



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 Beardstown Sanitary District (hereinafter referred to as BSD) for incidental take of Illinois chorus frog (*Pseudacris illinoensis*) during the proposed Phase 2 Wastewater Treatment Plant Improvements project. The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that the taking is incidental to activities associated with the construction of improvements to the existing wastewater treatment plant in Cass County, Illinois.¹

Procedural History

The Department received a conservation plan prepared by Benton & Associates, Inc., for BSD on January 27, 2016, as a request for authorization for the incidental take of Illinois chorus frog. The Department requested additional information on March 1, 2016, to make the conservation plan complete as prescribed by 17 Ill. Adm. Code 1080. That additional information was received by the Department on March 16, 2016. 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 construction of improvements to the existing wastewater treatment plant on the northwestern edge of the City of Beardstown in Cass County, Illinois. A general description of these improvement activities includes construction and heavy equipment traffic, excavation for installation of subsurface utilities, and miscellaneous on-site activities related to construction. The proposed project could cause up to 7 acres of surface disturbance within the wastewater treatment plant property, **0.06 acre** of which is considered suitable burrowing habitat for the Illinois chorus frog that

¹ The wastewater treatment plant is located along the Illinois River at the northwestern edge of the City of Beardstown.

may be impacted and is located on the furthest northern portion of the site where minimal construction is proposed to occur. Less than 0.01 acre of potential Illinois chorus frog burrowing habitat will be permanently altered. BSD anticipates that the taking of Illinois chorus frogs could occur as a result of direct impact to frogs migrating through the construction site and/or habitat alteration during subsurface utility installation, excavation for the construction of structures, the use of construction equipment, and vehicle traffic. The take of Illinois chorus frog that could result from these activities is not the purpose of BSD's project, 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 BSD's conservation plan.

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

BSD states that the funding needed to support and implement the Conservation Plan will be obtained along with funds that will be needed to complete the proposed improvements to the wastewater treatment plant. These funds will be a combination of local funds, Illinois Environmental Protection Agency State Revolving Fund loan, and/or U.S. Department of Agriculture Rural Development funds.

It is the Department's opinion that BSD'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 **Illinois chorus frog** is listed as a threatened species in Illinois because of its limited range and threats to its habitat such as conversion to agricultural uses and development. The species has no formal federal conservation status, but the status of the Illinois chorus frog is currently under review by the U.S. Fish and Wildlife Service.

Illinois chorus frogs are found in areas of sandy soil. The frogs spend most of the year buried in the ground, emerging only to move to ponds where they mate and lay their eggs during February and March. Like other frogs, Illinois chorus frogs go through development as tadpoles and then metamorphose into young frogs from May to late June. The young frogs have been shown to migrate up to 0.9 km (2,953 feet) from ephemeral breeding ponds to burrowing sites. They are able to move short distances and feed while buried. The fossorial habits of the Illinois chorus frog make surveys of their populations difficult except during the breeding season when they are vocalizing at their breeding ponds. The success of breeding varies greatly between years depending on precipitation patterns and the persistence of the breeding ponds, as well as the potential detrimental introduction of fish to the ponds.

The Illinois chorus frog is found at scattered locations in central, southwest, and extreme southern portions of Illinois. The range of the species is believed to be similar to presettlement times, but the abundance of the species within that range has diminished. Illinois chorus frogs also occur in parts of Missouri and Arkansas. The Illinois Natural Heritage Database includes 18 element occurrence records for the Illinois chorus frog that are classified as extant. Those populations are found in Alexander, Cass, Logan, Madison, Mason, Menard, Morgan, Scott, and Tazewell Counties.

The Department has 22 pending or previously issued authorizations for incidental take of Illinois chorus frogs. Project types included pipelines, electric transmission lines, dredged material placement, road construction, a wind farm, and a water treatment plant. For most projects, the primary threat of take is digging up Illinois chorus frogs that are within the soil at the construction site. Frogs can also be crushed by heavy machinery or trapped and buried in trenches. Measures implemented to minimize or mitigate the take of Illinois chorus frogs in previous projects have included excavation of new breeding ponds, limitation of the area affected by construction, use of silt fences to exclude frogs from construction areas during their breeding season movement to ponds, inspection of trenches to detect entrapment of frogs, and avoidance of disturbance to breeding ponds. Some recipients of authorization for incidental take of Illinois chorus frogs have provided financial support for management of the species and/or research to enhance the conservation of the species.

