

NEPA:

What is it?
How does it impact my project?

COUNTY ENGINEERS WORKSHOP
FEBRUARY 2018

Speakers

Margaret
Barondess

- MDOT Environmental Section Manager

Tracie Leix, PE

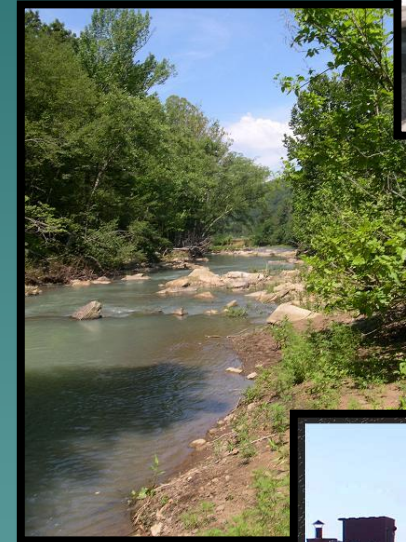
- MDOT Local Agency Program Engineer

Matt Ihnken, CWB

- USFWS Transportation Liaison

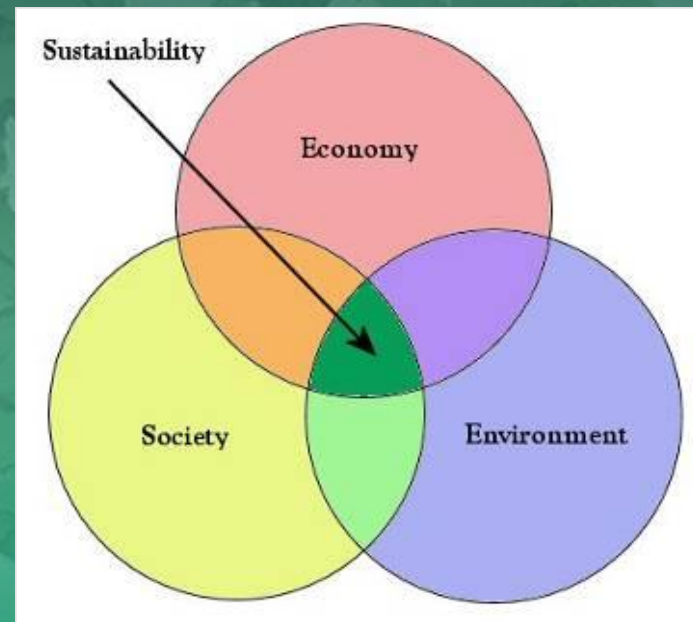
What is NEPA?

- National Environmental Policy Act of 1969.
- All projects receiving federal dollars (or approval) must be reviewed for environmental impacts.
 - Social
 - Environmental
 - Economic



Understanding the 1969 National Environmental Policy Act (NEPA)

- ◆ **Disclose Information**
- ◆ **Foster Coordination and Cooperation**
- ◆ **Engage the Public**
- ◆ **Analyze Alternatives**
- ◆ **Better Decisions**



The NEPA Umbrella

NEPA



- Public Involvement
- Coast Guard Permits
- Farmland Protection
- Aquifer Protection
- Threatened and Endangered Species
- Coastal Zone Consistency

- Air Quality Conformity
- Historic Preservation
- Title VI and EJ
- Section 4(f)
- Noise Abatement
- Sustainable Development
- Community Impact Assessment

