



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

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 the McLean County Highway Department (hereinafter referred to as MCHD) for the incidental take of the State-threatened Monkeyface (*Quadrula metanevra*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that this taking is incidental to activities associated with the replacement of the bridge structure carrying County Highway 32 (County Road 1000N) over the Middle Fork of Sugar Creek (hereinafter referred to as the Creek) approximately 1.6 miles east-southeast of Stanford in McLean County, Illinois.

Procedural History

On behalf of MCHD, the Illinois Department of Transportation (hereinafter referred to as IDOT) submitted the Conservation Plan to the Department on December 10, 2020, as a request for authorization for the incidental take of Monkeyface. The Department requested additional information on December 21, 2020, January 28, 2021, and April 6, 2021 to make the Conservation Plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on February 19, 2021, March 19, 2021, and May 20, 2021. The final Conservation Plan was accepted as complete by the Department on May 20, 2021. The public notice period and public comments will be detailed under #6 of the Compliance section below.

Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria which 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 be only 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 bridge structure that carries McLean County Highway 32 over the Creek in McLean County. The replacement structure will have wider travel lanes, and will have a higher weight limit, allowing agricultural vehicles to cross at this location.

The initial construction activities will include removal of the existing bridge deck, supporting piers, and abutments. Removal of the bridge will be over the channel of the Creek and may include minor debris falling into the creek. All bituminous materials shall be removed from the Creek. The existing soils and material around the individual pier columns and the abutments will be excavated such that the pier columns and abutments may be cut off below the finished ground level and removed. Heavy equipment will be used to excavate this material and remove the pier columns and abutments. All equipment staging will take place within the McLean County right of way.

Construction of the new bridge may begin with placement of a temporary crossing, which generally requires the placement of aggregate materials over temporary metal culvert pipes. The temporary crossing may be necessary to move heavy equipment, materials, and personnel from one side of the creek to the other throughout construction. The construction of a temporary creek crossing has the potential to bury and crush mussel species within the footprint of the temporary crossing.

The proposed piers will be located at the edges of the streambed. Each pier is an individually encased pile bent type consisting of seven (7) driven metal shell piles with a 2-6" diameter concrete encasement poured from the pile cap above to 2-6" below the streambed. No cofferdams will be needed as the encasement will be pumped dry prior to pouring the concrete.

The construction of the three-span continuous steel beam bridge deck, guardrails, and farm field entrances should not have any impact on the channel of the Creek; however, once the abutments are complete, and prior to placing the bridge deck, the channel banks will be lined with stone riprap directly under the proposed bridge. No stone riprap shall be placed in the full width of the Creek. The stone riprap will be used to prevent erosion and scour around the new bridge piers and under the new bridge along the channel banks. The placement of stone riprap under the proposed structure along the channel banks has the potential to bury and crush mussel species within the footprint of the proposed right of way for this project.

Total estimated area of impact within species habitat for the proposed actions is 0.11 acres. The Department concurs that the take of Monkeyface that could result from the proposed project is not the purpose of MCHD'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 avoidance, minimization and mitigation were included in MCHD's Conservation Plan.

To meet the “maximum extent practicable” standard, additional minimization and/or mitigation measures may be required beyond those proposed by MCHD, based on the life history needs of the Monkeyface. **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.

MCHD states that 100% of the funds will come from McLean County, and costs of erosion and sediment controls will be included in the cost of the construction project. MCHD commits to funding the project and the mitigation. Post-construction monitoring will be conducted by the Illinois Natural History Survey with funds from IDOT.

The Department accepts this provision as assurance that adequate funding will be available to carry out the terms of the Conservation Plan.

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 is a part, or the habitat essential to the species' existence in Illinois.

Monkeyface (*Quadrula metanevra*) is an Illinois state-threatened mussel species.

Habitat: Monkeyface are predominately found in medium to large rivers that have gravel or mixed sand and gravel substrates.

Distribution: This species is widespread in the United States. Populations can be found from Kansas, Nebraska, and Oklahoma east to West Virginia and Georgia, and range from Minnesota south to the Gulf of Mexico in Louisiana, Mississippi, and Alabama.

