

Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Pat Quinn, Governor
Marc Miller, 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 CCPS Transportation, LLC (Enbridge) (hereinafter known as Enbridge) for the incidental take of the yellow-headed blackbird (*Xanthocephalus xanthocephalus*), king rail (*Rallus elegans*) and Illinois chorus frog (*Pseudacris streckeri illinoensis*). The Illinois Department of Natural Resources (hereinafter referred to as the Department) has determined that the taking is incidental to activities associated with the excavation of a section of the existing Spearhead Pipeline in Mason County, Illinois for the purpose of investigating and performing any required maintenance on the pipeline segment. The project site is approximately one mile southeast of Havana, Illinois and is identified by Enbridge as Line 55 Milepost 163.2808 on the Spearhead Pipeline. The project location lies within the Sand Lake Illinois Natural Areas Inventory Site.

Procedural History

The Department received a conservation plan from Barr Engineering on behalf of Enbridge on November 19, 2014, as a request for authorization for the incidental take of the yellow-headed blackbird, king rail, and Illinois chorus frog. The Department requested additional information on December 10, 2014, to make the conservation plan complete as prescribed by 17 Ill. Adm. Code 1080.10. That additional information was received by the Department on December 11 and December 17, 2014. 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 excavation of a section of the existing Spearhead Pipeline in Mason County, Illinois for the purpose of investigating and performing any required maintenance on the pipeline segment. Included in this project is the clearing (brush-hogging) of an access route and the work area. The work area will be approximately 140 feet by 30 feet,

with an excavation of approximately 60 feet long by 30 feet wide by 10 feet deep. An additional area of approximately 150 feet by 100 feet will be used for staging, stockpiling soil, and storing equipment. Take of the yellow-headed blackbird, king rail and/or Illinois chorus frog could result from clearing; project traffic; staging of equipment; trenching and stockpiling of soils; backfilling and post-backfilling; and/or grading and restoration. The take of these species that could result from this project is not the purpose of Enbridge'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:

A conservation plan prepared by Barr Engineering on behalf of Enbridge describes measures that will be implemented to minimize the potential adverse effects of the project on the yellow-headed blackbird, king rail, and Illinois chorus frog.

Enbridge will minimize the effect of this project on these species and their habitats by utilizing the following practices:

During site preparation, the staging area will be located in uplands as much as possible, the size of the workspace beyond the excavation will be minimized, and vegetation within the wetland will be cut off at ground level, leaving root systems in place.

Silt fences and other erosion control methods will be installed and maintained in proper working order to prevent movement of sediments into the wetland from spoil piles or from sloped approaches to the wetland.

No material, such as soil, rock, tree stumps or brush riprap will be placed in the wetland to improve access. If a wetland area cannot support construction equipment and low ground-weight equipment is not used; timber mats will be placed to support equipment.

Trenches, which will typically be excavated using a backhoe, will be left open for the shortest time possible.

Where feasible, up to one foot of native topsoil will be stripped from the excavated area and stockpiled separate from subsoil and other trench spoil. During backfilling, subsoil will be used to fill the excavation and topsoil will be returned to its original horizon over the backfilled trench.

Cleanup and rough grading of the project area will be done as soon as possible after the trench is backfilled within any constraints related to weather conditions. The overall duration of the project will be minimized

as much as possible to assure completion of all project activity before the spring breeding season of the three species of concern.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

This pipeline maintenance project is a required part of Enbridge's operation of the Spearhead Pipeline. Compliance with environmental protection regulations is a standard part of all such maintenance projects and funding for compliance is included in the budget for this project.

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 yellow-headed blackbird is listed as an endangered species in Illinois because of its limited range and low numbers in the state. The species has no formal federal conservation status. The Illinois population of yellow-headed blackbirds represents the eastern limit of the species range in the United States. The nearest relatively secure population of yellow-headed blackbirds is in western Iowa. Yellow-headed blackbirds are colonial nesters and prefer hemi-marsh (dense stands of cattails and bulrushes interspersed with open water) for breeding areas. Succession of hemi-marshes to closed cattail marshes may be one factor in the limited abundance of this species in Illinois.