In March 2016, a survey for Illinois chorus frogs was conducted at the project site by personnel from Benton & Associates, Inc. No frog species were detected on the property, nor was any ponded water found that could serve as suitable Illinois chorus frog breeding habitat. Frog calls were detected in road ditches with standing water, ponds, creek bottoms, and swamp/wetland areas while on the commute from Jacksonville to Beardstown and other areas near the City of Beardstown. Although no breeding habitat is present on the wastewater treatment plant property and no evidence was found of Illinois chorus frogs using the

property; it is possible that Illinois chorus frogs may burrow in the suitable burrowing habitat that is present, where they are unlikely to be detected, or they may cross the property during migration to nearby areas. BSD has delineated **0.75 acres** of suitable burrowing habitat for the Illinois chorus frog on their property. BSD estimates that **0.06 acre** of the suitable habitat will be affected during construction, and less than **0.01 acre** will be permanently altered.

Based on the life history needs of this species, the number of known element occurrence records in the State, an assessment of the potential impact to individuals that make up the element occurrences in the project footprint, the conservation measures outlined herein, 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 the project will not reduce the likelihood of survival or recovery of the Illinois chorus frog 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 BSD indicates an acceptance of and 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 BSD's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on March 24, 2016, and in the *Cass County Star Gazette* on March 24, March 31, and April 7, 2016. A copy of the conservation plan was deposited at the Beardstown Houston Memorial Public Library, where it was available for public review. The closing date for public comments was May 7, 2016. No comments were received from the public.

Authorization

It is the determination of the Department that the measures to be implemented by BSD will adequately minimize and mitigate the anticipated taking of the Illinois chorus frog incidental to activities associated with the construction of improvements to the Beardstown wastewater treatment plant in Cass County, Illinois. The covered area that is the subject of this authorization is described on Page 1. Further, the Department has concluded that the take authorized herein will not reduce the likelihood of survival or recovery of the Illinois chorus frog 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 BSD to the Department are incorporated into this agreement by reference and 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 applicant 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 BSD has failed to comply with any of these terms and conditions or has been responsible for the taking of the Illinois chorus frog beyond that which is incidental to activities associated with the construction of improvements to the Beardstown wastewater treatment plant in Cass County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between BSD 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 Illinois endangered or threatened 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. On-site personnel shall be educated on the sensitive biological resources in the area, the identification of Illinois chorus frog, 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. BSD shall submit a copy of the education materials to the Department.
5. The Department reserves the right of entry to inspect potential habitat and species management practices.
6. Biological consultants employed by BSD shall hold the necessary permits for work with non-listed and listed species; these include an Illinois Department of Natural Resources Scientific Collection Permit and an Illinois Department of Natural Resources Endangered Species Permit.
7. BSD shall notify the Department's Endangered Species Program of construction commencement and completion of the improvements to the wastewater treatment plant.

The Department shall be informed of any State-listed species sighting and provided location information (photograph and GPS coordinates) within 48 hours of such sighting. The Department shall be notified immediately of the discovery of dead specimens and will provide guidance on preservation and disposition. If Illinois chorus frogs are found in any condition, BSD representatives shall call the local District Heritage Biologist at 217-653-2236 for retrieval.