Reproduction: Monkeyface is a short-term brooder, with females retaining glochidia in their gills from late March to July. Glochidia host fish include Spotfin Shiner, Bluntnose Minnow, Eastern Blacknose Dace, and Creek Chub.

Population: Monkeyface populations are on the decline due to siltation, habitat loss, desiccation during droughts, pollution, impoundment and channelization, species introductions including Zebra Mussels, and increased water temperatures.

Range in Illinois: Monkeyface mussels are found in 10 drainages, but healthy populations are only found in the Mississippi River and Kankakee River. Monkeyface have been reported in 12 of 102 Illinois counties. There are currently 26 extant Element Occurrence Records for Monkeyface mussel.

Incidental Take Authorizations: This is the fifth Incidental Take Authorization issued or pending for Monkeyface following its addition to the Illinois Threatened and Endangered Species List in May 2020. This is the first Incidental Take Authorization issued for Monkeyface in McLean County, The other projects were

for bridge maintenance, to construct a mooring facility in the Ohio River, install water withdrawal infrastructure, and to maintain pipelines.

Based on the amount of habitat impacted by this project, the number of known occurrences of Monkeyface in Illinois, an assessment of the potential effect of this project on individual species in the project footprint, the conservation methods included in this authorization for 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 the 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.

Additional measures are listed below under "Authorization". This authorization is, by definition, subject to those terms and conditions and the signature of a representative from MCHD indicating 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 MCHD's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on June 10, 2021, and in *The Pantagraph* (Bloomington) on June 10, June 18, and June 26, 2021. A copy of the Conservation Plan was deposited at the Bloomington Public Library, where it was available for public review. The deadline for public comment was July 26, 2021. No comments were received from the public.

Authorization

It is the determination of the Department that the measures to be implemented by MCHD will adequately minimize and mitigate the anticipated taking of Monkeyface associated with the bridge structure removal and replacement in McLean County, Illinois. Further the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of Monkeyface in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species existence in Illinois.

All terms and conditions included in the aforementioned Conservation Plan submitted by MCHD to the Department are incorporated into this agreement by reference and are made a part thereof.

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 MCHD 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 MCHD has failed to comply with any of these terms and conditions or has been responsible for the taking of Monkeyface beyond that which is incidental to the bridge structure removal and replacement in McLean County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between MCHD and the Department. The Illinois Endangered Species Protection Board shall be notified of 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. Notification to all on-site personnel shall be provided on the sensitive biological resources in the area; the identification of Monkeyface; regulations protecting the species; where the species might be found; avoidance areas; travel restrictions for equipment; how to report sightings or incidents that may involve take; the importance of avoiding take of the species; and response protocol if the species are found, including the chain of response personnel. **MCHD 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 potential habitat and species management practices. Department staff shall notify MCHD or the contractor upon their arrival, and are required to adhere to IDOT's health and safety requirements.
6. Biological consultants employed by MCHD 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. The relocation of non-listed aquatic life is hereby authorized by the Department with signature of this agreement per the Illinois Fish and Aquatic Life Code (515 ILCS 5/1-150).
8. MCHD shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of the project. A **project status report** shall be submitted to the Department within **90 days** following completion (defined as bridge in use) summarizing the implementation of minimization, mitigation, and restoration measures and evaluating the effectiveness or status of those measures and shall include a project photo log. The report shall also include a map of the project location, as well as the relocation recipient location; identification of species and number of listed and non-listed species relocated from the project footprint; description of any injuries or mortalities; and the disposition of any individuals that were injured or killed.
9. Notification of any Monkeyface present during performance of the project shall be reported electronically to the Department within 48 hours of discovery accompanied by location information (photograph, map, and GPS coordinates).
10. 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.
11. MCHD shall conduct, or cause to be conducted, the following pre-construction or construction efforts:
 - a. Mussel relocation utilizing Department-approved methods outlined in item #12 below.
 - b. Measures shall be implemented to limit debris from falling in the creek. Any debris deposited shall be removed as soon as practicable during the same workday.
 - c. All applicable Stormwater Pollution Prevention Policy practices shall be implemented and any silt fence, silt curtain, and/or other erosion control measures shall be inspected daily by the resident engineer, with additional inspections following heavy rain, and maintained if found to be failing.
 - d. The temporary stream crossing to keep equipment out of stream shall cause a minimal disruption to the flow of the Creek. Normal downstream flow shall be maintained with the use of culverts in the causeway.
 - e. Heavy equipment shall not enter the water during placement of clean rip rap; except that arms and buckets will have limited entry.
 - f. After completion of work, the temporary stream crossing shall be removed, and the streambed returned to its pre-construction state.
 - g. Riprap at the bridge shall be minimized to the abutments and around piers. MCHD has agreed to not line the entire creek bed under the bridge with riprap.