The Illinois Natural Heritage Database includes 17 element occurrence records for the yellow-headed blackbird that are classified as extant populations. Most of these occurrences are in northeast Illinois with one occurrence in northwest Illinois and one along the Illinois River in central Illinois. Defining a breeding population of yellow-headed blackbirds as "extant" is difficult because of the species apparent sensitivity to water levels at potential breeding sites. The birds may avoid a given breeding location for one or more years when water levels are unsuitable only to return when conditions are again more favorable. The last known occurrence of breeding yellow-headed blackbirds in Mason County was in 1994.

The Department has issued one previous incidental take authorization for yellow-headed blackbirds. That authorization was for the Flanagan South pipeline constructed by Enbridge and is still in effect. The Flanagan South Pipeline right-of-way is adjacent to the Spearhead Pipeline right-of-way. Construction of the Flanagan South Pipeline is complete. No direct take of yellow-headed blackbirds is known to have occurred during the construction of that pipeline.

Enbridge intends to avoid any direct take of yellow-headed blackbirds by conducting all project activities during the winter months and outside of the

breeding season of these birds. This species is present in Illinois only in the warmer months and typically migrates to the southern/southwestern United States and Mexico for the winter. Indirect effects on the species as a result of habitat disturbance are expected to be minimal. The area that will be disturbed is less than one-half acre. The project area has been planted to row crops for the past three years.

The king rail is listed as an endangered species in Illinois because of its limited distribution in the state and a sharp reduction in the number of known breeding sites compared to earlier decades. The species has no formal federal conservation status. Once considered to be a common summer resident in suitable marshes throughout the state, king rails are now only rarely encountered in Illinois.

The Illinois Natural Heritage Database includes eight element occurrence records for the king rail that are classified as extant populations. These are found at widely-scattered locations in northeast, central and south-central Illinois. The last known occurrence of breeding king rails in Mason County was in 1994.

The Department has issued one previous incidental take authorization for king rails. That authorization was for the Flanagan South pipeline constructed by Enbridge and is still in effect. The Flanagan South Pipeline right-of-way is adjacent to the Spearhead Pipeline right-of-way. Construction of the Flanagan South Pipeline is complete. No direct take of king rails is known to have occurred during the construction of that pipeline.

Enbridge intends to avoid any direct take of king rails by conducting all project activities during the winter months and outside of the breeding season of these birds. This species is present in Illinois only in the warmer months and typically migrates to the southern/southwestern United States and Mexico for the winter. Indirect effects on the species as a result of habitat disturbance are expected to be minimal. The area that will be disturbed is less than one-half acre. The project area has been planted to row crops for the past three years.

The Illinois chorus frog is listed as a threatened species in Illinois. The species has no formal federal conservation status. Illinois chorus frogs are known from areas having sandy soils in central, southwest and southern Illinois. Though the overall range of the species in Illinois is probably similar to what it has been historically, the availability of suitable habitat within that range has been reduced by conversion to agricultural uses.

The Illinois Natural Heritage Database includes 19 element occurrence records for Illinois chorus frog that are classified as extant populations. The majority of these occurrences are in counties bordering the east side of the Illinois River, ranging from Scott County in the south to Tazewell County in the north.

The Department has issued 15 previous authorizations for the incidental take of Illinois chorus frogs. These projects included road construction or upgrades, electrical transmission lines, pipelines (water and petroleum), electrical transmission lines, a landfill remediation project and others. Two of the projects for which incidental take authorizations were issued were later cancelled. Minimization and mitigation measures included excavation of shallow ponds to expand potential breeding habitat, seasonal avoidance of Illinois chorus frog breeding activity, exclusionary fencing around project sites, pre- and post-construction surveys, and financial support of research and management to benefit the species.

