



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 City of Newton (hereinafter referred to as Newton) for the incidental take of the State-threatened Smooth Softshell (*Apalone mutica*) and Eastern Sand Darter (*Ammocrypta pellucidum*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that the taking is incidental to activities associated with construction of a shared-use river walk trail in Newton, IL to extend an existing trail in Peterson Park along the Embarras River in Jasper County, Illinois. This project is alongside, and partially within, the Embarras River Illinois Natural Areas Inventory site (INAI#0950), which was designated for having specific habitat suitable for state-listed species.

Procedural History

The Department received a Conservation Plan from Milano & Grunloh Engineers, on behalf of Newton on August 6, 2019, as a request for authorization for the incidental take of Smooth Softshell and Eastern Sand Darter. Additional information was requested by the Department on January 31, 2020, to make the Conservation Plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on March 23, 2020. The final Conservation Plan was deemed complete by the Department on April 14, 2020. 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 construct an extension to a walking/biking trail in Newton. The trail would run from the "Historic Bridge" north of Newton and continue east to Peterson Park, just West of the Burl Ives Bridge. This construction will include creating a concrete river walk that is 0.81 miles long and 10' wide with a pedestrian handrail and installing a retaining wall. The project will require the use of a platform to be placed in the Embarras River for approximately 500 feet of the project (or 0.1 mile). Construction of this portion of the trail will take place from a working platform along the bank of the river to allow for a working surface for equipment and

workers to safely work within the limits of the project. This portion of the project diverts the trail around the Riverside Cemetery in Newton.

The embankment will be cut back five (5) to ten (10) feet to allow for the placement of the path and retaining wall. A working platform in the river will be likely necessary for the placement and excavation of materials for construction. The working platform will be constructed of temporary riprap placed in the river to allow for equipment to be able to work above the flow of the river. Chunks of clean, coarse riprap approximately the size of a basketball will be used. The top of the working surface will be 20 feet wide for equipment access. The working surface will not block/dam the river at any time. The normal water elevation compared to the shale bottom is estimated to be only 2 feet deep.

After the Riverwalk trail is completed, the working pad will be removed by an excavator that will be placed on the working pad while removing it from the stream. Once the majority of the working pad is removed, the contractor will work from the center of the river to the bank. The channel bottom and banks will be restored to their pre-construction conditions. Erosion control measures will be used to prevent erosion of the bank.

Take of Smooth Softshell and Eastern Sand Darter could occur as a result of being crushed or smothered during installation of riprap or Gabion baskets, sedimentation within and downstream from the project site, increased turbidity, and increased noise and/or vibration, particularly due to the use of heavy equipment, within the Project Area during construction. The construction phase associated with the stabilization of the bank yields the greatest potential for aquatic incidental taking of Smooth Softshell or the Eastern Sand Darter.

Total estimated area of impact for species habitat is anticipated to be no more than **0.50 acre**. The Department concurs that the take of Smooth Softshell and Eastern Sand Darter that could result from the proposed 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 avoidance, 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 the Smooth Softshell and Eastern Sand Darter. **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.

Newton owns the property and is responsible for the long-term management. The project is funded with a combination of Federal Illinois Transportation Enhancement Program funding and local funding.

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 are a part, or the habitat essential to the species' existence in Illinois:

Smooth Softshell (*Apalone mutica*) is an Illinois State-threatened aquatic turtle species.

Habitat: Although Smooth Softshells will bask out of water like other turtle species, they are never far from water and are almost fully aquatic. Their soft shell makes them more susceptible to desiccation than other turtle species. Smooth Softshells get their name from their smooth, leather-like, flexible carapace in place of the hard, outer shell typical of most turtles. Smooth Softshells are found in large, unpolluted rivers in the central United States, and prefer areas with moderate to fast currents and sandy or muddy substrates lacking rocky areas and dense vegetation. They can also be found in lakes, impoundments, and shallow bogs. Smooth Softshells have the ability to extract oxygen from the water through their skin and can remain submerged for long periods of time.

Distribution: Their overall range covers most of the central Eastern United States. Smooth Softshells can be found from North Dakota and Minnesota south to New Mexico, Texas, Louisiana, Mississippi, and Florida. Pennsylvania and West Virginia are the eastern edge of the habitat that extends west into the Great Plains states of the Dakotas, Nebraska, Kansas, and Oklahoma.

