



# 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 North Morgan Water Coop (hereinafter referred to as NMWC) for the incidental take of the State-threatened Illinois Chorus Frog (*Pseudacris illinoensis*) and the State-threatened Plains Hog-nosed Snake (*Heterodon nasicus*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that the taking is incidental to activities associated with the installation of one of the nine segments of the water main extension known as part the Willow Creek Phase in Morgan and Cass Counties, Illinois.

### **Procedural History**

The Department received a Conservation Plan prepared by NMWC on November 14, 2019, as a request for authorization for the incidental take of Illinois Chorus Frog and Plains Hog-nosed Snake. Additional information was requested by the Department on January 27, 2020 and August 24, 2020, to make the Conservation Plan complete as prescribed by 17 Ill. Adm. Code 1080.10. Additional information was received by the Department on June 5, 2020, and October 27, 2020. The final conservation plan was approved by the Department on November 19, 2020. 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 to install water main extensions that will serve portions of Morgan and Cass Counties with a safe and reliable source of potable water. The improvements include a water main, water services, and the related appurtenances. In total nine (9) segments will be installed. However, this authorization contemplates installation of only the following one (1) segment of water main:

**Segment 1:** Sections 26-35 T-17-N, R-12-W Cass County; Sections 1, 2, 11, & 14, T-16-N, R-13-W, and Sections 2-6, 8, & 9, T-16-N, R-12-W, Morgan County.

The water main will be trenched in below grade with a minimum of 48 inches of cover, with up to 60 inches possible. The maximum trench width is 24 inches, with 12 inches being average. The construction will require a maximum 20-foot right-of-way near or within suitable habitat of the species. Road crossings and creeks will be directionally-bored. Some brush clearing will be required.

Take of Illinois Chorus Frog and Plains Hog-nosed Snake could occur as a result of crushing or burying by project traffic or heavy machinery during construction, and/or dispersal from suitable habitat due to increased noise and/or vibration.

Total estimated area of impact within suitable species habitat is **37.6 acres**. The Department concurs that the take of Illinois Chorus Frog and Plains Hog-nosed Snake that could result from the proposed project is not the purpose of NMWC'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 measures were included in NMWC's conservation plan.

To meet the "maximum extent practicable" standard, additional minimization and/or mitigation measures may be required beyond those proposed by NMWC, based on the life history needs of the Illinois Chorus Frog and Plains Hog-nosed Snake. **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.

This project is being funded by the Rural Development Water Loan & Grant program, which provides funding for clean and reliable drinking water in rural areas. There are adequate funds to carry out all aspects of the Conservation Plan.

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 are a part, or the habitat essential to the species' existence in Illinois:

**Illinois Chorus Frog (*Pseudacris illinoensis*)** is an Illinois state-threatened amphibian species.

**Habitat:** The Illinois Chorus Frog is found in areas of sandy soil. The frogs spend most of the year buried 4-8 inches below the surface, emerging in February or March only to move to ephemeral ponds where they mate and lay their eggs. The

species may intermittently burrow during the day in breeding season. They locally migrate to underground burrows in June.

**Distribution:** The current range of the species is similar to its historic range, but the abundance of the species within that range has diminished. Illinois Chorus Frogs also occur in parts of Missouri and Arkansas.

**Reproduction:** Illinois Chorus Frogs will emerge from their burrows and migrate up to 0.9 kilometers to ponds. Males will call to attract females. They will mate and lay eggs in several clusters of 10-40 eggs. Clutches of 400-700 eggs in total are attached to the underside of submerged vegetation. The species' life span is typically 2-3 years.

**Population:** Illinois Chorus Frogs are declining due to habitat loss caused by the draining of breeding sites for development, chisel-plow cultivation, and road mortality during migration to and from breeding sites.

**Range in Illinois:** Illinois Chorus Frogs are found at scattered locations in central, southwest, and extreme southern portions of Illinois. They have been observed in 10 of 102 counties, including Alexander, Cass, Madison, Mason, Morgan, Menard, Scott, Pulaski, Pike, and Tazewell Counties. There are currently 15 extant (within last 10 years) Element Occurrence Records for Illinois Chorus Frog in the Illinois Natural Heritage Database.