12. In addition to the August 6-7, 2020 mussel relocation effort that remains valid through August 7, 2022, MCHD shall conduct, or cause to be conducted, a thorough pre-construction relocation effort for freshwater mussels within a 10 buffer downstream of the previous effort before construction commencement:

- a. MCHD shall conduct or cause to be conducted a thorough relocation of mussels within a buffer area that begins at the downstream-most extent of the August 7, 2020 relocation effort (approximately 20 meters downstream of the bridge centerline) and extends 15 meters downstream (i.e., 35 meters downstream of the road centerline).
- b. A multi-pass moving transect search method shall be used to collect mussels from within the buffer area. Transects shall be 1-meter wide, perpendicular to stream flow, and extend the entirety of the wetted stream width. Transects shall be resampled until subsequent passes no longer yield 10% or more of the total individuals collected from a transect.
- c. Those conducting the search must be qualified at accurate identification of freshwater mussel species. All native freshwater mussels found during this search shall be relocated to suitable habitat pre-approved by the Department.
- d. The mussel relocation shall occur within 2 years prior to the onset of construction.
- e. Mussels should be held in mesh bags within the stream, except during processing. Each mussel should be identified to species, and length and count of external growth rings shall be recorded for all threatened and endangered species and the first 100 individuals of each remaining species, unless this was satisfied with the August 7, 2020 area relocation effort.
- f. Relocation should occur when water temperatures are between 15°C and 30°C to minimize stress and mortality. Mussels shall be relocated to a previously identified recipient area approximately 275 meters downstream of the bridge.
- g. A report including, but not limited to, the survey methodology utilized (for relocation site and project action area), water temperature, habitat characteristics, the species and abundance of mussels relocated, length, sex (if discernable), the number of growth rings (i.e. an approximation of age), transect and pass of origin, and the unique identification marker of each tagged individual relocated, and a map of the species locations and areas surveyed shall be provided to the Department within 90 days of completion of the mussel relocation.

13. MCHD shall conduct, or cause to be conducted, thorough surveys for Monkeyface within the project area and the relocation site in **Years 1 and 5** following project completion:

- a. A combination of semi-quantitative and qualitative search methods shall be used; a minimum of 260 meters of randomly located transects perpendicular to the flow of the Creek shall be searched in both the area from which mussels were relocated, and the recipient area. Transect searches shall be followed by 2 person-hour qualitative surveys which cease when no new species are detected.

- b. **A report including, but not limited to, the survey methodology utilized, water temperature, habitat characteristics, the species and abundance of mussels located (noting any marked individuals at the relocation site and/or buffer), length, sex (if discernable), the number of growth rings (i.e. an approximation of age), transect and pass or qualitative reach of origin, the unique identification marker (if applicable), an analysis of mussel survival rates at the relocation site, and a map of the species locations and areas surveyed shall be provided to the Department within 90 days of completion of the survey.**

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

- a. MCHD shall provide funding in the amount of **\$11,161.00** to the Illinois Wildlife Preservation Fund, to be earmarked to bring conservation benefit to the mussel species (Monkeyface).
- b. The funds shall be provided **within 90 days of execution of this agreement**. 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.

15. 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 Resource 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.


- 16. The MCHD official identified below is authorized to execute this agreement. Execution by MCHD indicates acceptance of all terms and conditions described in this authorization.
- 17. The execution of this agreement does not waive or excuse the responsibilities of MCHD 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:

For the McLean County Highway Department



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



Mr. Jerry Stokes
McLean County Engineer

10/13/2021

Date

OCTOBER 13, 2021

Date