Direct take of Illinois chorus frogs related to this project may be unavoidable because of the fossorial habits of the species (Illinois chorus frogs spend much of the year, including the winter months, buried in sandy soils). Several phases of the project, as described above, could result in the take of Illinois chorus frogs if they are present underground in the project area. Detection and avoidance of any "buried" frogs is not feasible. Enbridge has estimated that five or fewer Illinois chorus frogs may be taken during the execution of this project.

The Department has concluded that the taking proposed herein will not reduce the likelihood of survival or recovery of the yellow-headed blackbird, king rail or Illinois chorus frog 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. This conclusion is based on the following considerations:

Yellow-headed blackbird – Enbridge's intent to complete all project activities outside of the breeding season for this species will effectively preclude any risk of direct take. Habitat loss will be minimal, if not zero, because the project site has been used for row-crop production annually since 2012 and currently includes no wetland vegetation, particularly cattails and/or bulrushes, suitable for nesting habitat and no standing water. If changes in precipitation patterns or groundwater levels result in the return of standing water to Sand Lake in 2015 or subsequent years, wetland plant species will likely become reestablished in the project area and serve as potential nesting habitat.

King rail – Enbridge's intent to complete all project activities outside of the breeding season for this species will effectively preclude any risk of direct take. Habitat loss will be minimal, if not zero, because the project site has been used for row-crop production annually since 2012 and currently includes no wetland vegetation suitable for nesting habitat and no standing water. If changes in precipitation patterns or groundwater levels result in the return of standing water to Sand Lake in 2015 or subsequent years, wetland plant species will likely become reestablished in the project area and serve as potential nesting habitat.

Illinois chorus frog – Any excavation and soil stockpiling within the known breeding range of the Illinois chorus frog presents some risk of taking frogs that are within the soil. Research has shown that Illinois chorus frogs can disperse up to 0.9 km (0.56 mile) from breeding ponds to habitats suitable for burrowing. Information on the density and depth at which Illinois chorus frogs may be present in the soil is not available. Sand Lake is a documented breeding site for this species and aquatic habitat suitable for breeding of Illinois chorus frogs may have been present at Sand Lake in 2011. In 2012, 2013, and 2014, the Sand Lake basin was dry and used for row-crop production. Some small areas of standing water and wetland vegetation were observed by biologists contracted by Enbridge in July 2014. Mortality rates and life expectancy of adult Illinois chorus frogs are unknown (it is known that mortality of eggs, tadpoles and newly-metamorphosed froglets can be very high), but it is reasonable to presume that each year in which breeding habitat is not available results in a reduction in the number and density of frogs in the immediate vicinity of Sand Lake. Mortality above natural rates may have resulted from cultivation of the Sand Lake basin for three consecutive years. It is unknown how many Illinois chorus frogs will be present within the 0.44-acre area that will be directly affected by this project. Based on the limited life history information available for this species, Enbridge’s estimate of the take of five or fewer Illinois chorus frogs appears adequate. This level of take does not represent the loss of a significant portion of the population of Illinois chorus frogs in the Illinois River valley.

Habitat effects of this project will be minimal. The small area (0.44 acre) that will be included in the construction site is not a significant portion of the overall Sand Lake site. Disturbance of the construction site will be temporary, with plans to allow revegetation by natural processes or by planting suitable species, depending on the water level at the site. If increased precipitation and/or a rise in the water table results in the presence of standing water at Sand Lake in 2015 or subsequent years, it is anticipated that suitable breeding habitat for the Illinois chorus frog will again be present. The intermittent nature of the presence of aquatic habitat at Sand Lake is well documented throughout recent decades.

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 Enbridge indicates Enbridge’s 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 Enbridge’s request for authorization of incidental take was published in the Breeze-Courier (official state newspaper) on December 23, 2014, and in the Mason County Democrat on December 24 and 31, 2014; and January,

6, 2015. A copy of the conservation plan was deposited at Havana Public Library, where it was available for public review. The deadline for public comment was February 5, 2014. No comments were received from the public.