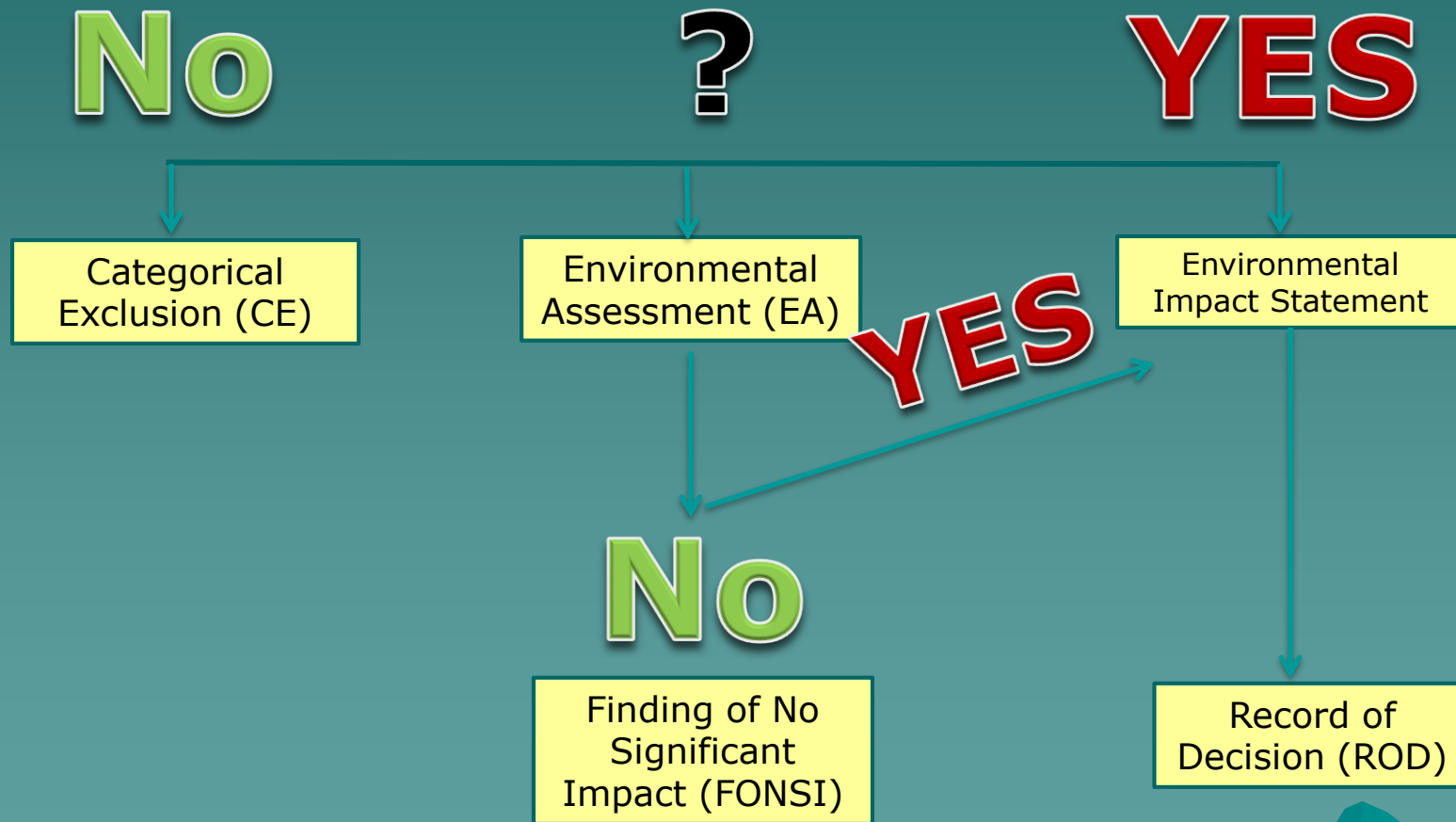
Balanced Decisions



Seeking Input

NEPA Classification

Significant Impact



Current LAP Process for NEPA

ENVIRONMENTAL CERTIFICATION:

All items designated as "Within Project Limits," shall be shown on the construction plans to prevent incidental impacts during construction. Appropriate agency project clearance documents and reviews are required for the following items and **must** be kept in the local agency's project file. These files are subject to monitoring and review by MDOT and the Federal Highway Administration. The following is a list of agencies that **must** be notified by the local agency. The local agency is responsible for notifying other agencies that may also have jurisdiction.

MI. Dept. of Natural Resources (MDNR) (<http://www.michigan.gov/dnr>)

State and/or Federal National, Wild & Scenic River
State and/or Federal Endangered Species or Habitat, Michigan Natural Features Inventory
P.A. 116 Agricultural Land
Section 6(f) Properties, (acquired or developed with assistance of the Land And Water Conservation Act. Notify the U.S. Department of Interior - U.S. Forest Service, and maintain a file copy).

MI. Dept. of Environmental Quality (MDEQ) (<http://www.michigan.gov/deq>)

100 Year Base Flood Plain
Michigan Coastal Zone

Within Project Limits If Within Project Limits

No Yes No Impact Impact

☐ ☐ ☐ ☐

We hereby certify this document to be true and accurate for fulfilling federal, state and local laws, regulations and requirements and that this document has not been modified in any way from its original form.

PREPARED BY (Signature of Professional Engineer)

DATE

AFFIX PREPARER'S LICENSED PROFESSIONAL ENGINEER'S SEAL

PREPARER'S TYPED NAME AND TITLE

PREPARER REGISTRATION NUMBER

EXPIRATION DATE

ACCEPTED BY LOCAL AGENCY (Signature of Authorized Person Employed by the Eligible Applicant Agency)

DATE

TYPED NAME AND TITLE

I concur with the environmental classification, as determined by the Local Agency:

MDOT LOCAL AGENCY PROGRAMS PROJECT DEVELOPMENT ENGINEER

DATE

2017 CAP Findings

- ▶ 23 CFR Part 771.117(d) states:
 - ▶ “...actions which meet the criteria for a CE...may be designated as CEs only after Administration **approval**.”
- ▶ FHWA
 - ▶ Documenting that Environmental Classification remains valid throughout NEPA
 - ▶ Documenting QA throughout NEPA



