



Federal Threatened and Endangered Species and Public Roads

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Outline



ESA and Section 7 Consultation



IPaC and Dkeys



What to do if you get a may affect determination



BMPs for some listed species



Next Steps



Other Federal Laws

U.S. Fish and Wildlife Service

- Ecological Services
 - Endangered Species
 - Contaminants
 - Conservation Planning Assistance
- Endangered Species Act
 - Congress passed the Endangered Species Act (ESA) in 1973
 - Recognized that our rich natural heritage is of "esthetic, ecological, educational, recreational, and scientific value to our Nation and its people"
 - The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend



Our mission is to work with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.



Endangered Species Act Overview

- Section 2: Findings, Purpose, and Policy
- Section 3: Definitions
- Section 4: Determination of Endangered Species and Threatened Species (Listing, Critical Habitat Designation, Recovery, Monitoring)
- Section 5: Land Acquisition
- Section 6: Cooperation with the States
- Section 7: Interagency Cooperation
- Section 9: Prohibited Acts
- Section 10: Exceptions (Permits)
- Section 11: Penalties and Enforcement



Michigan's Federally Listed Species



Mammals

- Northern long-eared bat (E)
- Indiana bat (E)
- Tricolored bat (P)
- Gray wolf (E)
- Canada lynx (T)



Insects

- Poweshiek skipperling (E)
- Mitchell's satyr butterfly (E)
- Karner blue butterfly (E)
- Hungerford's crawling water beetle (E)
- Hine's emerald dragonfly (E)
- Monarch (P)



Birds/Reptiles

- Whooping crane (EXP)
- Piping plover (E)
- Red knot (T)
- Eastern massasauga (T)
- Northern copperbelly watersnake (T)



Plants

- Dwarf lake iris (T)
- Houghton's goldenrod (T)
- Pitcher's thistle (T)
- Michigan monkey flower (E)
- Eastern prairie fringed orchid (T)
- Lakeside daisy (T)
- American hart's tongue fern (T)



Mussels

- Clubshell (E)
- Rayed Bean (E)
- Snuffbox (E)
- Northern riffleshell (E)
- Round hickorynut (T)
- Salamander mussel (P)

Section 7 – Interagency Cooperation



- Section 7 outlines Federal agencies role in conserving listed species
- Section 7(a)(1) - Requires that federal agencies utilize their authority by carrying out programs for the conservation of listed species
- Section 7(a)(2) - Ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or adversely modify critical habitat
 - Regulations can be found at 50 CFR 402

Section 7 Consultation

- Consultation is required if an action may affect a listed species or critical habitat
- Applicant must make an effect determination for each species/critical habitat
 - No effect
 - Not likely to adversely affect
 - Likely to adversely affect



Informal
Consultation

Formal
Consultation



Determinations

No Effect

- No impacts, positive or negative, to species

NLAA

- All effects are beneficial, insignificant, or discountable
- Insignificant effects are so minor they never reach the scale where take occurs
- Discountable effects are extremely unlikely to occur

LAA

- Listed species will respond in a negative manner to the action or its consequences
- For listed animals, determine if take is reasonably certain to occur
- Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct

Do projects with
no federal funding
have obligations
under the ESA?

It is illegal for anyone subject to U.S.
jurisdiction to take (ex. injure or kill)
endangered fish or wildlife species



YES

Could my project cause take?

- Similar to making a determination for consultation under Section 7
- All Species Michigan Dkey on IPaC can help you evaluate effects
- Important to consider both direct and indirect effects of the action
- Conservation measures or surveys can be used to avoid take
- We are here to help!



Federal TE Review Process in IPaC

Determine if species may be present in the action area (Official Species List)



Consider if the species' habitat is present in the action area



Determine if your proposed action may affect the species or its habitat



If you make a determination, you may need to consult outside of the dkey

Step 1: Request an official species list

An official species list is a letter from the local U.S. Fish and Wildlife Service field office that assists in the evaluation of potential impacts of your project. It includes a list of species that should be considered under [Section 7](#) of the Endangered Species Act, a project tracking number, and other pertinent information from the field office.

Does this project require an official species list?

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action" ([Section 7](#) of the Endangered Species Act).

