



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
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 City of Lockport (hereinafter referred to as City) for the incidental take of the State-threatened Banded Killifish (*Fundulus diaphanus*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that this taking is incidental to activities associated with rehabilitating the IL 7 Frontage Road Bridge over the Des Plaines River, totaling **0.30 acres** within Will County, Illinois. The bridge rehabilitation project footprint is adjacent to the Lockport Prairie Illinois Natural Areas Inventory (INAI) Site #0932 designated as such due to the presence of high quality natural communities, specific suitable habitat occupied by endangered and/or threatened species, and an Illinois Nature Preserves Commission-protected site known as Lockport Prairie Nature Preserve. No impact will occur within the current boundary of the INAI site.

Procedural History

A Conservation Plan prepared by Baxter & Woodman, on behalf of the City, was submitted to the Department on June 23, 2017, as a request for authorization for the incidental take of the Banded Killifish. The Department requested additional information on July 21, and September 13, 2017, and January 16, 2018, to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on August 16, and November 29, 2017, and August 24, 2018. The proposed project experienced a delay in review and approval due to a disparity in ownership of the INAI, as well as a potential overlap of the INAI boundary with the project boundary. Upon further review Department staff found that the original mapping of the INAI site was in error because staff had assigned a natural areas designation to a road right-of-way and degraded buffer. The error was addressed by an authorized change to the INAI boundary delineation in the vicinity of the project action area. Once all issues were addressed, the final conservation plan was approved by the Department on August 24, 2018. 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 the rehabilitation of the IL 7 Frontage Road Bridge over the Des Plaines River in Will County. The bridge is a two-lane bridge currently rated as Structurally Deficient and Functionally Obsolete. The existing piers will remain in place. The proposed rehabilitation of this bridge includes structural steel repairs, deck overlay, approach slab replacement, crash railing installation, and approach guardrail and terminal replacement. First, temporary causeways will be constructed. The causeways will be approximately 30 feet wide and extend 0.5 foot above the estimated high-water surface elevation during the rainy season (totaling 13,261 square feet or 0.30 acre). Culverts will be placed in the causeways to allow continuous flow. One causeway will be constructed and operated at a time. Bridge rehabilitation work will occur from each causeway. Once the work is done on one side of the bridge, the causeway will be removed, and the other causeway will be constructed. Finally, the second causeway will be removed from the river. The proposed activities may result in direct impact to the Banded Killifish through crushing or burial related to causeway installation. Indirect impact may include dispersal from foraging habitat or reduction in reproductive success as a result of the noise and vibration associated with the project.

Total estimated area of impact within species habitat is **0.30 acres**. The Department concurs that the take of Banded Killifish that could result from this project is not the purpose of the City'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 the City's conservation plan.

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

The City states the project will be supported using federal funds (administered through the Illinois Department of Transportation or IDOT) and City funds. This project was included in the FY18 capital improvement plans of IDOT and the City.

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:

Banded Killifish (*Fundulus diaphanus*)

Banded Killifish is an Illinois state-threatened fish species.

Habitat: Banded Killifish is a small, freshwater fish found in quiet waters. They are usually found over sand, gravel, or detritus-covered bottoms with patches of submerged aquatic vegetation. They are a non-migratory schooling fish that tends to stay in shallows in the summer.

Reproduction: Spawning occurs in late spring and summer. Eggs are released in clusters and attach to plants in quiet weedy pools. They hatch in 11-12 days. Banded Killifish become sexually mature after one year.

Population: Banded Killifish population decline has occurred due to increased habitat alteration, stream siltation, turbidity, and removal of aquatic vegetation.

Range in Illinois: In Illinois, Banded Killifish are found in the Fox, Kankakee, Chicago, Illinois, and Des Plaines River basins. The species is found in 14 of 102 Illinois counties. There are currently 67 extant Element Occurrence Records for Banded Killifish in the Illinois Natural Heritage Database.

Incidental Take Authorizations: The Department has five (5) previously issued or pending Incidental Take Authorizations for Banded Killifish. This agreement is the second authorization for the taking of Banded Killifish in Will County, the first was for pipeline maintenance in the Kankakee River. Three (3) other Incidental Take Authorizations cover actions in northern Illinois lakes including shoreline rehabilitation or invasive vegetation control. One (1) authorization was executed for installation of a stormwater diversion tunnel from the North Branch of the Chicago River to the North Shore Channel.