Authorization

It is the determination of the Department that the measures that will be implemented by Enbridge will adequately minimize and mitigate the anticipated taking of yellow-headed blackbird, king rail and Illinois chorus frog incidental to activities associated with the excavation of a section of the existing Spearhead Pipeline in Mason County, Illinois for the purpose of investigating and performing any required maintenance on the pipeline segment. Further, the Department has concluded that the take authorized herein will not reduce the likelihood of survival or recovery of the yellow-headed blackbird, king rail or Illinois chorus frog 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 Enbridge 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 applicant under Compliance condition #2 above:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of two (2) 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 Enbridge has failed to comply with any of these terms and conditions or has been responsible for the taking of yellow-headed blackbird, king rail or Illinois chorus frog beyond that which is incidental to activities associated with the excavation of a section of the existing Spearhead Pipeline in Mason County, Illinois for the purpose of investigating and performing any required maintenance on the pipeline segment.
2. The effective period of this authorization may be altered by mutual written agreement between Enbridge 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. The Department reserves the right of entry to inspect potential habitat and species management practices.
5. Enbridge shall notify the Department's Endangered Species Program of commencement of the maintenance project.
6. All personnel working in the vicinity of the project shall receive educational materials regarding the sensitive ecological context of the project. Materials will include identification information on the potentially impacted State-listed species, protected status of the species, response protocol for when the species is encountered, live or dead, and explanation of environmental restrictions. A copy of the educational materials shall be provided to the Department. The Department shall be informed of any sighting of State-listed species and provided location information within 48 hours.
7. The Department shall accept the mitigation and post-project monitoring requirements associated with Incidental Take Authorization #99 – Enbridge Flanagan South Pipeline Project, signed on July 29, 2013; as partial mitigation for the currently proposed maintenance. The Flanagan South Pipeline Project occurred within a parallel footprint to the proposed Spearhead Pipeline maintenance, however the currently proposed maintenance actions were not considered at the time that the earlier Incidental Take Authorization was issued.
8. Enbridge shall utilize their Spearhead Pipeline excavation work to provide the Department with data on the density and depth of any Illinois chorus frogs located at this Illinois Natural Areas Inventory site. Sandy soil samples of at least one cubic yard shall be collected at varying depths (i.e. 2 feet, 4 feet, 6 feet, and 8 feet) and sifted by a qualified biologist (who holds a current IDNR Endangered Species Permit) to locate any Illinois chorus frogs. Replication of each depth sampling at four randomly chosen locations within the dig site is preferred with 16 total samples. Enbridge shall provide the Department with a report detailing their methods and findings within 60 days. If Illinois chorus frogs are encountered during excavation, Enbridge or their biological consultant shall immediately contact the IDNR District Natural Heritage Biologists for this area at (217)784-4730 and (309)446-9181, for retrieval.
9. Within 60 days of project completion, Enbridge shall provide the Department with a project report summarizing actions, best management practices utilized, adaptive management issues, and all encounters with any State-listed species.
10. Documentation, including maps, shall be submitted to:

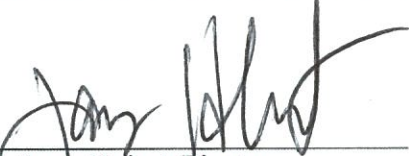
Illinois Department of Natural Resources
Endangered Species Program – Incidental Take Authorization Coordinator
One Natural Resources Way
Springfield, IL 62702-1271

(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.

11. The Enbridge official identified below is authorized to execute this agreement. Execution by Enbridge indicates acceptance of all terms and conditions described in this authorization.
12. The execution of this agreement does not waive or excuse the responsibilities of Enbridge 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:



Dr. James Herkert, Director
Office of Resource Conservation

2-24-15

Date

*For CCPS Transportation, LLC
(Enbridge):*



Lawrence J. Stock
Senior Manager

2/24/15

Date