



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 Antioch Township Highway Department (hereinafter referred to as Antioch Township) for the incidental take of the State-threatened Iowa Darter (*Etheostoma exile*). 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 culverts in Dutch Gap Canal, in unincorporated Antioch Township, Lake County, Illinois.

Procedural History

A Conservation Plan prepared by Antioch Township, was submitted to the Department on July 23, 2018, as a request for authorization for the incidental take of the Iowa Darter. The Department requested additional information on August 23, 2018, to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on November 16 and December 19, 2018. The final conservation plan was accepted as complete by the Department on January 2, 2019. 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 replace existing twin corrugated metal pipe culverts with triple concrete box culverts and headwalls in the Dutch Gap Canal. Non-erodible cofferdams will be installed to divert water flow. One side will be blocked with cofferdams at a time to maintain water flow through the remaining open culvert. Aquatic life will be removed from the coffered area prior to and during dewatering. The first existing corrugated metal pipe will be removed and replaced with a 9' x 9' concrete box culvert. The cofferdam process will then be repeated for the second corrugated metal pipe culvert, while restoring flow to the newly installed box culvert. The culverts will then be blocked with an upstream and downstream cofferdam and water will be temporarily bypassed through 48" diameter pipes. The cofferdammed area will be

dewatered and the headwalls will be poured. Further project detail is provided in the conservation plan. All proposed activities may result in direct burial or crushing of and/or noise and vibration disturbance to the Iowa Darter.

Total estimated area of impact within species habitat for the immediately proposed actions is **0.071 acres**. The Department concurs that the take of Iowa Darter that could result from the immediately proposed project is not the purpose of Antioch Township'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 Antioch Township's conservation plan.

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

Antioch Township states that the project is authorized by Illinois Department of Transportation and will utilize Township Bridge Program funding from the State of Illinois. Antioch Township has budgeted Motor Fuel Tax and general funds to cover the balance of the project cost. Due to Township Motor Fuel Tax funds being used, the Lake County Division of Transportation is required to let and administer the project.

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.

Iowa Darter (*Etheostoma exile*)

Iowa Darter is an Illinois state-threatened fish species.

Habitat: Iowa Darter is a small fish found in clear, sluggish creeks and small to medium rivers. They are also found in weedy portions of glacial lakes and ponds over sand, peat, or organic debris.

Distribution: Iowa Darters occur in the St. Lawrence-Great Lakes, Hudson Bay, and Mississippi River basins from Quebec to Alberta and south to Ohio and Colorado.

Reproduction: Spawning occurs between April and July. Female may spawn with one or more males. Eggs hatch in 18-26 days.

Population: Iowa Darter population decline has occurred because of habitat alterations, drainage of wetlands, and pollution.

Range in Illinois: In Illinois, Iowa Darters are found in the Wabash, Vermilion, Mississippi, Fox and Des Plaines River basins. Iowa Darters are found in 9 of 102 Illinois counties, including Boone, Cook, DuPage, Kane, Kendall, Lake, McHenry, Will, and Winnebago. There are currently 59 extant Element Occurrence Records of Iowa Darter in the Illinois Natural Heritage Database.

Incidental Take Authorizations: The Department has four previously issued or pending Incidental Take Authorizations for Iowa Darter. One is for aquatic vegetation management in a lake 3.24 miles southwest of this project with no apparent hydrological connection to this proposed project. Another authorization is 24.36 miles southwest for a dredging project. This is the second authorization for the taking of Iowa Darter in Lake County.

Based on the amount of habitat impacted by this project, the number of known occurrences of Iowa Darter 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 Antioch Township 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 Antioch Township's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on January 4, 2019, and in the *Daily Herald* on January 4, 11, and 19, 2019. A copy of the

conservation plan was deposited at the Antioch Public Library District, where it was available for public review. The deadline for public comment was February 19, 2019. No comments were received from the public.

Authorization

It is the determination of the Department that the measures to be implemented by Antioch Township will adequately minimize and mitigate the anticipated taking of Iowa Darter associated with the replacement of culverts in Lake County, Illinois. Further the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of Iowa Darter 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 Antioch Township 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 Antioch Township 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 Antioch Township has failed to comply with any of these terms and conditions or has been responsible for the taking of Iowa Darter beyond that which is incidental to the replacement of culverts in Lake County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between Antioch Township 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 Iowa Darter; 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. **Antioch Township 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.
6. Biological consultants employed by Antioch Township 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 salvage 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. Antioch Township shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of the project. A **project status report** in readable pdf format with complete metadata shall be submitted to the Department within **90 days** following completion (defined as Edwards Road open to public use) summarizing the implementation of minimization and mitigation measures and evaluating the effectiveness or status 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 and/or translocated from 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. Antioch Township shall conduct, or cause to be conducted, the following pre-construction or construction efforts:
 - a. Instream work shall not occur during Iowa Darter spawning season (April 1 – June 30).
 - b. Aquatic species shall be relocated during and after dewatering occurs.
 - c. Water shall be filtered through an approved sediment containment bag.
 - d. Disturbed areas shall be restored with native seed.

11. Antioch Township shall conduct, or cause to be conducted, a thorough survey for Iowa Darter within the project area during Years 2 and 5 following construction completion:
- a. The fish assemblage survey shall utilize methodologies approved by the Department. The survey shall be conducted during summer low flow conditions.
 - b. The survey shall be conducted outside the spawning season of April to July.
 - c. A report including, but not limited to, the survey methodology utilized, a map of the surveyed reach, recorded abundance of each species encountered, an estimate of mean width and depth within the survey reach, length of the surveyed reach and a qualitative description of survey reach characteristics (e.g., flow, substrate, habitat composition). Photos (which include distinguishing characteristics) of State-listed species shall be included with the report.
 - d. **A survey report in readable pdf format with complete metadata shall be provided to the Department within 90 days of completion.**
12. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization are as follows:
- a. Antioch Township shall provide funding in the amount of **\$5,200** to the Lake County Forest Preserve District's Iowa Darter conservation efforts. The Lake County Forest Preserve District is currently undertaking a project in Ethel's Woods Forest Preserve in Antioch, to restore the stream channel of North Mill Creek (downstream of the Edwards Road culvert project). The project thus far has converted Rasmussen Lake back into a stream channel with pools, riffles, and a native-planted floodplain. The stream will be connected downstream in order to allow fish passage. The new stream channel will improve water quality, oxygen levels, and fish habitat. **Antioch Township shall provide the Department with an update on this mitigation project in the project status report required under item #8 above.**
 - b. The donation 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.

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 Resource Way

Springfield, IL 62702-1271

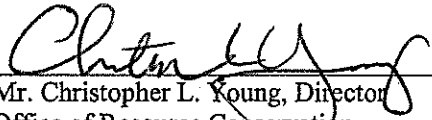
(217)557-8243
DNR.ITAcoordinator@illinois.gov

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.

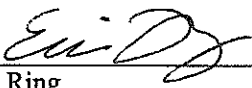
14. The Antioch Township official identified below is authorized to execute this agreement. Execution by Antioch Township indicates acceptance of all terms and conditions described in this authorization.
15. The execution of this agreement does not waive or excuse the responsibilities of Antioch Township 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 Antioch Township Highway Department:



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



Mr. Eric Ring
Highway Commissioner

4/19/19

Date

4-19-19

Date