Based on the amount of habitat impacted by this project, the number of known occurrences of the threatened species 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 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 Banded Killifish 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 of the City 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 the City's request for authorization of incidental take was published in the *Breeze-Courier* (official state newspaper) on September 4, 2018, and in *The Herald-News* on September 4, 11, and 19, 2018. A copy of the conservation plan was deposited at the Lockport Branch of the White Oak Library, where it was available for public review. The deadline for public comment was October 19, 2018. No comments were received from the public.

Authorization

It is the determination of the Department that the measures to be implemented by the City will adequately minimize and mitigate the anticipated taking of Banded Killifish associated with rehabilitating the IL 7 Frontage Road Bridge over the Des Plaines River in Will County, Illinois. Further, the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of Banded Killifish 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 the City 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 the City 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 the City has failed to comply with any of these terms and conditions or has been responsible for the taking of Banded Killifish beyond that which is incidental to the rehabilitating the IL 7 Frontage Road Bridge over the Des Plaines River in Will County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between the City 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 the 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, the importance of avoiding take of the species. **The City 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. To handle fish species, biological consultants employed by the City 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. The City 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 open for 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 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. The City shall conduct, or cause to be conducted, the following pre-construction or construction efforts:
 - a. All in-stream work shall be conducted from temporary causeways.
 - b. No instream work shall occur between May 15 to June 30 to minimize impacts during fish spawning seasons. This restriction applies only to spawning season of the construction period when causeways are installed. No instream restrictions apply once structures are in place.
 - c. Erosion and sediment control measures shall be implemented in all areas. Disturbance of plants shall be minimized to prevent erosion and sedimentation.
 - d. No construction debris shall be deposited into the river. All debris shall be removed and disposed in an upland location.
 - e. River habitat shall be restored to pre-construction conditions, including the re-establishment of a rock channel bottom to original elevations.

11. The City shall conduct, or cause to be conducted, the following post-construction monitoring measures for banded killifish during **Year 2 and Year 5**:
 - a. A survey of the project area fish assemblage. The survey shall use IDNR protocols (two, thirty-minute runs of backpack electrofishing) within a reach centered on the project area and focusing on the zones of causeway impact. The survey shall be conducted during summer flow conditions.
 - b. The survey shall be conducted outside spawning season (May through July).
 - c. A report including, but not limited to, the survey methodology utilized, a map of the surveyed reach, recorded abundance of each encountered species for each thirty-minute run, 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 listed species shall be included with the report.
 - d. The survey report shall be provided to the Department by December 31 of each survey year.

12. The City shall conduct, or cause to be conducted, an **emergent vegetation survey** within the shoreline habitat improvement areas associated with the bridge rehabilitation during the growing seasons of Year 1, Year 2, and Year 3 following plant installation:
 - a. **A report including, but not limited to, the restoration species list, the current emergent vegetation structure with estimated abundance, an indication of restoration success or otherwise, any proposed follow-up necessary, photos of the restored areas, and a map of the vegetation**

survey coverage areas shall be provided to the Department by December 31 of each survey year.

13. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization are as follows:
- a. The City shall conduct shoreline habitat restoration through planting of native emergent vegetation to support additional spawning and foraging habitat for the Banded Killifish. The value of plants and labor is estimated at \$16,385.65.
 - b. The City shall provide funding in the amount of \$5,000 to the Illinois Natural History Survey for genetic research related to the Banded Killifish.
 - c. Compensatory mitigation shall be provided to the Illinois Natural History Survey **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.

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

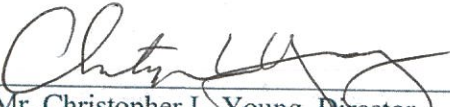
(217)557-8243
DNR.ITAcoordinator@illinois.gov

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 City official identified below is authorized to execute this agreement. Execution by the City 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 the City 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 Lockport:



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



Mr. Brent D. Cann
Director of Public Works

1-15-19
Date

1-14-19
Date