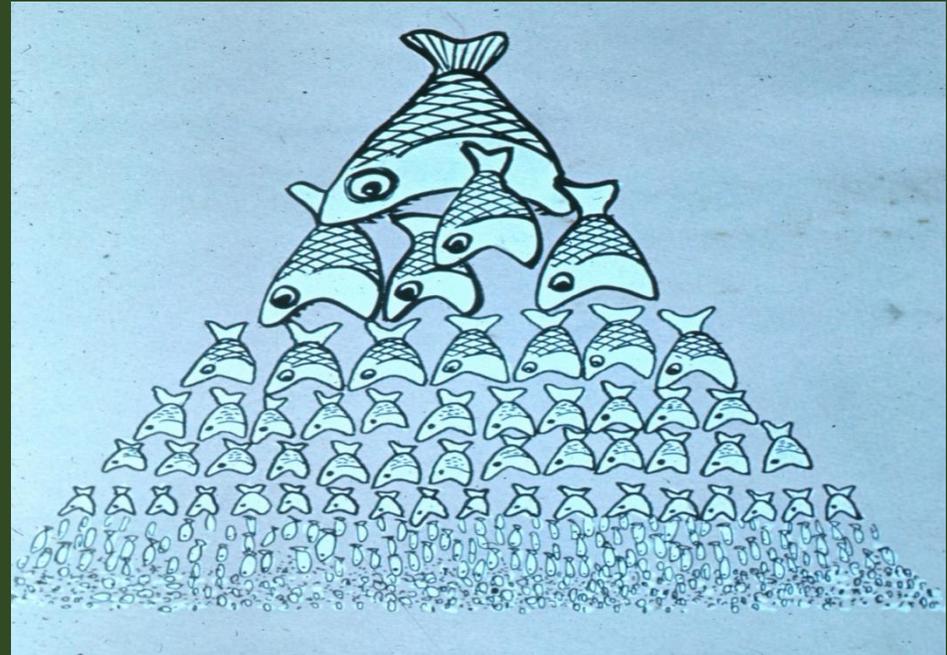
Assessing a Fish Community

- What fish are here?
- How many fish are there?
- How big are they?
- How are they growing?



Assessing a Fish Community

- What fish are here?
- How many fish are there?
- How big are they?
- How are they growing?
- Is the fishery in balance?



Assessing a Fish Community

- What fish are here?
- How many fish are there?
- How big are they?
- How are they growing?
- Is the fishery in balance?
- Management?