**Incidental Take Authorizations:** The Department has 27 previously issued or pending Incidental Take Authorizations for Illinois Chorus Frog. This is the twelfth authorization to be granted for the potential take of Illinois Chorus Frog in Morgan County and/or Cass County.

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**Plains Hog-Nosed Snake (*Heterodon nasicus*)** is an Illinois State-threatened snake species.

**Habitat:** Plains Hog-Nosed Snakes inhabit prairies, sandhills, and semi-agricultural areas with sandy or gravelly soils. They are active from April to October and overwinter in burrows.

**Distribution:** Their overall range covers most of the central United States. They can be found as far north as Canada, extending south to northern Texas.

**Reproduction:** Mating occurs in the spring and eggs are laid in July. Females lay clutches of 3-23 eggs each year or every other year. Plains Hog-Nosed Snakes are sexually mature in their second year.

**Population:** Plains Hog-Nosed Snakes are at risk from habitat loss or degradation. Conversion of prairie habitat to agriculture has been a main cause of decline.

**Range in Illinois:** They are found in northwestern Illinois and in some eastern counties. Plains Hog-Nosed Snakes have been observed in 8 of 102 Illinois counties including Carroll, Cass, Henry, JoDaviess, Lee, Mason, Morgan, and Whiteside. There are currently 10 extant (within the last 10 years) Element Occurrence Records for Plains Hog-Nosed Snakes in the Illinois Natural Heritage Database.

**Incidental Take Authorizations:** The Department has seven previously issued or pending Incidental Take Authorizations for Plains Hog-Nosed Snakes. This is the first authorization to be granted in Morgan County and the second in Cass County. Previous authorizations were for landfill recap, road improvement, and wind farm construction.

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Based on the amount of habitat impacted by this project, the number of known occurrences of the Illinois Chorus Frog and Plains Hog-nosed Snake 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 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 these 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 NMWC 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 NMWC's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on November 19, 2020. The notice was also published in *The Source* on November 19, November 26, December 3, and December 10, 2020. A notice of the location where the hard copy of the Conservation Plan could be reviewed was posted at the MC River Valley Public Library. The deadline for public comment was January 9, 2021. No comment was received from the public.

### Authorization

It is the determination of the Department that the measures that will be implemented by NMWC will adequately minimize and mitigate the anticipated taking of Illinois Chorus Frog and Plains Hog-nosed Snake associated with the construction of the Willow Creek Phase water main extension in Morgan and Cass Counties, Illinois. Further, the Department has concluded that the taking authorized herein 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.

All terms and conditions included in the aforementioned conservation plan submitted by NMWC 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 NMWC 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 NMWC has failed to comply with any of these terms and conditions or has been responsible for the taking of the Illinois Chorus Frog and Plains Hog-nosed Snake, beyond that which is incidental to activities associated with the Willow Creek Phase of water main construction in Morgan and Cass Counties, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between NMWC 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 Illinois Chorus Frog and Plains Hog-nosed Snake; 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; and response protocol if individuals are found, including the chain of response personnel. **NMWC 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. Biological consultants employed by NMWC 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, Herptile Scientific Permit as authorized under 17 Illinois Administrative Code 885, and an IDNR Endangered Species Permit as authorized under 17 Illinois Administrative Code 1070. Gloves shall always be worn when handling any species and properly disinfected or discarded between individuals.
7. NMWC shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of the water line construction in Morgan and Cass Counties. A **project status report** shall be submitted to the Department **within 90 days following completion** summarizing the implementation of minimization, mitigation, and restoration measures and evaluating the effectiveness 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.