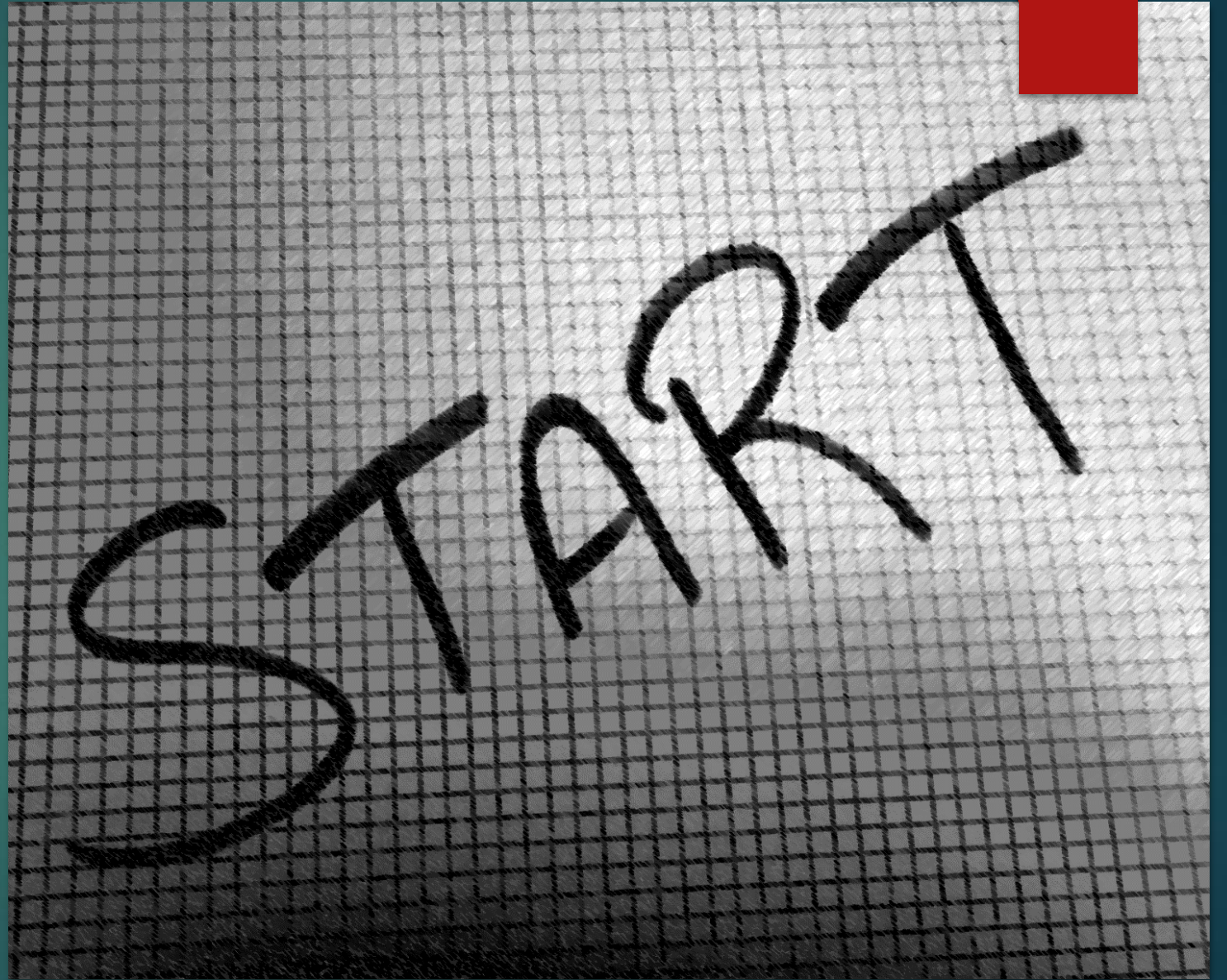
Proposed LAP Process for NEPA

Move from *Concur* to **Approve**
in order to meet Federal Regulations

What does this mean?

- ▶ Local Agencies are already required to determine NEPA classification
- ▶ Local Agencies are already required to maintain documentation in their project files
- ▶ Local Agencies will be required to submit documentation to MDOT for approval of CE

How do we
get there
from here?



NEPA Team

- ▶ FHWA
 - ▶ Mark Lewis
 - ▶ Patrick Marchman
 - ▶ Kurt Zachary
- ▶ MDOT Local Agency Program
 - ▶ Tracie Leix
 - ▶ Lynnette Firman
 - ▶ Mark Harrison
- ▶ MDOT Environmental
 - ▶ Margaret Barondess
 - ▶ Ann Lawrie
 - ▶ Eric Costa
- ▶ CRA (NEPA Subcommittee)
 - ▶ Steve Puuri (and MML)
 - ▶ Karl Hanson
 - ▶ Craig Atwood
- ▶ MML
 - ▶ John LaMacchia
 - ▶ Patrick Lewis – city of Monroe
 - ▶ Willard Redman – city of Hastings

Accomplishments

Establish New FTE
within MDOT
Environmental
Section

Finalized
Threatened &
Endangered
Species Review
Process

Draft Updated
Section 106 (SHPO)
Exemptions &
Application Tips

Section 106 - SHPO

- ▶ Exempted project types
- ▶ SHPO letters responding to project reviews
 - ▶ MiSHPO
- ▶ Tip sheet
 - ▶ Detailed project descriptions

Documentation Requirements

Scenic
Rivers

T&E
Species

Wetlands

4(f)/6(f)
Properties

PA 116
Properties

Noise

Air
Quality

Water
Quality

Other

Training Needs and Schedule

- ▶ Introduction Training
 - ▶ MDOT/ACEC Workshop, CEW, MTPA Conference
- ▶ Local Technical Assistance Program (LTAP) Webinars
 - ▶ Threatened & Endangered Species – January 2018
 - ▶ SHPO Requirements – Spring 2018
 - ▶ NEPA Basics – Fall 2018
- ▶ Comprehensive Training Spring 2019

Information Technology and Data Needs

- ▶ SPR Funding Grant
 - ▶ Presence/Absence for Select Elements
- ▶ Program Application
 - ▶ Paper Form
 - ▶ Software Application

Process Implementation

- ▶ Pilot Projects
- ▶ Anticipated for FY20 (October 2019)
 - ▶ All Projects
- ▶ Construction Impacts
 - ▶ Change Management in the Field

Schedule Recap

- ▶ Identify Documentation Requirements – Now
- ▶ Training
 - ▶ Intro – Now
 - ▶ Comprehensive – Spring/Summer 2019
- ▶ IT/Data Needs – Long Term
- ▶ Pilot Projects – Fall 2018/Spring 2019
- ▶ Implementation – October 2019