Reproduction: Smooth Softshells hibernate during the winter buried under sandy or muddy substrates. They emerge in the spring and breed from May to June. Nesting takes place from June to early July on sandbars and sandy riverbanks with full exposure to sun. Females lay up to 30 eggs in a single nest. Eggs incubate for 8-12 weeks before hatchlings emerge. Smooth Softshell hatchlings are highly susceptible to predation by fish, other turtles, snakes, wading birds, and some mammals. Males that survive the early years of life become sexually mature in their fourth year, while females become mature at 7-9 years.

Population: The primary threats to Smooth Softshell populations are habitat degradation, pollution, human activities at nesting sites, and overharvest by humans as meat or as bycatch of commercial fishing. Land clearing and wetland drainage for agriculture, pollution by sewage, and construction of locks and dams have negatively affected smooth softshell habitat and populations, along with increased runoff and silt caused by changes in the habitat structure near rivers. Smooth Softshell nests are susceptible to increased boat traffic, as excessive waves caused by boats can cause nests to be uncovered or drowned.

Range in Illinois: Smooth Softshells can be found in rivers throughout the State of Illinois, including the Mississippi, Ohio, Rock, Illinois, Sangamon, Kaskaskia,

Wabash, and Embarras River basins. Smooth Softshells are currently extant in 18 of 102 Illinois counties. There are 23 extant Element Occurrence Records for Smooth Softshell in the Illinois Natural Heritage Database.

Incidental Take Authorizations: There are 3 Incidental Take Authorizations either pending or executed for the potential take of Smooth Softshell in the State of Illinois. The previous authorizations were issued for bank stabilization and bridge construction in Lawrence County. This is the first Incidental Take Authorization granted for Smooth Softshell in Jasper County.

Eastern Sand Darter (*Ammocrypta pellucidum*) are an Illinois State-threatened fish species.

Habitat: Eastern Sand Darter are a small fish found in clear creeks and rivers with slow to medium current, and some lakes. They prefer areas with fine sandy substrate.

Distribution: Eastern Sand Darter occur in the Ohio River basin, St. Lawrence-Lake Champlain drainage, and Wabash drainage from Illinois to Vermont, north to Ontario and Quebec and south to Kentucky.

Reproduction: Spawning occurs between early May and late July. Eggs hatch in less than 7 days and fry begin feeding about 9 days after hatching.

Population: Eastern Sand Darter population decline has occurred because of habitat loss and heavy siltation.

Range in Illinois: In Illinois, Eastern Sand Darter are found in the Wabash, Vermilion, and Embarras River basins. Eastern Sand Darter are found in 8 of 102 Illinois counties, including Champaign, Coles, Crawford, Cumberland, Jasper, Lawrence, Richland, and Vermilion Counties. There are currently 25 extant Element Occurrence Records of Eastern Sand Darter in the Illinois Natural Heritage Database.

Incidental Take Authorizations: The Department has 7 previously issued or pending Incidental Take Authorizations for Eastern Sand Darter. The previous projects include dam removal projects, bank stabilization, pipeline maintenance, and bridge construction. This is the first authorization for the taking of Eastern Sand Darter in Jasper County.

Based on the amount of habitat impacted by this project, the number of known occurrences of the Smooth Softshell and Eastern Sand Darter 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 Smooth Softshell or Eastern Sand Darter 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 Newton 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 Newton’s request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on June 25, 2020. The notice was also published in *The Newton Press Mentor* on June 25, July 2, July 9, and July 16, 2020. A notice of the location of a copy of the Conservation Plan was posted at the Newton Public Library, the Plan was made available for public inspection at the Effingham IDOT office, and Milano & Grunloh Engineers. The deadline for public comment was August 17, 2020. Comments were received from the public and acknowledged by Newton.

Authorization

It is the determination of the Department that the measures that will be implemented by Newton will adequately minimize and mitigate the anticipated taking of Smooth Softshell and Eastern Sand Darter associated with the construction of a river walk trail on the bank of the Embarras River in Jasper County, Illinois. Further, the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of the Smooth Softshell or Eastern Sand Darter 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 Newton 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 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 **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 Newton has failed to comply with any of these terms and conditions or has been responsible for the taking of the Smooth Softshell and Eastern Sand Darter, beyond that which is incidental to activities associated with the trail construction along and within the Embarras River in Jasper County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between Newton 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. Notification to all on-site personnel shall be provided on the sensitive biological resources in the area; the identification of Smooth Softshells and Eastern Sand Darter; 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; the importance of avoiding take of the species; and response protocol if individuals are found, including the chain of response personnel. **Newton 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 Newton shall hold the necessary permits for handling 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, Herptile Scientific Permit as authorized under 17 Illinois Administrative Code 885, and an IDNR Endangered Species Permit as authorized under 17 Illinois Administrative Code 1070.
7. The salvage and 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) and Aquatic Life Salvage or Relocation Code (17 Illinois Administrative Code 860).
8. Newton shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of the bank stabilization on Embarras River. A **project status report** shall be submitted to the Department within **90 days** 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.
9. 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).

