



Illinois Department of Natural Resources

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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 Illinois Department of Natural Resources ORCP Division of Engineering Field Operations (hereinafter referred to as ORCP) for the incidental take of the State-endangered Taillight Shiner (*Notropis maculatus*) and the State-threatened Bantam Sunfish (*Lepomis symmetricus*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that this taking is incidental to hydraulic dredging to restore deep-water habitat in Buttonland Swamp, a portion of the Cache River Land and Water Reserve, 1.6 miles southeast of Perks, in Johnson and Pulaski Counties, Illinois. Buttonland Swamp is recognized as a Natural Heritage Landmark, and the Lower Cache River Swamp is on the Illinois Natural Areas Inventory (INAI #610) in recognition of the high quality natural community, suitable habitat for listed species, and containing a Land and Water Reserve registered with the Illinois Nature Preserves Commission (INPC).

Procedural History

A Conservation Plan prepared by Mark Guetersloh of the Illinois Department of Natural Resources Division of Natural Heritage (hereinafter referred to as Heritage) was submitted to the Department on May 29, 2014 as a request for authorization for the incidental take of Bantam Sunfish. The Department requested additional information to make the Conservation Plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department. The final Conservation Plan was accepted as complete by the Department on August 20, 2019.

A revised Conservation Plan prepared by Brian Metzke of Heritage was submitted on April 1, 2021 to add Taillight Shiner. The Department asked for a signed implementing agreement with IDNR Director's signature to make it complete. The final Conservation Plan was accepted as complete by the Department on May 24, 2021. The public notice period and public comments will be detailed under #6 of the Compliance sections 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 restore deep-water habitats by removing excess sediments in Buttonland Swamp using a boat-mounted hydraulic dredge with an excavating head. The wetland is located within the Cache River Land and Water Reserve and is included in the Lower Cache River Swamp Illinois Natural Areas Inventory site. Dredging will occur in an area of Buttonland Swamp and Cypress Ditch, approximately 2.2 miles southeast of Perks, and approximately 0.8 miles east of Long Reach Road south of Perks in Johnson and Pulaski Counties, Illinois.

Heavy machinery and equipment will be used to complete this project, which includes sediments being removed using a barge-mounted hydraulic dredge in addition to dredge material being pumped to nearby containment basins. A maximum of 27 acres may be temporarily impacted and disturbed by dredging activities and vehicular access in order to access the workspaces and containment basins. Equipment will be staged at existing public access sites, and the dredge will be deployed from the boat ramp. Proposed activities may result in direct burial or crushing of, and/or noise and vibration disturbance to the Bantam Sunfish and Taillight Shiner during project activities. 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 for the immediately proposed actions is a maximum of 27 acres. The Department concurs that the take of Taillight Shiner and Bantam Sunfish that could result from the proposed project is not the purpose of ORCP'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 ORCP's Conservation Plan.

To meet the "maximum extent practicable" standard, additional minimization and/or mitigation measures may be required beyond those proposed by Heritage, based on the life history needs of the Taillight Shiner and Bantam Sunfish. **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.

ORCP states that all dredging activities will be funded through the Park and Conservation Fund. Monitoring will be performed using IDNR Office of Resource Conservation funds for use in natural areas or for conservation of species and communities, Natural Areas Acquisition Fund, or Illinois Wildlife Preservation Fund.

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.

Taillight Shiner (*Notropis maculatus*) is an Illinois-state endangered fish species.

Habitat: Taillight Shiners are found in swamps and backwaters of rivers, usually associated with vegetation or woody debris.

Distribution: Taillight Shiners are found along the Eastern seaboard from North Carolina to Florida and the Mississippi River Valley from Louisiana to Southern Illinois. Until surveys in 2020, Taillight Shiners were potentially extirpated from the state

Reproduction: Taillight Shiners spawn in April and May in Illinois. This species is a broadcast spawner with no further parental involvement. Offspring reach sexual maturity in less than one year. Maximum life expectancy is approximately 2 years.

Population: Loss of habitat through stream channelization and wetland draining are the primary threat to populations.

Range in Illinois: In Illinois, Taillight Shiners are found in the lower Ohio and Mississippi River basins from Southern Indiana and Illinois. There is currently one (1) extant Element Occurrence Record in the Illinois Natural Heritage Database, and they are only known from Pulaski County.

Incidental Take Authorizations: The Department has zero (0) previously issued or pending Incidental Take Authorizations for Taillight Shiner. This agreement is the first authorization for the taking of Taillight Shiner in Johnson and Pulaski Counties in Illinois.