Project Review for T/E Species

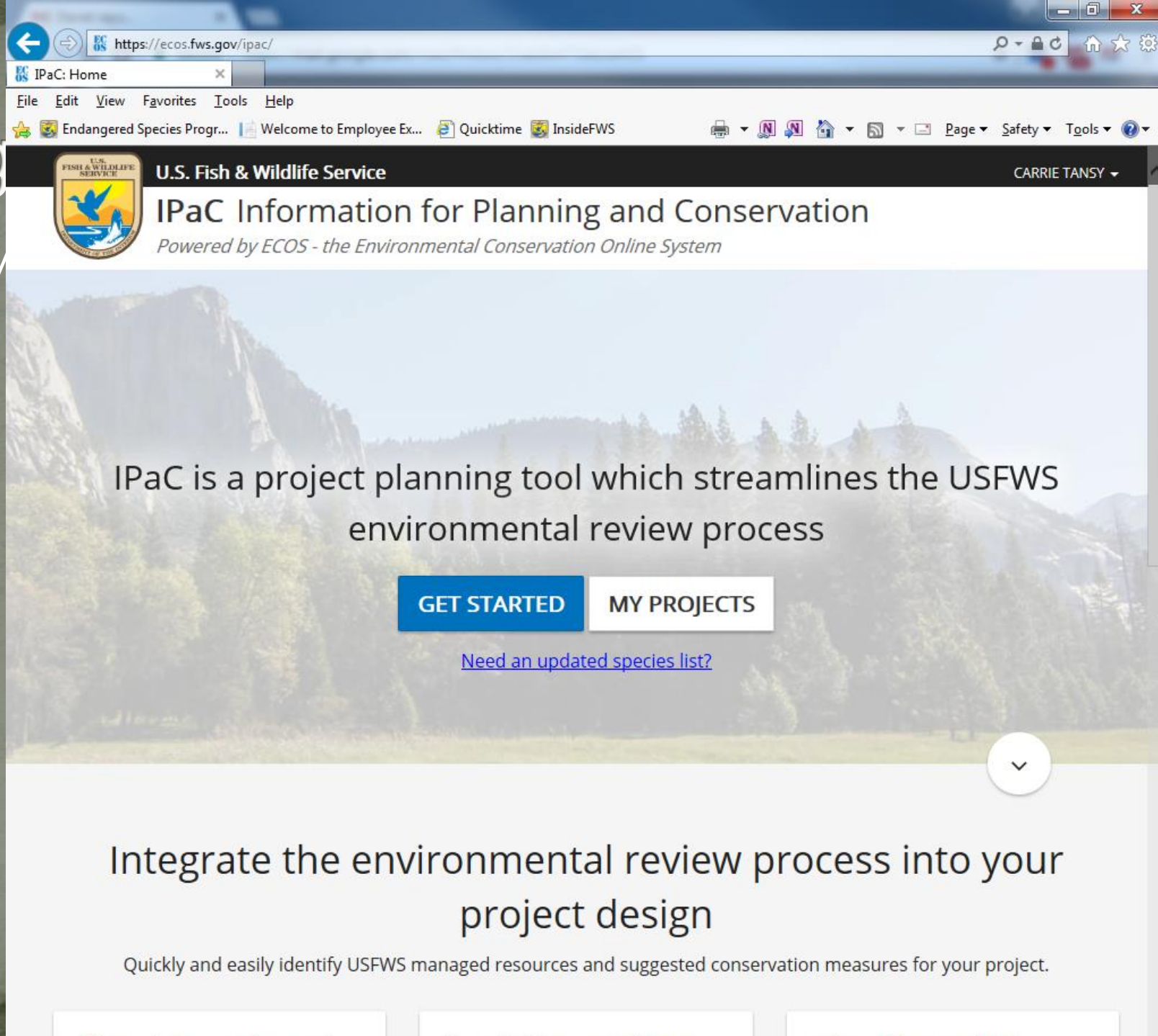
Matt Ihnken

USFWS Michigan Ecological Services Field Office
East Lansing, Michigan

Screening Projects for the Eastern Massasauga Rattlesnake

Michigan

- [https://](https://ecos.fws.gov/ipac/)



The screenshot shows the IPaC (Information for Planning and Conservation) website. The browser address bar displays <https://ecos.fws.gov/ipac/>. The page header includes the U.S. Fish & Wildlife Service logo and the text "IPaC Information for Planning and Conservation". Below the header, a large banner image of a forested mountain landscape contains the text "IPaC is a project planning tool which streamlines the USFWS environmental review process". Two buttons, "GET STARTED" and "MY PROJECTS", are positioned below the banner. A link "Need an updated species list?" is also visible. The main heading "Integrate the environmental review process into your project design" is followed by the subtext "Quickly and easily identify USFWS managed resources and suggested conservation measures for your project."

U.S. Fish & Wildlife Service

IPaC Information for Planning and Conservation

Powered by ECOS - the Environmental Conservation Online System

IPaC is a project planning tool which streamlines the USFWS environmental review process

[GET STARTED](#) [MY PROJECTS](#)

[Need an updated species list?](#)

Integrate the environmental review process into your project design

Quickly and easily identify USFWS managed resources and suggested conservation measures for your project.

ea?

IPaC Information for Planning and Conservation

U.S. Fish & Wildlife Service

MY PROJECTS

CARRIE TANSY

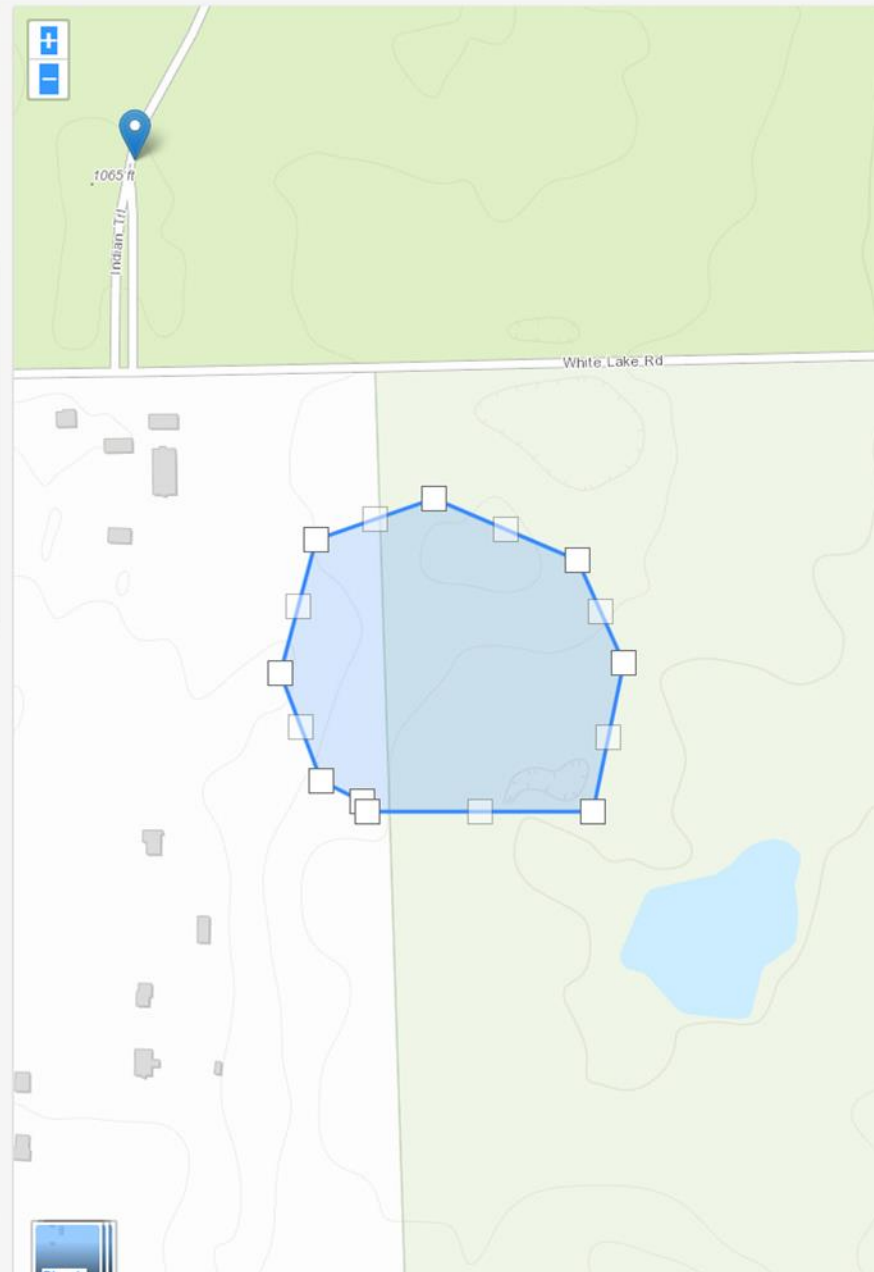
1 Find location**2** Define area**3** Confirm

