



# Illinois Department of Natural Resources

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www.dnr.illinois.gov

Bruce Rauner, Governor

Wayne A. Rosenthal, 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 Kendall County Highway Department (hereinafter referred to as KCHD) for the incidental take of the State-threatened slippershell mussel (*Alasmidonta viridis*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that the taking is incidental to activities associated with the improvement of the Eldamain Road crossing over Rob Roy Creek in Kendall County, Illinois.

### **Procedural History**

The Department received a conservation plan prepared by the Illinois Department of Transportation on behalf of KCHD on May 24, 2017, as a request for authorization for the incidental take of slippershell mussel. The Department requested additional information to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. That additional information was received and the conservation plan was approved by the Department on May 24, 2017. 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 the improvement of the Eldamain Road crossing over Rob Roy Creek in Kendall County, Illinois. Road crossing improvement activities include removal of overburden and existing culverts using chains, straps, or the excavator bucket of an excavator positioned on the existing roadway; the shaping of the channel to receive riprap; the placement of riprap across the entire 15-foot wide stream channel; and the installation of the new bridge structure. Dewatering may be necessary to facilitate construction. Total area of impact is estimated to be **0.04 acre**.

Take of the slippershell mussel could occur as a result of being crushed or smothered by construction equipment and debris during culvert removal, being caught pumps during dewatering if performed, sedimentation within and downstream from the project site, and temporary turbidity increases during

construction. Disturbance from noise and vibration within the river may have an adverse effect on certain life history stages of the mussel or its associated host fishes. The take of slippershell mussel that could result from this project is not the purpose of KCHD'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 KCHD's conservation plan.

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

KCHD states that full local project funding was approved by the Kendall County Board, a public agency, in September 2016. The estimated costs include funding for all activities associated with the implementation of the conservation plan, including mussel relocation, mitigation, and follow-up surveys. KCHD understands that if any additional activities are planned at the facility that may affect slippershell mussels or other endangered or threatened species, coordination with the Department will be required.

It is the Department's opinion that KCHD'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 is a part, or the habitat essential to the species' existence in Illinois:

The **slippershell** mussel is an Illinois State-threatened mussel species. It is predominantly found in small to medium-sized creeks and headwaters of rivers in areas with flowing water, but has also been found in larger rivers and lakes. It is known to prefer sand, mud, or fine gravel substrates.

Slippershell mussels are believed to be long-term brooders, and gravid females have been observed from September to late April. Slippershell mussel glochidial

host fish include banded sculpin (*Cottus carolinae*), mottled sculpin (*Cottus bairdii*), and johnny darter (*Etheostoma nigrum*).

Slippershell mussel populations have declined due to habitat degradation, poor water quality, increased siltation, and pollution. In Illinois, slippershell mussels have been found in the Sangamon, Embarras, Vermilion, Mackinaw, Fox, and Kishwaukee River basins, primarily in creeks and tributaries within the rivers' drainages. They are found in 19 of 102 Illinois counties. There are currently 69 extant Element Occurrence Records for slippershell mussels in the Illinois Natural Heritage Database. The Department currently has 20 previously issued or pending Incidental Take Authorizations for slippershell mussel. Types of projects included bridge removal and construction/replacement, pipeline construction, and creek re-meandering. This is the second incidental take authorization granted for slippershell mussel in Kendall County.

In May 2017, personnel from the Illinois Natural History Survey performed a survey for freshwater mussels in the project area. The survey results included 16 individual mussels of two species. Thirteen live slippershell mussels were found during the survey. KCHD estimates that six (6) slippershell mussels will be taken as a result of this project.

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Based on the amount of habitat impacted by this project, the number of known occurrences of the slippershell mussel in Illinois, an assessment of the potential effect of this project on individual mussels in the project footprint, the conservation measures included in this authorization for incidental take, and the understanding that vulnerability and recovery information on the species remains limited; the Department has concluded that the taking proposed herein will not reduce the likelihood of survival or recovery of the slippershell mussel 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.

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 KCHD 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 KCHD's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on June 1, 2017, and in the *Kendall County Record* on June 1, June 8, and June 15, 2017. A copy of the conservation plan was deposited at the Yorkville Public Library and the Kendall

County Highway Department, where it was available for public review. The deadline for public comment was July 15, 2017. No comments were received from the public.

