

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 McLean County Highway Department (hereinafter referred to as McLean County) for the incidental take of the State-endangered Mudpuppy (*Necturus maculosus*). 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 Baker Bridge over the Mackinaw River in McLean County, IL. The project is located approximately 2.6 miles southeast of Lexington in McLean County, Illinois.

Procedural History

The Department received a conservation plan prepared by the Illinois Department of Transportation for McLean County on June 3, 2022, as a request for authorization for the incidental take of Mudpuppy. Additional information was requested by the Department on June 21, September 23, and November 9, 2022, to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on August 31, October 17, and November 15, 2022. The final conservation plan was approved by the Department on November 29, 2022. 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, install stone riprap around the piers and abutments, and reconstruct the roadway approaches for the Baker Bridge over the Mackinaw River in McLean County, Illinois.

The existing bridge superstructure will be removed and replaced with a new eight-inch thick deck and lighter railings. The existing abutment and piers will remain and reused in place. No equipment will be placed in the stream for removal of the bridge deck. Downed trees and other material will be removed from the channel around the piers. Stone riprap will be placed along the abutment slopes and around the piers for scour control.

Riprap that is placed in the creek for scour control or removal of any of the woody debris from the stream would be considered habitat alteration. Stone riprap (A4) will be placed around the bridge abutments and piers as a permanent scour countermeasure. All excavated material will be removed from the channel and disposed in an upland location. The stone riprap will be placed by mechanical means. Staging of materials will also be in an upland area. Temporary stockpiling of riprap or excavated material in the channel will not be allowed. The area of permanent impact to the channel due to the riprap is 0.10 acres.

Take of Mudpuppy could occur as a result of the excavation 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. Impacts to riparian areas from vegetation clearing and woody debris removal, construction, or staging may temporarily adversely affect water quality.

The take of Mudpuppy that could result from this project is not the purpose of McLean County'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 McLean County's conservation plan.

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

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:

McLean County states that the project is funded with Local County Bridge Funds. The project construction, including implementation of all measures of the Conservation Plan, will be funded for this improvement out of the County's allotment. Mitigation funds will also be paid from McLean County.

It is the Department's opinion that McLean County'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:

Mudpuppy (*Necturus maculosus*) is a State-threatened freshwater amphibian species.

Habitat: Mudpuppies are aquatic salamanders that can be found in lakes, rivers, and ponds.

Reproduction: Mudpuppy mating typically takes place in Autumn. Males deposit spermatophores in the substrate of the waterbody. Females then pick them up and store them in their spermatheca until fertilization. In the Spring, females deposit 20-200 fertilized eggs under rocks or logs in the water. The eggs hatch in about 60 days. Offspring go through partial metamorphosis and retain gills as adults.

Distribution: Mudpuppies can be found Eastern North America, in the Atlantic and Gulf of Mexico drainages. The Southern limit of their range is Mississippi, Alabama, and Georgia. Their range extends north into Canadian provinces of Manitoba, Ontario, and Quebec.

Population: Mudpuppy populations have declined due to industrial, chemical contamination and sedimentation of waterways.

Range in Illinois: In Illinois, Mudpuppies have been found in the Mississippi and Kankakee Rivers, as well as several other smaller creeks and tributaries. They have been found in 14 of 102 Illinois counties, and there are currently 23 extant Element Occurrence Records for Mudpuppies in the Illinois Natural Heritage Database.

Incidental Take Authorizations: There have been four (4) previously issued or pending Incidental Take Authorizations for Mudpuppy in Illinois. Previous projects have included lake management activities, a bridge replacement project, and water withdrawal. This is the first authorization granted for the take of Mudpuppy in McLean County.

Based on the amount of habitat impacted by this project, the number of known occurrences of Mudpuppy 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 McLean County 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 McLean County's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on January 12, 2023, and in *The (Bloomington) Pantagraph* on January 12, January 20, and January 28, 2023. A copy of the conservation plan was deposited at the Bloomington Library where it was available for public review. The deadline for public comment was February 27, 2023. No comments were received from the public.

Authorization

It is the determination of the Department that the measures that will be implemented by McLean County will adequately minimize and mitigate the anticipated taking of Mudpuppy incidental to activities associated with the reconstruction of the Baker Bridge over the Mackinaw River in McLean 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 McLean County 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 McLean County 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 McLean County has failed to comply with any of these terms and conditions or has been responsible for the taking of the Mudpuppy beyond that which is incidental to activities associated with the reconstruction of the Baker Bridge over the Mackinaw River in McLean County, IL

2. The effective period of this authorization may be altered by mutual written agreement between McLean County 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 Mudpuppy, 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. **McLean County 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. Department staff must be accompanied by an employee of McLean County Highway Department and are required to adhere to IDOT's health and safety requirements.
6. Biological consultants employed by, or conducting work on behalf of, McLean County 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. **McLean County shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion** of work to reconstruct the Baker Bridge over the Mackinaw River in McLean 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. McLean County 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. To the extent practicable, equipment entry to remove stream obstructions and to place riprap shall be minimized.
 - b. Instream work shall be prohibited from May 1 to August 31 for the nesting/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.
 - g. Stone and other materials shall not be stockpiled in the stream channel.
 - h. 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. McLean County shall conduct, or cause to be conducted, post-construction surveys for Mudpuppy during the species' active period and in the vicinity of the bridge and a buffer of 10 m in all directions in **Years 2 and 5** following construction completion.
 - a. Mudpuppy shall be collected using modified minnow or panfish traps when water temperatures are less than 10° Celsius (50° Fahrenheit). Baited traps shall be placed in habitat suitable for Mudpuppy (e.g., boulders, logs, cut banks) at a density of approximately 1 trap per 100 square meters, with a minimum of 2 traps, and deployed for a minimum of 2 nights per trap.
 - b. Traps shall be checked daily, and length of all captured Mudpuppy shall be measured. Captured Mudpuppies shall be individually marked using Passive Integrated Transponders (PIT tags) or Visible Implant Elastomer (VIE tags)

A report including, but not limited to survey methodology, map with trap locations, a summary of habitat characteristics in each 100 square meter trap area, the number of individuals located, length, trap and date of capture, and tag ID of each

Mudpuppy captured shall be provided to the Department within 90 days of survey completion.

11. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization are calculated as follows:

McLean County and IDOT will collaborate with the Illinois Natural History Survey Biotic Survey and Assessment Program to carry out a research project to study the population(s) of the Mudpuppy surrounding the Mackinaw River area. This research is valued at \$9,950.

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.

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

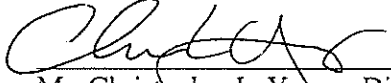
Illinois Department of Natural Resources
Office of Resource Conservation
Endangered Species Program – Incidental Take Authorization Coordinator
One Natural Resources Way
Springfield, IL 62702-1271

(217)557-8243
DNR.ITAcoordinator@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.

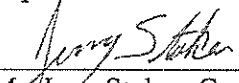
13. The McLean County official identified below is authorized to execute this agreement. Execution by McLean County indicates acceptance of all terms and conditions described in this authorization.
14. The execution of this agreement does not waive or excuse the responsibilities of McLean County to comply 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

For the McLean County Highway Department:



Mr. Jerry Stokes, County Engineer

April 11, 2023
Date

APRIL 3, 2023
Date