Verify the area where project activities will occur

AREA: 8.23 acres

CONTINUE

START OVER



Layers

ADD

ENDANGERED SPECIES	6
--------------------	---

MIGRATORY BIRDS 22

FACILITIES

WETLANDS !

 PRINT RESOURCE LIST

What's next?

Define a project at this location to evaluate potential impacts, get an official species list, and make species determinations.

DEFINE PROJECT

THUMBNAILS LIST

 SPECIES GUIDELINES ▾

NAME	STATUS
Rayed Bean <i>Villosa fabalis</i>	Endangered
Snuffbox Mussel <i>Epioblasma triquetra</i>	Endangered

NAME	STATUS
Poweshiek Skipperling CH	Endangered
Oarisma poweshiek	

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i>	Threatened

NAME	STATUS
Eastern Massasauga (=rattlesnake) <i>Sistrurus catenatus</i>	Threatened

Critical habitats

Explore

LOCAL OFFICE: E LANSING

Eastern Massasauga (=rattlesnake)

*Sistrurus catenatus*

This species only needs to be considered if any of the following conditions apply:

- All Projects: Tier 2 EMR Habitat Present
- All Projects: Within EMR Range

STATUS

Threatened; A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

DESCRIPTION


Massasaugas are small snakes with thick bodies, heart-shaped heads and vertical pupils. The average length of an adult is about 2 feet. Adult massasaugas are gray or light brown with large, light-edged chocolate brown blotches on the back and smaller blotches on the sides. The snake's belly is marbled dark gray or black and there is a narrow, white stripe on its head. Its tail has several dark brown rings and is tipped by gray-yellow horny rattles. Young snakes have the same markings, but are more vividly colored. The head is a triangular shape and the pupils are vertical.

CRITICAL HABITAT

No critical habitat has been designated for this species.

SPECIES GUIDELINES

 [General project design guidelines](#)

For more information, visit the [ECOS species profile](#) 


Resources

ENDANGERED
SPECIES

MIGRATORY BIRDS

FACILITIES

WETLANDS

 PRINT RESOURCE LIST

What's next?

Define a project at the location to evaluate potential impacts, get on the official species list, and make species determinations.

DEFINE PROJECT

LOCATION

Jackson County,
Michigan

CHANGE LOCATION

[Learn more](#) of the U.S. Fish

ation:

SPECIES GUIDELINES ▾

gered

gered

gered

Northern Long-eared Bat

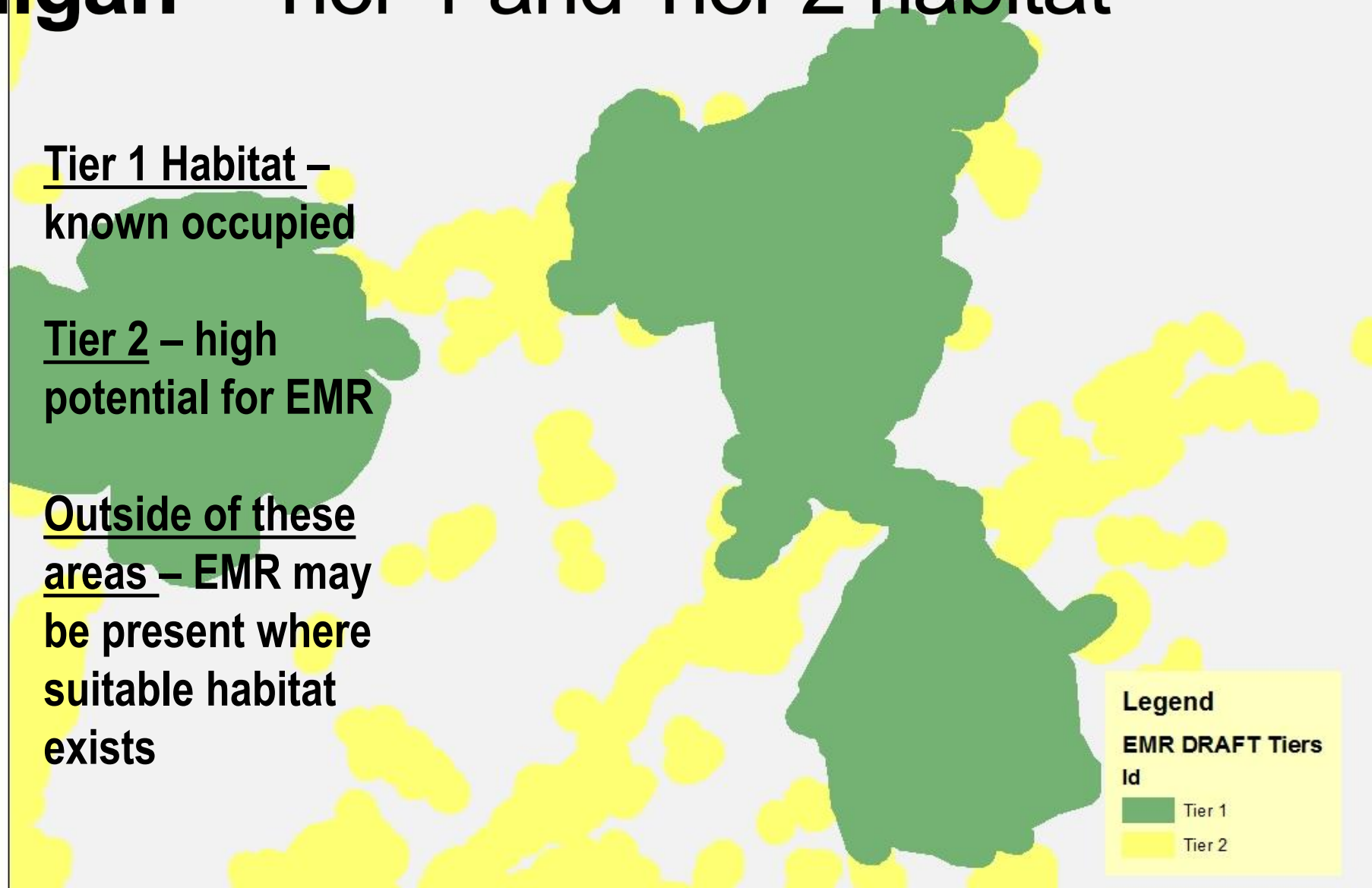
Threatened

Michigan – Tier 1 and Tier 2 habitat

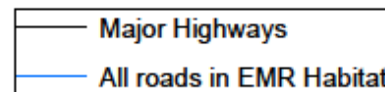
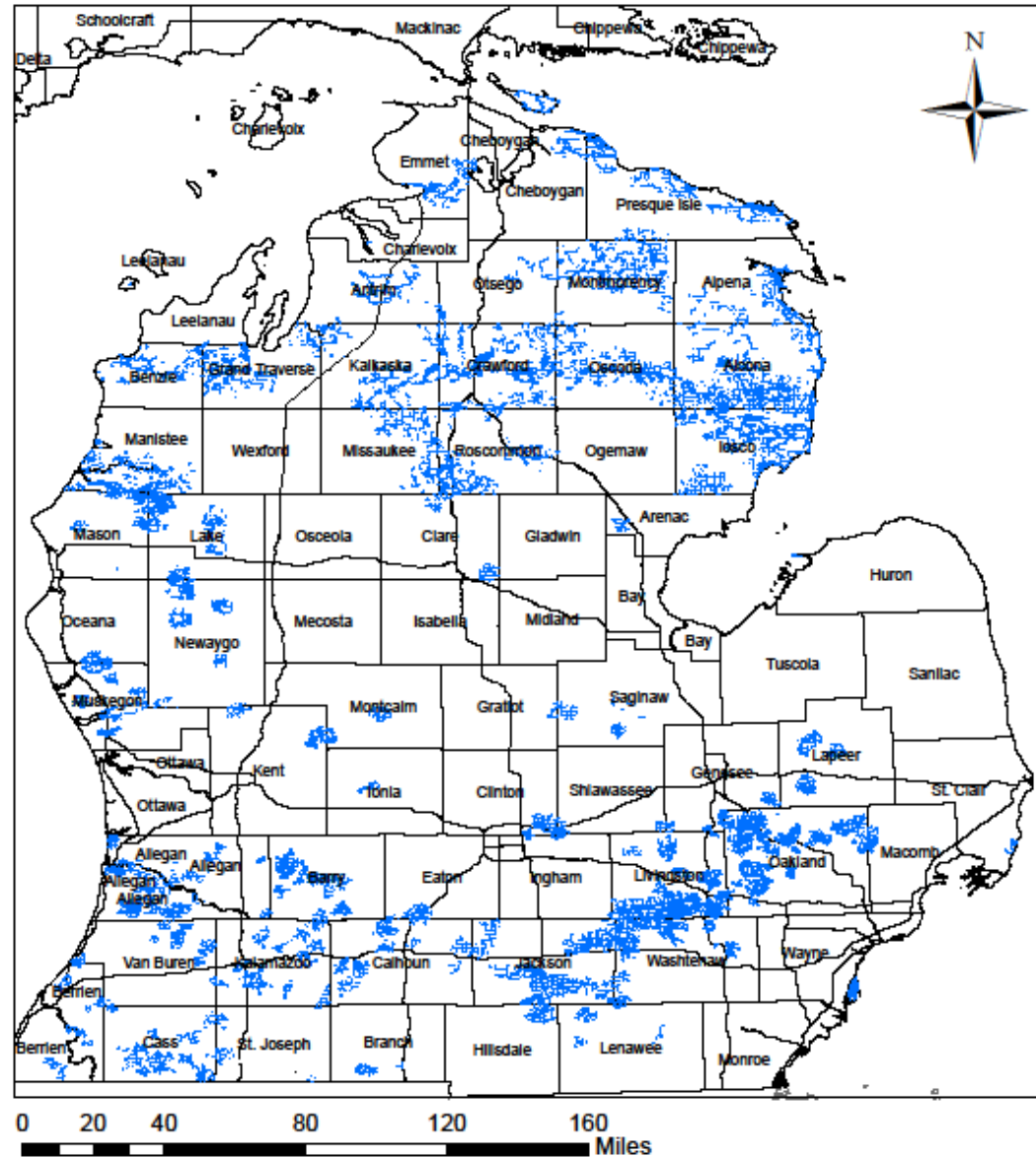
Tier 1 Habitat –
known occupied

Tier 2 – high
potential for EMR

Outside of these
areas – EMR may
be present where
suitable habitat
exists



ALL ROADS IN EMR HABITAT



Potential for conflicts with ROW management

- Management activities are needed to maintain safe roadways for the motoring public
- Some management activities could result in harm or mortality



Photo by Dick Dickinson

Best Management Practices

- Timing and Best Management Practices can avoid or minimize adverse impacts
- If you can avoid harming EMR (most often with timing restrictions), you don't need an ESA permit
- If you can't avoid take:
 - Can apply for an Incidental Take Permit
 - If your project has a Federal component, the Federal agency completes section 7 consultation
 - Requires advanced planning



USFWS photo

Mowing grasses

- Best to mow when snakes are hibernating
 - Mowing is unconstrained in the inactive season
- During the active season, snakes may be killed or injured by mower blades or crushed by tires
- Turf grass (areas maintained as lawn around buildings) or areas where trying to discourage EMR (trails) can be maintained as short grass, <4-5 inches, that EMR is unlikely to use.