This requirement applies to projects that are **conducted, permitted, funded, or licensed** by any Federal agency.

NOTE: Generating an official species list does not start the consultation clock for a project.

Step 2: Evaluate determination keys

The U.S. Fish and Wildlife Service has performed up-front analyses for certain project types, agencies, and species. The analyses have been compiled into *determination keys*, a simple interview process to help you arrive at a recommended determination for some species in your project area.

There are 3 determination keys that may apply to your project. Each determination key starts with a qualification interview to see if the key is appropriate for your project.

- All Species Michigan Determination Key

Release date: September 11, 2023

This key is intended to streamline review of projects for potential effects to Federally listed threatened and endangered species and designated critical habitat. This key covers all Michigan species and incorporates the rangewide NLEB dkey as an option.

Subject: Consistency letter for 'Sample Project' for specified federally threatened and endangered species and designated critical habitat that may occur in your proposed project area consistent with the Michigan Determination Key for project review and guidance for federally listed species (Michigan Dkey).

Dear Michelle Kane:

The U.S. Fish and Wildlife Service (Service) received on **September 18, 2023** your effect determination(s) for the 'Sample Project' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Michigan DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Eastern Massasauga (=rattlesnake) (<i>Sistrurus catenatus</i>)	Threatened	May affect
Hungerford's Crawling Water Beetle (<i>Brychius hungerfordi</i>)	Endangered	No effect
Monarch Butterfly (<i>Danaus plexippus</i>)	Candidate	No effect
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	No effect
Tricolored Bat (<i>Perimyotis subflavus</i>)	Proposed	No effect
	Endangered	

Please carefully review this letter. Your Endangered Species Act requirements are not complete.

Your project is in the vicinity of a National Wildlife Refuge (NWR), <https://fws.gov/visit-us/refuges>. The intent of this letter is limited to assisting you in evaluating the effects of your action on Federally listed species in Michigan; other FWS programs may have additional input on your

Which Dkey Should I Use?

All Species Michigan Dkey

- Covers all listed species in Michigan
- Continuously updated and improved by MIFO
- Recommend for most transportation projects

FHWA Dkey

- Only want to consult on listed bats
- Can be used for adverse effects that you wish to mitigate through an in-lieu fee program

Example Dkey Letters

In Reply Refer To:
Project code: 2022-0084385
Project Name: Saline Pump Stations

November 07, 2022

Subject: Verification letter for the project named 'Saline Pump Stations' for specified threatened and endangered species that may occur in your proposed project location consistent with the Michigan Endangered Species Determination Key (Michigan DKey)

Dear [REDACTED]

The U.S. Fish and Wildlife Service (Service) received on **November 07, 2022** your effect determination(s) for the 'Saline Pump Stations' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Michigan DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Eastern Massasauga (=rattlesnake) (<i>Sistrurus catenatus</i>)	Threatened	NLAA
Eastern Prairie Fringed Orchid (<i>Platanthera leucophaea</i>)	Threatened	No effect
Indiana Bat (<i>Myotis sodalis</i>)	Endangered	No effect
Mitchell's Satyr Butterfly (<i>Neonympha mitchellii mitchellii</i>)	Endangered	No effect
Monarch Butterfly (<i>Danaus plexippus</i>)	Candidate	No effect
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened	No effect

The Service will notify you within 30 calendar days if we determine that this proposed Action does not meet the criteria for a "may affect, not likely to adversely affect" (NLAA) determination for Federally listed species in Michigan. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NLAA concurrence provided here. This verification period allows the Michigan Ecological Services Field Office to apply local

In Reply Refer To:
Project code: 2023-0003479
Project Name: Macomb County North River Road Bridge Replacement

October 12, 2022

Subject: Consistency letter for 'Macomb County North River Road Bridge Replacement' for specified federally threatened and endangered species and designated critical habitat that may occur in your proposed project area consistent with the Michigan Determination Key for project review and guidance for federally listed species (Michigan Dkey).

