

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (Act) (520 ILCS 10/5.5) and the regulations adopted to implement the Act (17 Ill. Adm. Code 1080), authorization is hereby granted to Illinois Department of Transportation (hereinafter referred to as IDOT) for the incidental take of the State-threatened Mottled Sculpin (*Cottus bairdii*). The Illinois Department of Natural Resources (hereinafter referred to as the Department) has determined that the taking is incidental to activities associated with the reconstruction of the U.S. Route 20 Bridge (hereinafter referred to as the Bridge) between Randall Road and Shales Parkway over Poplar Creek in Cook County, IL. The project is located approximately 1.6 miles southeast of Elgin in Cook County, Illinois.

Procedural History

The Department received a conservation plan prepared by IDOT on April 25, 2023, as a request for authorization for the incidental take of Mottled Sculpin. Additional information was requested by the Department on May 23, and July 25, 2023, to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on June 28, and August 4, 2023. The final conservation plan was approved by the Department on August 8, 2023. The public notice period will be detailed under #6 of the Compliance section below.

Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria that must be satisfied for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The stated and apparent purpose of this proposed action is to remove and replace the existing bridge deck, reconstruct the abutments, install stone riprap along the abutments, and reconstruct the roadway approaches for the Bridge over Poplar Creek in Cook County, Illinois. At the Bridge, Poplar Creek is approximately 45 feet wide.

First, the existing superstructure will be removed in stages. The Bridge deck on the three-span bridge will be cut into slabs. The beams will be removed using cranes. Protected shielding will be used abutment to abutment to prevent debris from falling into Poplar Creek. Additionally, the abutments, abutment backwall and portions of the wingwalls will be removed. The existing Bridge piers are located at the toe slope to Poplar Creek and were previously rehabilitated in 1986.

The replacement abutments are out of the water, with a slope wall extending to the piers. To meet scour countermeasure requirements, 164 square yards of riprap will be installed to prevent impact to Poplar Creek. This amount will extend approximately 7.5 feet from the pier limits

Take of Mottled Sculpin could occur as a result of the demolition of the existing bridge and placing of riprap within the stream bed. Individuals may be crushed, buried, or subject to desiccation if they remain in excavated woody debris by construction activities. Indirect take could temporarily occur as a result of increased noise, vibration, and turbidity from suspension of fine sediments in the water column that would adversely affect all life stages.

The take of Mottled Sculpin that could result from this project is not the purpose of IDOT's activities but is incidental to the carrying out of an otherwise lawful activity.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking:

Proposed minimization and mitigation measures were included in IDOT's conservation plan.

To meet the "maximum extent practicable" standard, additional minimization and/or mitigation measures may be required beyond those proposed by IDOT, based on the life history needs of Mottled Sculpin.

All required minimization and mitigation measures are presented under the Authorization section below.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

IDOT has fully funded the improvements to the Poplar Creek Bridge through their Capital Program. Funding includes the installation of all necessary sediment and erosion control measures.

It is the Department's opinion that IDOT's stated commitment to funding their proposed minimization and mitigation measures is sufficient to satisfy this criterion.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of survival or recovery of the endangered species or threatened species in the wild within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois:

Mottled Sculpin (*Cottus bairdii*) is an Illinois state-threatened fish species.

Habitat: Mottled Sculpin is a benthic fish that inhabits crevices between large substrates in relatively cool and clear streams.

Reproduction: Mottled Sculpin spawn between March and May.

Population: Mottled Sculpin population decline has occurred because of anthropogenic sedimentation, warming water temperature, hydrologic alteration, and competition with invasive fishes.

Distribution: There are 27 extant Element Occurrence (EO) records of Mottled Sculpin in the Illinois Natural Heritage Database. Lake Michigan EOs are categorized as extant in the Natural Heritage Database, but Mottled Sculpin has not been recorded in the lake since 2015.