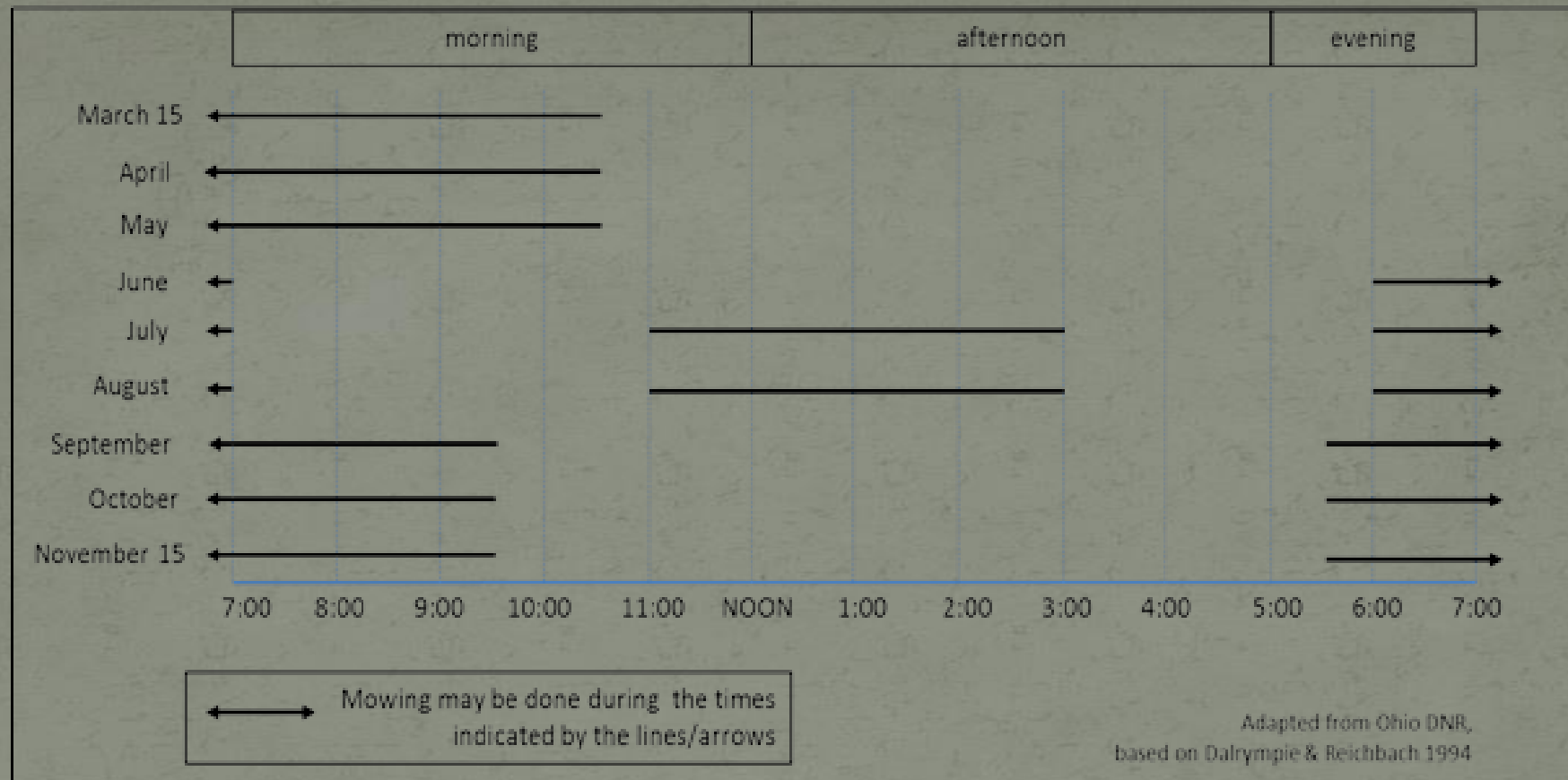


Figure 1. EMR Active season mowing schedule (NiSource Biological Opinion, page 273, USFWS 2015)

Mechanical treatments - shrubs and trees

- Brush-hogging, hydro-axing, vehicles/ other equipment should occur during the inactive season when the ground is frozen (such that soils can be left undisturbed)
- Use low impact harvest methods in occupied wetlands, including track mounted skid steers to cut and remove individual trees
- If ground isn't completely frozen, or if working near potential hibernacula, use hand tools
- Do not burn brush during the active season

Water level manipulation

- EMR hibernates in areas where the water table is near the surface but still have access to air to breathe
- Water levels should not be artificially lowered during the inactive season
 - Snakes need access to water within their hibernacula to avoid desiccation and freezing
- Flooding is also a threat
- Where applicable, water levels should be allowed to flow naturally and not artificially stabilized to allow for restoration of early successional habitats

Herbicides

- Follow all label instructions
- Avoid spray drift beyond the target species/ area (optimal wind speed and direction, boom height, droplet size calibration, precipitation forecast, etc.)
- Avoid broadcast spraying of herbicides in occupied habitat; use spot spraying, painting cut stumps, wicking, other targeted methods

Erosion Control

- In Michigan, use wildlife-safe materials for all projects where EMR may occur
- Avoid products containing plastic mesh
 - Net-less blankets, jute or other natural fibers, loose mulch, etc.