Dear [REDACTED]

The U.S. Fish and Wildlife Service (Service) received on **October 12, 2022** your effect determination(s) for the 'Macomb County North River Road Bridge Replacement' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Michigan DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Eastern Massasauga (=rattlesnake) (<i>Sistrurus catenatus</i>)	Threatened	NLAA
Indiana Bat (<i>Myotis sodalis</i>)	Endangered	No effect
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened	No effect
Piping Plover (<i>Charadrius melodus</i>)	Endangered	NLAA
Rayed Bean (<i>Villosa fabalis</i>)	Endangered	May affect
Red Knot (<i>Calidris canutus rufa</i>)	Threatened	NLAA
Snuffbox Mussel (<i>Epioblasma triquetra</i>)	Endangered	May affect
Whooping Crane (<i>Grus americana</i>)	Experimental	No effect
	Population, Non-Essential	

Please carefully review this letter. Your Endangered Species Act requirements are not complete.

Conservation Measures

Summary of conservation measures for your project You agreed to the following conservation measures to avoid adverse effects to listed species and our concurrence is only valid if the measures are fully implemented. These must be included as permit conditions if a permit is required and/or included in any contract language.

Eastern Massasauga: Materials used for erosion control and site restoration must be wildlife-friendly. Do not use erosion control products containing plastic mesh netting or other similar material that could entangle eastern massasauga rattlesnake (EMR). Several products for soil erosion and control exist that do not contain plastic netting including net-less erosion control blankets (for example, made of excelsior), loose mulch, hydraulic mulch, soil binders, unreinforced silt fences, and straw bales. Others are made from natural fibers (such as jute) and loosely woven together in a manner that allows wildlife to wiggle free.

Eastern Massasauga: To increase human safety and awareness of EMR, those implementing the project must first review the EMR factsheet (available at <https://www.fws.gov/media/eastern-massasauga-rattlesnake-fact-sheet>), and watch MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at https://www.youtube.com/watch?v=-PFnXe_e02w).

Eastern Massasauga: During project implementation, report sightings of any federally listed species, including EMR, to the U.S. Fish and Wildlife Service within 24 hours.

Eastern Massasauga: Do not impact more than 0.5 acres of suitable EMR habitat.

Eastern Massasauga: The project will not result in permanent loss of more than one acre of wetland or conversion of more than 10 acres of EMR upland habitat (uplands associated with high quality wetland habitat) to other land uses.

Eastern Massasauga: The project will occur entirely within the EMR inactive season (in the southern Lower Peninsula: October 16 through April 14; in the northern Lower Peninsula, October 2 through April 30).

Eastern Massasauga: The project will not result in a permanent barrier to snake movement, such as a new road or widening of an existing road, changing the road substrate from dirt to pavement, new trail or canal or other permanent barrier.

Mitchell's Satyr: This project will not alter or fill more than three acres of wetlands.

Whooping Crane: The project will not occur within a National Wildlife Refuge or National Park

Listed Bats: The action will not include temporary or permanent lighting of roadway(s), facility(ies), and/or parking lot(s).

Listed Bats: Herbicide application will follow all label instructions and limit application to targeted methods such as spot-spraying, hack-and-squirt, basal bark, injections, cut-stump, or foliar spraying on individual plants.

Listed Bats: All tree cutting/trimming will be conducted outside the period of June 1 through July 31 (that is, limited to August 1 through May 31).

Listed Bats: The project will not include the application or potential drift of insecticides, fungicides, or rodenticides into forested habitats.

Listed Bats: The action will not include tree cutting/trimming of any kind.

Listed Bats: The action will not include prescribed burning within or adjacent to (within 200 feet of) mature forest.