10. Newton shall notify the Department's Endangered Species Program by email correspondence of construction completion of the trail construction project. A **project status report** shall be submitted to the Department within **90 days** following completion 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, GPS coordinates, and photograph 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.
11. Newton shall conduct, or cause to be conducted, the following pre-construction, construction, or post-construction efforts:
 - a. All equipment and machinery utilized for instream work shall remain within the construction limits which have been outlined on the project plan sheets and included in the Conservation Plan.
 - b. No debris will be allowed to fall in the river during construction.
 - c. No instream work shall occur during the restricted time of the Eastern Sand Darter spawning from May 1 to July 31.
 - d. Sedimentation and erosion control shall be implemented during construction to eliminate runoff into the Embarras River.
 - e. If a Smooth Softshell is identified by personnel in the construction area, personnel shall halt work in the area, inform appropriate personnel to document the encounter, and approach the turtle to flush it away from the bank without handling.
 - f. Once the walk has been placed, if used the working platform shall be removed and disposed of according to IDOT standards, unless approved to be placed as bank stability with approval from IDOT, IDNR, and Newton.
 - g. If used, riprap shall be removed and disposed of offsite, or used on site for stabilization.
 - h. Upon completion of construction, the riverbed shall be returned to a state that is similar to preconstruction conditions.
 - i. All disturbed areas shall be seeded or otherwise stabilized upon completion of construction activities.
12. Newton shall conduct, or cause to be conducted, post-construction monitoring measures for Smooth Softshell by a qualified biologist during **Year 2 and 5** following construction completion.
 - a. Surveys shall be conducted between May and October.
 - b. Ten (10) baited single-throated collapsible traps shall be deployed within the river adjacent to the project area. Each net shall be deployed for two (2) nights (i.e. twenty (20) net-nights of survey effort).
 - c. Traps shall be securely staked to the substrate and sited to allow for turtles to raise their heads above water.

A report including, but not limited to, the survey methodology utilized, a description of habitat, the number of individuals located, the estimated age and sex of each individual sampled if possible, a map of the species locations, and

decontamination measures followed shall be provided to the Department within 90 days of survey completion.

13. Newton shall conduct, or cause to be conducted, a thorough survey for freshwater fish by a qualified biologist in and around the project area for Eastern Sand Darter during **Year 2 and 5** following construction completion.
 - a. Surveys will be conducted between August 1 and October 31.
 - b. Barge-mounted electrofishing shall be used to conduct a community-based fish survey. The survey extent shall be approximately 230 meters and located adjacent to the river walk trail construction corridor.
 - c. An additional targeted survey for Eastern Sand Darter shall be conducted. Fifteen samples using kick-seining techniques shall be conducted in habitat suitable for Eastern Sand Darter.
 - d. All fish collected during both electrofishing and kick-seining shall be identified and enumerated. Total length of all collected Eastern Sand Darter shall be recorded.

A report including, but not limited to, the survey methodology utilized, a map of the surveyed reach, recorded abundance of each species encountered, total length of each Eastern Sand Darter collected, an estimate of mean width and depth within the survey reach, length of the survey reach, and a qualitative description of survey reach characteristics (e.g., flow, substrate, habitat composition). Collection results for electrofishing and kick-seining shall be recorded separately but presented in one report. Photos (which include distinguishing characteristics) of State-listed species shall be included in the report to be provided to the Department within 90 days of survey completion.

14. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization are as follows:
 - a. The City of Newton shall install two (2) interpretive educational signs at each end of the river walk displaying conservation information about the State-listed Smooth Softshell and Eastern Sand Darter. The Department retains the right to examine the species-related information before the signs are finalized produced. The signs will be placed on concrete pads. The interpretive sign mitigation project is valued at **\$16,000, and unspecified educational value.**
 - b. A report of the completion of this mitigation project shall be provided to the Department **within 90 days after construction completion.**

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.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.

16. The Newton official identified below is authorized to execute this agreement. Execution by Newton 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 Newton 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 City of Newton:*

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

Mark Bolander
Mr. Mark Bolander
Mayor

Nov. 16, 2020
Date

11-10-20
Date