Bantam Sunfish (*Lepomis symmetricus*) an Illinois state-threatened fish species.

Habitat: Bantam Sunfish is a small, freshwater fish found in quiet waters such as swamps, shallow backwater lakes and margins of low gradient rivers with herbaceous or woody vegetation.

Distribution: Bantam Sunfish are found in the Eastern United States, primarily in the Lower Mississippi River and Ohio River Valleys with Illinois, Indiana and Missouri being in the northern extent of their range. Also, Bantam Sunfish are found west to Texas and Oklahoma.

Reproduction: Spawning occurs in May. The larvae leave the nest approximately 7-10 days after hatching and reach 2 cm in length after approximately two months. The species will reach sexual maturity in less than one year.

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

Range in Illinois: In Illinois, Bantam Sunfish are found in the lower Ohio and Mississippi River basins from Southern Indiana and Illinois. There is currently one (1) extant Element Occurrence Record in the Illinois Natural Heritage Database. Two (2) counties have had records for Bantam Sunfish: Johnson and Pulaski.

Incidental Take Authorizations: The Department has zero (0) previously issued or pending Incidental Take Authorizations for Bantam Sunfish. This agreement is the first authorization for the taking of Bantam Sunfish in Johnson and Pulaski Counties in Illinois.

Based on the amount of habitat impacted by this project, the number of known occurrences of Taillight Shiner and Bantam Sunfish 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 ORCP 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 ORCP's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on June 9, 2021, and in *The Southern Illinoisan* on June 9, 16, and June 24, 2021. A copy of the Conservation Plan was deposited at the Dongola Public Library, where it was available for public review. The deadline for public comment was July 24, 2021. No comments were received from the public.

Authorization

It is the determination of the Department that the measures to be implemented by ORCP will adequately minimize and mitigate the anticipated taking of Taillight Shiner and Bantam Sunfish associated with the efforts to restore deep-water habitats using hydraulic dredging in Johnson and Pulaski Counties, Illinois. Further the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of the Taillight Shiner and Bantam Sunfish 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 ORCP 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 ORCP in the Conservation Plan:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of **eight (8) 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 ORCP has failed to comply with any of these terms and conditions or has been responsible for the taking of the Taillight Shiner and Bantam Sunfish beyond that which is incidental to restoring deep-water habitats through hydraulic dredging operations in Johnson and Pulaski Counties, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between ORCP 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 Taillight Shiner and Bantam Sunfish; 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. **ORCP 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 ORCP 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. **ORCP shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion** of the hydraulic dredge project. A **project status report** shall be submitted to the Department within **90 days** following completion of each stage 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 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. Notification of any Taillight Shiner or Bantam Sunfish 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. ORCP shall conduct, or cause to be conducted, the following pre-construction, construction, and/or post-construction efforts:
 - a. Water level management (i.e. impounding water in Buttonland Swamp during low-water periods) will continue during and after dredging.
 - b. High water conditions will be assessed during proposed November – March dredging period. If necessary water elevation is not met, dredging will be delayed until the following November – March period. Adherence to the

November- March dredging period ensures avoidance of vulnerable life stages of state-listed species.

- c. Dredged sediments shall be pumped into containment basins located in upland areas adjacent to Buttonland Swamp. Illinois Environmental Protection Agency policies will be followed for allowing water to reenter from the containment basin.

12. Heritage, on behalf of ORCP shall conduct, or cause to be conducted, post-construction monitoring by a qualified biologist and thorough electrofishing survey for Taillight Shiner and Bantam Sunfish assemblage in and around the project area:
In Years 1 and 3 following dredging activities, Heritage shall use standardized boat electrofishing protocols for a minimum of 30 minutes in dredged and vegetated areas of Buttonland Swamp.

A report including, but not limited to, a description of the survey methodology utilized including duration, date, time, habitat description, photographs of habitat and any individuals of listed species, length and weight of individual Taillight Shiners and Bantam Sunfish, and a map of survey locations and the locations of Taillight Shiners and Bantam Sunfish shall be provided to the Department within 90 days of completion of each survey.

13. No compensatory mitigation will be required for this action, as it is intended to improve habitat for the listed species by providing deep water refugia during winter and droughts.

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.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.


15. The ORCP official identified below is authorized to execute this agreement. Execution by ORCP 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 ORCP 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
(Department):*


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


8/17/2021
Date

*For the Illinois Department of Natural
Resources (IDNR):*


Ms. Colleen Callahan
Director, IDNR (landowner)

8-17-21
Date

For the ORCP Division of Engineering Field Operations:


Mr. Dale Brockamp
Manager (applicant)

August 13, 2021
Date