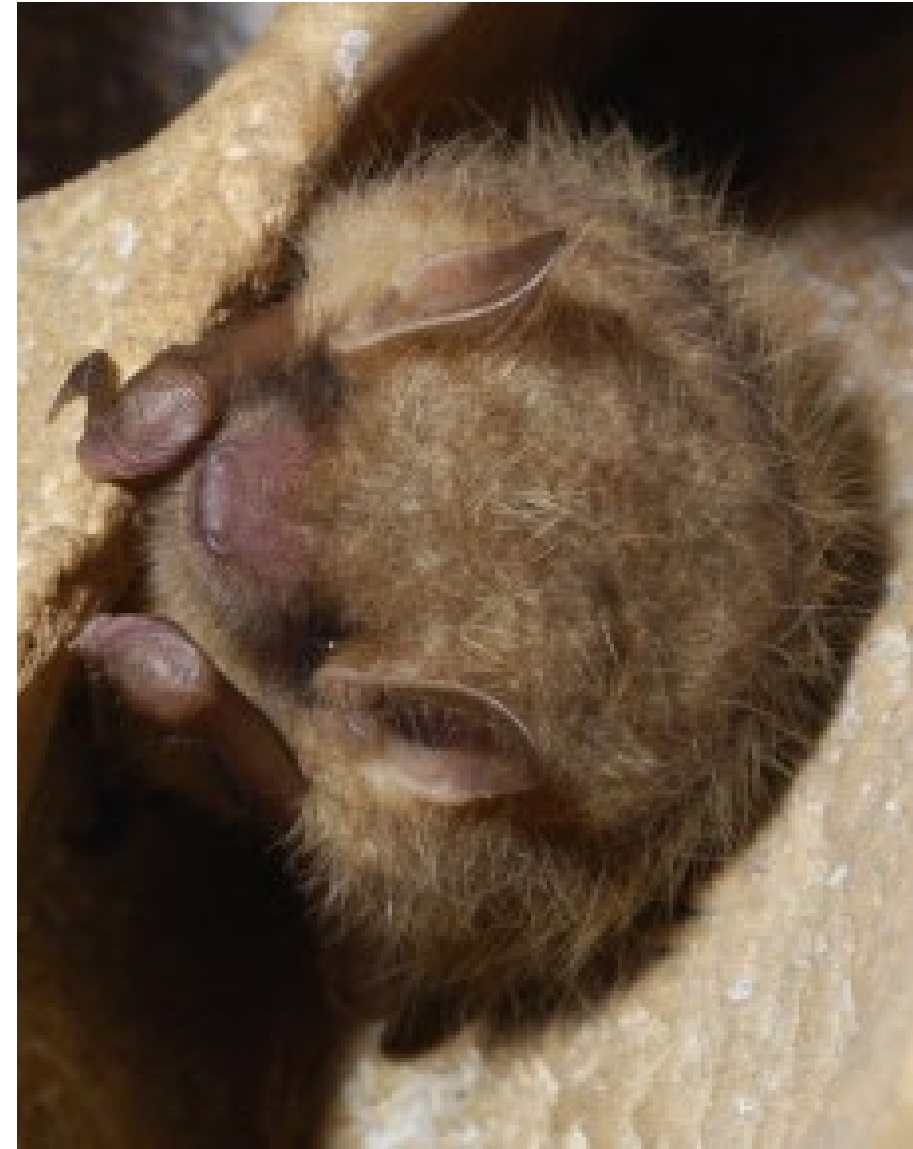
Next Steps for May Affects

- Email mifo_dkey@fws.gov with a copy of your letter and a **complete project description**
- We will respond with any questions about the project and recommendations for BMPs
- We will work with you to find BMPs that work for the project and are effective for the species
- Once you agree to BMPs and we have all information needed for our review, we will prepare an official concurrence letter or Biological Opinion
 - Maximum Timeline: 60 days for NLAA, 135 days for LAA



BMPs for Federally Listed Bats

- Clear trees in a narrow linear corridor less than 1,000 ft wide to avoid impacting landscape connectivity
- Conduct structure assessments on suitable bridges from May 15 – August 15
- Adhere to seasonal tree clearing restrictions
 - Recommended dates vary by location
 - Available through the MI dkey or page 52 of the [Standing Analysis](#)



BMPs for Federally Listed Mussels

- Avoid direct and indirect impacts to group 3 streams
 - Areas where federally listed mussels are known or modeled to occur
 - Available through the MI dkey or [Michigan Mussel Mapper](#)
- If impacts to group 3 streams are necessary:
 - Contact our office early to begin coordination
 - May need a permitted biologist to conduct a mussel survey
 - Relocation may be necessary



BMPs for Eastern Massasauga

- Use wildlife safe erosion control
- Watch MDNR [“60-Second Snakes: The Eastern Massasauga Rattlesnake”](#) video or review the [EMR factsheet](#)
- Revegetate disturbed areas with natural vegetation
- Ensure equipment, vehicles, and fill are free from invasive species
- Use exclusionary fencing during the active season
- Do not significantly alter hydrology during the inactive season
- Do not create a new or increased permanent barrier to snake movement
- Remove trees during the inactive season using low impact harvest methods



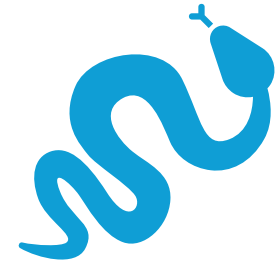
Now What?