8. 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).
9. NMWC shall conduct, or cause to be conducted, the following pre-construction, construction, or post-construction efforts:
  - a. Trenches shall be backfilled the same day.
  - b. In the case of unforeseen circumstances, any open trench shall be covered for the night and inspected the next morning before construction activities resume.
  - c. If wetlands holding water at the time of installation are encountered, then directional boring shall be used.
  - d. Equipment shall remain within the 20-foot-wide right-of-way when work is occurring within suitable species habitat.
  - e. Only the amount of water main materials that can be installed within 48 hours shall be strung along the project route prior to installation.
  - f. Post-construction, all disturbed areas shall be restored using the Illinois Department of Transportation's Class 2 Roadside Mixture 7 with the exception of agricultural lands intended to be returned to crops.
10. NMWC shall conduct, or cause to be conducted, post-construction surveys for Illinois Chorus Frog and Plains Hog-nosed Snake during the species' active period and in the vicinity of the water line extension following construction completion.
  - a. All Illinois Chorus Frog surveys shall be coordinated with the Department's survey efforts for this species in the same area.
  - b. Post-construction calling surveys for Illinois Chorus Frogs targeting all ponds within 0.3 miles of construction (i.e. where landowner permission is granted, and/or where ponds are within 100 ft. of public roads) for two (2) of the five (5) years post-construction. If rainfall is substantially lower than average, NMWC will confer with the Department about postponing surveys to a year with better conditions to evaluate the presence of the Illinois Chorus Frog.
  - c. Illinois Chorus Frog call surveys shall be performed during early spring of the after construction. Nighttime audible call surveys shall be performed by qualified contractors at least 30 minutes after sunset, and end by midnight, during active breeding season (late February to late March, generally, but calls in local areas may only last approximately two weeks). Surveys shall be conducted when the temperature is above 32° F and wind speed is below 18 miles/hour with a lack of heavy rainfall. Listening posts shall be targeted as provided above in (a.). *Illinois Chorus Frog survey data sheets shall reflect date, location, time, air temperature, humidity, wind speed, moon visibility, precipitation, number of minutes at each listening post (no less than fifteen minutes), number of cars that passed, other human-caused noise, water presence/absence, and a notation of whether the call emanates from within the watermain project boundary or outside (note direction). Mapping of all ephemeral wet areas potentially utilized by Illinois Chorus Frogs in the survey area shall be provided to the Department with notations on depth of water and presence/absence of emergent vegetation and tadpoles, if accessible.*

- d. **A study plan including specific survey methods will be submitted to IDNR prior to the start of the survey and the survey will be conducted within the first half of the permit term.**

**A report including, but not limited to, the survey methodology utilized for each species, area covered and time duration, a description and map of each habitat surveyed, the number of individuals located, the estimated life stage of each individual encountered (juvenile/adult) if possible, and a map of the species locations shall be provided to the Department within 90 days of survey completion.**

11. NMWC shall conduct, or cause to be conducted, post-construction surveys for Plains Hog-nosed Snake during the species' active period and in the vicinity of the water line extension following construction completion.
  - a. Post-construction surveys for Plains Hog-Nosed Snake shall occur during the height of active season within or adjacent to the project area in Year 1 following completion of construction. The surveys will utilize a combination of visual encounter surveys and snake boards, and will be conducted on private or state-owned property that contains highly suitable habitat.  
**A study plan including specific survey methods will be submitted to IDNR prior to the start of the survey and the survey will be conducted within the first half of the permit term.**

**A report including, but not limited to, the survey methodology utilized for each species, area covered and time duration, a description and map of each habitat surveyed, the number of individuals located, the estimated life stage of each individual encountered (juvenile/adult) if possible, and a map of the species locations shall be provided to the Department within 90 days of survey completion.**

12. Mitigation to the maximum extent practicable is required by the Act. NMWC shall submit mitigation to the Illinois Department of Natural Resources - Illinois Wildlife Preservation Fund in the amount of **\$1,929 within 90 days of execution of this agreement**. The mitigation will be earmarked to bring conservation benefit to the Illinois Chorus Frog and Plains Hog-nosed Snake. 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.ITAcordinator@illinois.gov](mailto: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.

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

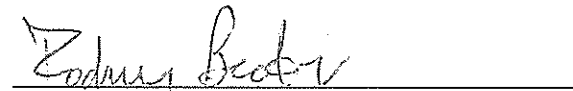
15. The execution of this agreement does not waive or excuse the responsibilities of NMWC to comply with other Federal, State, or local regulations, including but not limited to obtaining any required permits for the execution of this project.

*For the Illinois Department of Natural Resources:*

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

9/13/2021  
\_\_\_\_\_  
Date

*For North Morgan Water Coop:*

  
\_\_\_\_\_  
Mr. Rodney Becker  
President

9-9-2021  
\_\_\_\_\_  
Date