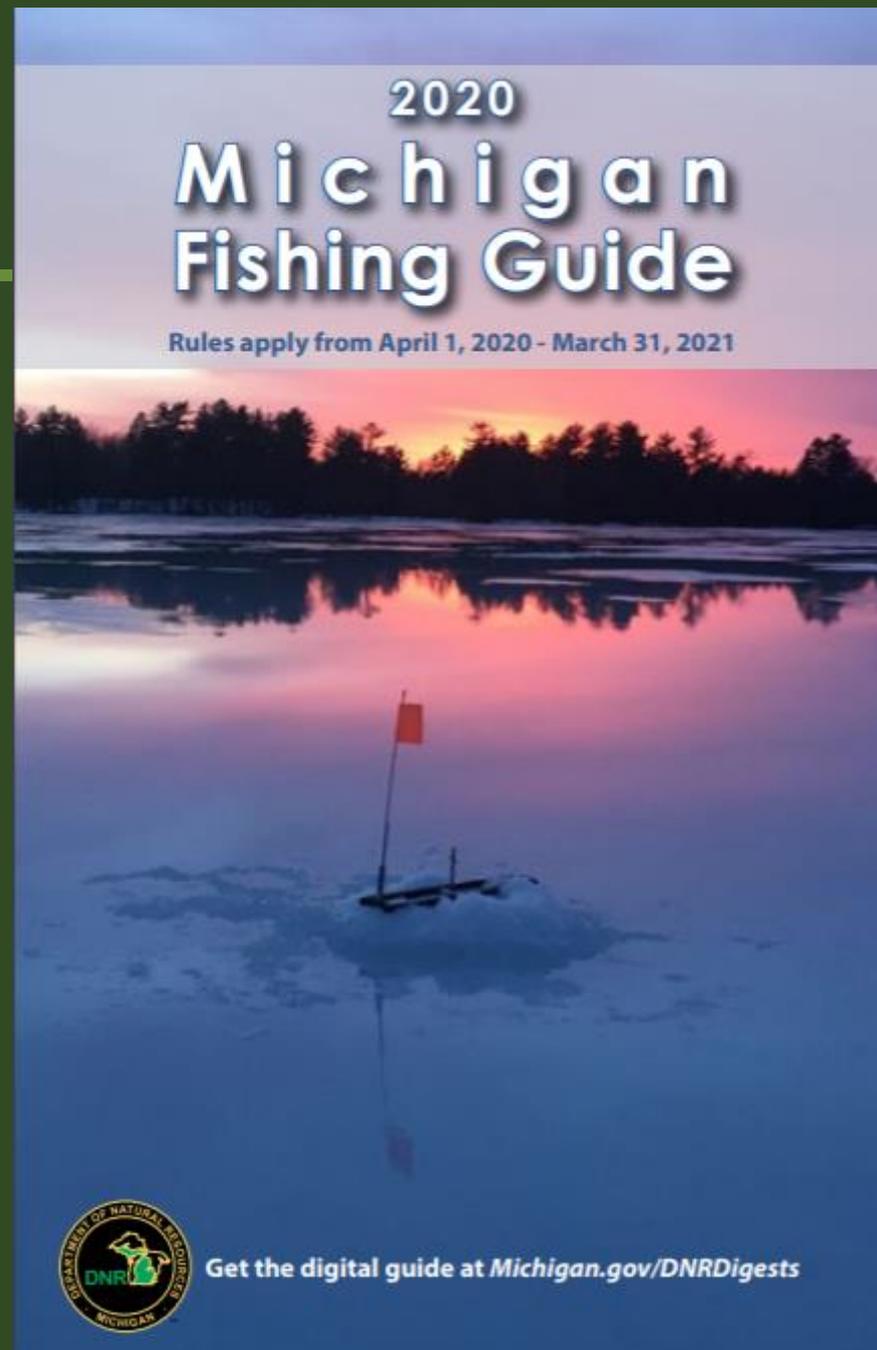
Fisheries Management

- Maintain or return balance
- Enhance or create fisheries
- Management techniques
 - Monitoring
 - Regulations
 - Stocking
 - Habitat Improvement



Regulations

- Minimum size limits
 - Bag limits
 - Slot limits
 - Closed seasons
 - Refuges
 - Catch and release
- Guide and Online Publications
- Law Enforcement



Stocking

- Create a fishery
- Balance a fishery
- Restoration of imperiled species
- Supplement natural recruitment
- Other (genetics, fish kills, etc)



Can We Stock Our Lake?

- Management plan
- State v Private Plants
 - Permitting
 - DNR input
 - Disease
 - Cost



Fish Kills

- Natural Kills
 - Winterkill
 - Spring spawning stress
 - Summer DO and temp
 - Diseases
- Human caused
 - Herbicides
 - Manure/sewage
 - Other pollutants
- Cumulative causes
- Reptiles, amphibians, invertebrates, and mussels



Fish Kills

- Reporting and DNR assessment
 - Report fish kills to DNR “Eyes in the Field”
 - DEQ Pollution Emergency Alerting System (PEAS)
 - Initiated response
 - Site evaluations and data gathering
 - Remediation



Additional Activities

- Invasive Species Control
- Research
- Great Lakes Assessment
- Fish Ladders
- Restoration
 - Dam Removal
 - Stream improvement
- Species restoration
- Natural Rivers
- Outreach



Interaction with DNR Fisheries

- Collaboration
 - Partnerships
 - Eyes/ears in the field
 - Identification of issues
- Information
 - Lake and stream survey reports
 - Can provide input and advice when dealing with environmental issues
 - Help inform management plans



Interaction with DNR Fisheries

- Resource protection
 - DEQ permit review
 - Involvement in projects that may impact/enhance fisheries
- Grants
 - Fisheries Habitat Grant
 - Aquatic Habitat Grant (5 projects, \$1.25M)
 - Dam Management Grant (4 projects, \$3.35M)
 - Habitat Improvement Account (Au Sable, Manistee and Muskegon, \$180K)
 - Midwest Glacial Lakes Partnership (\$110K)



Contact DNR Fisheries Division

- Email DNR-Fisheries@michigan.gov
- Call 517-284-5830
- Locate your biologist

- Attend our spring public meetings
- Tour a facility
- Weekly fishing report



Questions?

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