Fill out TE section of 5323 form



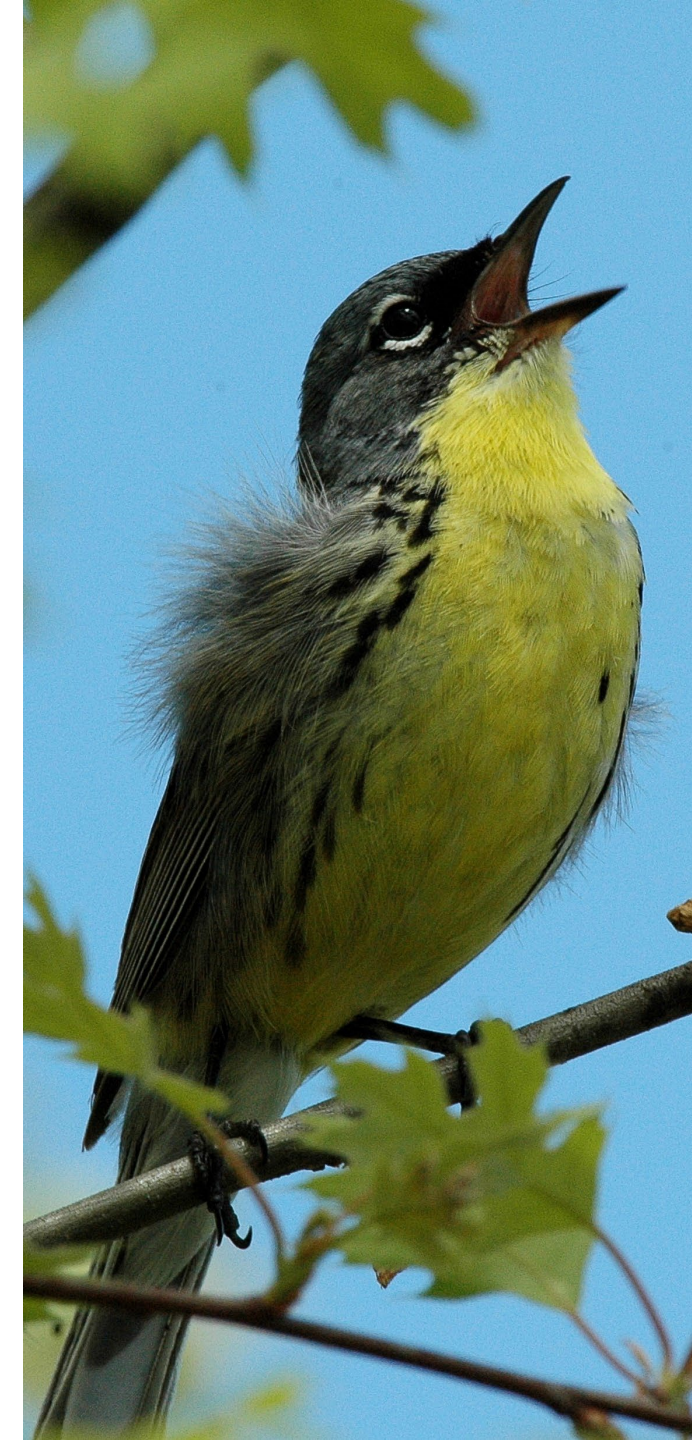
Submit your concurrence documentation with your 5323 form



Make sure to coordinate with DNR for state-listed species

Other Federal Laws

- Fish and Wildlife Coordination Act – requires consultation on impacts to fish and wildlife resources for federal projects that control or modify a body of water
- Bald and Golden Eagle Protection Act – prohibits anyone from taking bald or golden eagles, their parts (like feathers), nests, or eggs without a permit
- Migratory Bird Treaty Act – prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization





Any Questions?

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