Range in Illinois: Mottled Sculpin are found in 7 of 102 Illinois counties: Boone, Cook, Kane, Kendall, La Salle, McHenry, and Vermilion. The species occurs in the Vermilion River (of the Wabash) basin, Rock River basin, Des Plaines River basin, and Fox River basin.

Incidental Take Authorizations: The Department has one (1) previously issued or pending Incidental Take Authorizations for Mottled Sculpin. This is the first authorization for the taking of Mottled Sculpin in Cook County.

Based on the amount of habitat impacted by this project, the number of known occurrences of Mottled Sculpin in Illinois, an assessment of the potential effect of this project on the listed species in the project footprint, the conservation measures included in this authorization for incidental take and the conservation plan, and the understanding that vulnerability and recovery information on the species remains limited; it is the conclusion of the Department that the taking anticipated as a result of this project will not reduce the likelihood of survival or recovery of the species in the wild within the State of Illinois, the biotic community of which these species are a part, or the habitat essential to the species' existence in Illinois.

5. Any measures required under Section 5.5(b)(6) of the Act will be performed:

These measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and the signature of a representative of IDOT indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

Public notice of IDOT's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on September 3, 2023, and in the *Elgin Courier News* on September 3, 10, and 20, 2023. A copy of the conservation plan was deposited at the Gail Borden Public Library District's Main Library in Elgin and the Bartlett Public Library District Bartlett Branch where it was available for public review. The deadline for public comment was October 20, 2023. No comments were received from the public.

Authorization

It is the determination of the Department that the measures that will be implemented by IDOT will adequately minimize and mitigate the anticipated taking of Mottled Sculpin incidental to activities associated with the reconstruction of the Bridge over Poplar Creek in Cook County. Further, the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of the species in the wild within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois.

All terms and conditions included in the aforementioned conservation plan submitted by IDOT to the Department are incorporated into this agreement by reference and are made a part thereof. In the event there is conflict between the conservation plan and this authorization, this authorization shall control.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5] and the Administrative Rules for the Incidental Taking of Endangered and Threatened Species [Ill. Adm. Code 1080.40(b)], this authorization is issued subject to the following terms and conditions, which may include additions or modifications to the minimization and mitigation measures proposed by IDOT in the conservation plan:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of seven (7) years from the date of the Department signature, unless terminated by written agreement of both parties.

This authorization may be revoked pursuant to the Act and Ill. Adm. Code 1080.80(b) if the Department finds that IDOT has failed to comply with any of these terms and conditions or has been responsible for the taking of Mottled Sculpin beyond that which is incidental to activities associated with the reconstruction of the Bridge over the Poplar Creek in Cook County, IL

2. The effective period of this authorization may be altered by mutual written agreement between IDOT and the Department. The Illinois Endangered Species Protection Board shall be notified of any such alteration.

Any substantive changes, including but not limited to a change in the project footprint or a change in the State-listed species which could potentially be affected, will require that a new conservation plan be submitted to the Department to initiate the review and public notice process as required by the Act.

3. This authorization may only be transferred upon approval and written authorization by the Department.
4. All on-site personnel shall be educated on the sensitive biological resources in the area, the identification of Mottled Sculpin, regulations protecting the species, where the species might be found, avoidance areas, travel restrictions for equipment and vehicles, how to report sightings or incidents that may involve take, and the importance of avoiding take of the species. **IDOT shall submit a copy of the education materials to the Department.**
5. The Department reserves the right of entry by its staff or representatives to inspect species, potential habitat, and species management practices.
6. Biological consultants employed by, or conducting work on behalf of, IDOT shall hold the necessary permits for work with non-listed and listed species; these include an Illinois Department of Natural Resources (IDNR) Scientific Collection Permit as authorized under 17 Illinois Administrative Code 520, and an IDNR Endangered Species Permit as authorized under 17 Illinois Administrative Code 1070.
7. **IDOT shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion** of work to reconstruct the Bridge over Poplar Creek in Cook County, IL. A **project status report** shall be submitted to the Department within **90 days** of completion summarizing the implementation of minimization, mitigation, and restoration measures and evaluating the effectiveness of those measures and shall include a project photo log. The report shall also include a map and GPS coordinates of any listed species found within the project footprint, description of any injuries or mortalities, and the disposition of any individuals that were injured or killed.
8. Any discoveries of additional State-listed species beyond those identified in this agreement **halts work** and shall be reported to the Department within 48 hours accompanied by location information (photograph, map, and GPS coordinates).
9. IDOT shall conduct, or cause to be conducted, the following pre-construction or construction efforts:

- a. No equipment shall enter the stream to remove the bridge deck or abutments, except buckets and equipment arms.
- b. Instream work shall be prohibited from March 15 to May 31 for the spawning season.
- c. Sediment and erosion best management practices shall be utilized.
- d. Disturbance of vegetation shall be minimized to prevent erosion and sedimentation. Existing vegetation will be preserved where attainable and disturbed portions of the site will be stabilized.
- e. Erosion and sediment control measures shall be monitored weekly and after heavy rain events to ensure effectiveness.
- f. Debris and excavated material shall be removed from the streambed as soon as practicable. Use of protective shielding should eliminate demolition debris from falling into Poplar Creek.
- g. Stone and other materials shall not be stockpiled in the stream channel.
- h. Riprap shall not be placed across the entire streambed. Instead, its use shall be limited to use at abutments and no more than 7.5 feet from the piers.
- i. All disturbed areas shall be seeded upon completion of construction activities. This includes slopes that will require a seed mix specifically formulated for these locations.

10. IDOT shall conduct, or cause to be conducted, post-construction surveys for Mottled Sculpin in Years 1 and 3 following construction completion.

- a. Fish shall be collected in the focal reach using backpack electrofishing. Electrofishing shall occur between June 1 and September 30.
- b. All collected fish shall be identified and enumerated. Mottled Sculpin total length shall be recorded.

A report including, but not limited to survey methodology, map with electrofishing extent, estimate of wetted surface area electrofished, a summary of habitat characteristics in the focal area, abundance of each fish species collected, and length of each Mottled Sculpin collected shall be provided to the Department within 90 days of each survey completion.

11. IDOT shall conduct, or cause to be conducted, post-construction surveys for aquatic vegetation regrowth after completion of construction. This monitoring shall be conducted to document fish habitat restoration and recovery following construction.

A report, including photos from similar locations as the preconstruction location condition photos in the Conservation Plan, shall be submitted to the Department within 90 days of survey completion.

12. Mitigation to the maximum extent practicable is required by the Act.

IDOT shall submit mitigation to the Illinois Department of Natural Resources - Illinois Wildlife Preservation Fund in the amount of \$15,600.00 within 90 days of execution. The mitigation will be earmarked to bring conservation benefit to Mottled

Sculpin. Mitigation payments are nonrefundable, including events of revocation or termination

Mitigation values are based on the Department's best current understanding of the species life history needs and impact analysis relevant to the project site's proposed conceptual design elements available at the time of review.

13. All reports, notifications, and other project documentation shall be submitted to:


**Illinois Department of Natural Resources
Office of Resource Conservation
Endangered Species Program – Incidental Take Authorization Coordinator
One Natural Resources Way
Springfield, IL 62702-1271**

**(217)557-8243
DNR.ITAcordinator@illinois.gov**

The Department's Endangered Species Program shall provide all reports required under this agreement to the Illinois Endangered Species Protection Board and to the Department's Natural Heritage Database.


- 14. The IDOT official identified below is authorized to execute this agreement. Execution by IDOT indicates acceptance of all terms and conditions described in this authorization.**
- 15. The execution of this agreement does not waive or excuse the responsibilities of IDOT to comply with other Federal, State, or local regulations, including but not limited to obtaining any required permits for the execution of this project.**

For the Illinois Department of Natural Resources:


Mr. Christopher L. Young, Director
Office of Resource Conservation

1/17/24
Date

For the Illinois Department of Transportation:


Mr. Jose Rios, P.E.
District 1 / Region 1 Engineer

1/9/2024
Date