EMR killed by an erosion control blanket's plastic mesh netting

Screening Process for Bats



Indiana Bat Section 7

- “May Affect”
 - Any impact to known or potential habitat
 - “May affect, not likely to adversely affect” (informal consultation):
 - Removal of suitable habitat when bats are not present in summer habitat (October 1- March 31)
 - “May affect, likely to adversely affect” (formal consultation):
 - Disturbance of hibernacula
 - Removal of known roost trees
 - Removal of potential roost trees when bats are potentially present (April 1- Sept 30)
 - Removal/fragmentation of a significant portion of available foraging/roosting habitat at any time of year

Indiana Bat Range in Michigan



Screening Process for Mussels



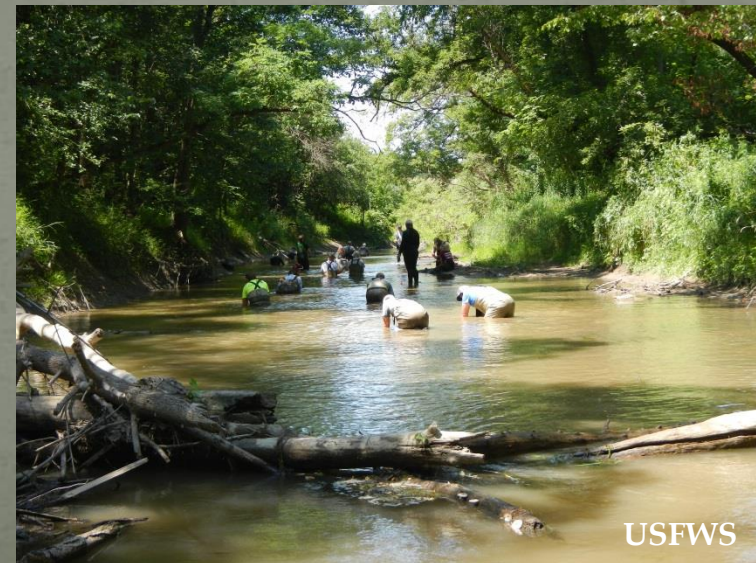


Michigan Freshwater Mussel Survey Protocols and Relocation Procedures



Purpose and Development

- Purpose
 - Provide guidance and standardized survey and relocation protocols to minimize impacts to state and federally listed mussel
- Development
 - Adapted from West Virginia and Ohio Protocols
 - Working group representatives from
 - MDOT
 - DEQ
 - USFWS
 - DNR
 - MNFI
 - Reviewed by practitioners and MI Mussel Working Group
- Protocol document will be updated annually



Groups 2 and 3 rivers

 Group 3

 Group 2

Draft 09 2017



Project Planning

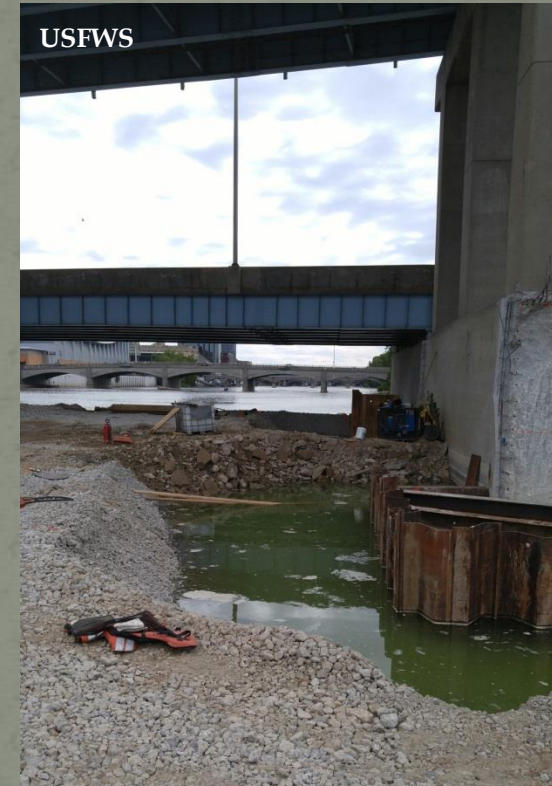
- Survey and Relocation Season
 - Survey season = June 1-October 15
 - Water temp = above 50 deg
 - Air temp = 50-90 deg
 - Relocation season = June 1-September 15
- Site Specific Authorization
- Authorization of Relocation under ESA

Quadrat #	Quadrat #	Quadrat #
N/A Slo Med Fast	N/A Slo Med Fast	N/A Slo Med Fast
slight med heavy	slight med heavy	slight med heavy
Present Absent	Present Absent	Present Absent
slight med heavy	slight med heavy	slight med heavy
Dense, partly open, open	Dense, partly open, open	Dense, partly open, open
Bedrock % Boulder %	Bedrock % Boulder %	Bedrock % Boulder %
Cobble % Gravel %	Cobble % Gravel %	Cobble % Gravel %
Sand % Silt %	Sand % Silt %	Sand % Silt %
Clay % Muck %	Clay % Muck %	Clay % Muck %
Marl % Detritus %	Marl % Detritus %	Marl % Detritus %
Quadrat Bag # color:	Quadrat Bag # color:	Quadrat Bag # color:
Alive Shell	Alive Shell	Alive Shell



Survey Plans and Prior Notification

- Must provide survey plans to MDNR (all rivers/streams) and/or FWS (Group 3 only) for review in advance of surveys
 - Notification of MDNR and/or FWS at least 15 days prior to the actual survey date
 - MDNR review of final survey results
 - Site specific authorization
- Purpose of prior notification
 - Allow time for agency review
 - Appropriate protocol is applied for a stream type and construction activity



Permit Requirements

- State of Michigan Permits
 - Cultural and Scientific Collectors Permit issued by the MDNR Fisheries Division
 - All native mussels are protected in Michigan
 - Group 2, 3
 - Threatened and Endangered Species Permit, MDNR Endangered Species Program
 - Group 2



Permit Requirements continued

- Federal Permits issued by USFWS
 - Section 10(a)(1)(A) permits for scientific purposes or to enhance the propagation or survival of a species
 - Includes permits to conduct surveys (e.g., mussel surveys)
 - Group 3
 - Authorization from USFWS required for relocation of federally listed species



Matt Ihnken
U.S. Fish & Wildlife Service
Michigan Ecological Services Field Office
2651 Coolidge RD, Suite 101
East Lansing, Michigan

Email: matthew_ihnken@fws.gov
Office: (517) 351-8474



Questions?