### **Authorization**

It is the determination of the Department that the measures that will be implemented by KCHD will adequately minimize and mitigate the anticipated taking of slippershell mussels incidental to activities associated with the improvement of the Eldamain Road crossing over Rob Roy Creek in Kendall County, Illinois. Further, the Department has concluded that the take authorized herein will not reduce the likelihood of survival or recovery of the slippershell mussel 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. Additional listed mussel and fish species may inhabit Rob Roy Creek; **this agreement does not authorize take of any species except the slippershell mussel.**

All terms and conditions included in the aforementioned conservation plan submitted by KCHD 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 KCHD in the conservation plan:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of **five (5) 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 KCHD has failed to comply with any of these terms and conditions or has been responsible for the taking of slippershell mussels beyond that which is incidental to activities associated with the replacement of the Eldamain Road Bridge over Rob Roy Creek in Kendall County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between KCHD 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 is non-transferable.

4. All on-site personnel shall be educated on the sensitive biological resources in the area, the identification of listed species, 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. KCHD 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 KCHD 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 and an IDNR Endangered Species Permit.
7. KCHD shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of the improvement of the Eldamain Road crossing over Rob Roy Creek. A project status report shall be submitted to the Department within 90 days of construction completion (open to the public) 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 including any relocations, description of any injuries or mortalities, and the disposition of any individuals that were injured or killed.
8. Any discoveries of additional listed species beyond those identified in this agreement shall be reported to the Department within 48 hours accompanied by location information (photograph, map, and GPS coordinates).
9. KCHD shall conduct, or cause to be conducted, the following pre-construction or construction efforts:
  - a. All work shall take place within the existing and the newly acquired right-of-way.
  - b. Erosion and sediment control measures shall be implemented in all areas affected by riparian activities. Disturbance of vegetation shall be minimized to prevent erosion and sedimentation. All disturbed areas shall be seeded or otherwise stabilized upon completion of construction activities.
  - c. All staging of materials shall take place in an upland area.
  - d. If areas are dewatered during construction, fish and other aquatic species shall be removed from dewatered areas and relocated to suitable habitat.
  - e. No construction debris shall be deposited into the stream channel. All excavated material shall be removed from the channel and disposed in an upland location. There shall be no temporary stockpiling of excavated material in the channel.
10. On May 17, 2017, a mussel relocation effort occurred in association with the pre-construction mussel survey at the project location. This effort is permitted by the Department as part of a statewide mussel relocation survivability study at transportation

projects being conducted by the Illinois Natural History Survey (#S-16-034). Sixteen individuals of two species, including 13 slippershells, were removed from the project footprint and placed downstream in suitable habitat.

11. KCHD shall conduct, or cause to be conducted, a thorough search for freshwater mussels around the project area and relocation site(s) in Year two and Year five following completion of the project. For example, if the project is completed in 2017, this search for freshwater mussels shall be conducted in 2019 and 2022 when water levels and temperatures are suitable. **A report including, but not limited to, the survey methodology utilized, water temperature, species and numbers of mussels located (noting any marked individuals), the age class ( $\leq 5$  or  $> 5$ ) of each individual sampled indicating whether recruitment is evident, survival rates of marked individuals, and a map of the species locations shall be provided to the Department within 90 days of completion of each survey.**
12. The salvage and relocation of non-listed mussels is hereby authorized by the Department with signature of this agreement per the Illinois Fish and Aquatic Life Code (515 ILCS 5/1-150).
13. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization follow:

KCHD shall mitigate for the potential taking of the slippershell mussel by bringing conservation benefit to the species potentially impacted. Compensatory mitigation in the amount of \$5,580.00 shall be provided to the Kendall County Forest Preserve District within 90 days of execution of this agreement and shall be earmarked for restoration of aquatic habitat downstream of the Eldamain Road project area. KCHD shall provide proof of this transaction to the Department.

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

14. 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

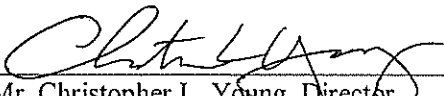
(217)557-8243  
[DNR.ITAcoordinator@illinois.gov](mailto:DNR.ITAcoordinator@illinois.gov)

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.

- 15. The KCHD official identified below is authorized to execute this agreement. Execution by KCHD indicates acceptance of all terms and conditions described in this authorization.
- 16. The execution of this agreement does not waive or excuse the responsibilities of KCHD 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 Kendall County Highway Department:*

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

  
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Mr. Fran Klaas, County Engineer

8/22/17  
Date

8-17-17  
Date