8. BSD shall conduct, or cause to be conducted, the following pre-construction or construction efforts:
 - a. Where groundbreaking occurs, all measures of erosion control shall be implemented and monitored for effectiveness. An appropriate native seed mix shall be used to stabilize areas.
 - b. Trenches dug as a result of this project shall be covered at the end of each work day. Before starting work each day, trenches and excavations shall be routinely inspected to ensure no frogs have fallen in and become trapped.
 - c. Within the 0.75 acre of suitable burrowing habitat, the soil profile shall be segregated during trenching to ensure reestablishment of the pre-disturbance profile.
 - d. Prior to construction, exclusionary fencing shall be installed around the perimeter of the construction site, and inspected daily. The purpose of the fencing is to exclude frogs from the construction site; therefore, it should remain in place from February to August.
 - e. Observations of migrating congregations of Illinois chorus frogs within travel corridors and work areas during breeding season shall be reported to the Department and impact to congregations during migration shall be avoided.
9. BSD shall restore and maintain all temporary travel areas and work areas to preconstruction conditions per the conservation plan. All areas on the site with no permanent structures will be reseeded with native species of grasses. If plantings are unsuccessful, supplementation shall occur.
10. **Within 90 days of construction completion**, BSD shall provide the Department with a project status report summarizing the implementation of minimization, mitigation, and restoration measures and evaluating the effectiveness of those measures. If any Illinois chorus frogs were encountered during the project; this report shall also include a map and GPS coordinates of where the species were found, a description of any injuries or mortalities, and the disposition of any individuals that were injured or killed.
11. BSD shall conduct, or cause to be conducted, post-construction Illinois chorus frog surveys throughout the wastewater treatment plant property, including the sandy areas containing potential Illinois chorus frog burrowing habitat in **Year One and Year Three** after construction is completed. The surveys will consist of nighttime audible call surveys no earlier than thirty minutes after sunset and shall be performed by qualified contractors twice (approximately 15 days apart) within the same breeding season (March to May). Surveys shall be conducted when the temperature is above 0° C and wind speed is below 30 km/hr. Illinois chorus frog survey data sheets shall reflect date, location,

time, air temperature, humidity, wind speed, moon visibility, precipitation, survey duration, other noise, water presence/absence, and a notation of whether the call emanates from within the habitat area or outside (note direction). **A report detailing survey methods and results shall be submitted to the Department within 90 days of each survey's completion.**

12. Mitigation to the maximum extent practicable is required by the Act. BSD will set aside a 0.03 acre comprised of the sandy soil at the north end of the water treatment plant site which is currently mowed and maintained. No tilling or compaction shall occur in this area. Kill the turf with Round-up per label instructions. Apply Round-up two additional times during the first season. At first snow, the area shall be broadcast-seeded sparsely in native sand prairie forb and grass species [common milkweed (*Asclepias syriaca*), goldenrod (*Solidago speciosa*), bee balm (*Monarda fistulosa*), gray-headed coneflower (*Ratibida pinnata*), little bluestem (*Schizachyrium scoparium*), and sand lovegrass (*Eragrostis trichodes*)] to serve as potential Illinois chorus frog burrowing habitat. No landscaping cloth shall be used. The area will be managed to control encroachment by woody vegetation and invasive plant species. The area will be permanently protected by BSD and will be demarcated as protected native species habitat with restrictive signage to prevent disturbance of the area. **The frog survey report provided in Year One and Year Three shall include a progress report on the status of the protected area including photographs.**

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

13. BSD shall provide the Department with annual reports summarizing the activities of the previous year and activities scheduled for the upcoming year for the duration of this authorization. Reports shall include a summary of activities completed during the reporting year, documentation of listed species found (dates, locations, photographs, and GPS coordinates), management measures implemented, a description of minimization and mitigation activities, and a description of anticipated activities that will be carried out during the upcoming year. **The annual report for the previous calendar year is due to the Department by March 1st.**
14. BSD shall submit reports on all surveys within 90 days of survey completion.
15. All reports and other documentation required by this authorization shall be submitted to:

Illinois Department of Natural Resources
Endangered Species Program
Incidental Take Authorization Coordinator
One Natural Resources Way
Springfield, IL 62702-1271

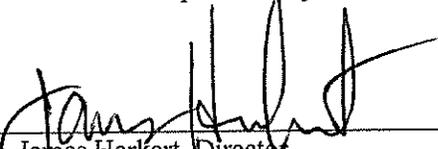
(217)557-8243

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 BSD official identified below is authorized to execute this agreement. Execution by BSD indicates acceptance of all terms and conditions described by this authorization.

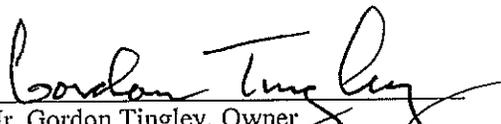
For the Illinois Department of Natural Resources:



Dr. James Herkert, Director
Office of Resource Conservation

8-9-16
Date

For the Beardstown Sanitary District:



Mr. Gordon Tingley, Owner

8-5-16
Date