



# 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 Nicor Gas (hereinafter referred to as Nicor) for the incidental take of the State-endangered yellow-headed blackbird (*Xanthocephalus xanthocephalus*), common gallinule (*Gallinula galeata*), Blanding's turtle (*Emydoidea blandingii*), and the State-threatened slippershell (*Alasmidonta viridis*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that the taking is incidental to activities associated with the replacement of the Nicor Gas (Dubuque Line) Pipeline in Kane County, Illinois.

### **Procedural History**

The Department received a conservation plan prepared by Applied Ecological Services, Weaver Consultants Group, and Nicor on May 22, 2017, as a request for authorization for the incidental take of the yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell. The Department requested additional information on June 13, 2017, to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on June 15, 2017. The Department again requested additional information on June 30, 2017. A conservation plan was approved by the Department on July 7, 2017. 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 replacement of 8 miles of 22" pipe with 30" pipe along the Nicor Dubuque Line carrying natural gas between Hampshire and the west side of Elgin, Kane County, Illinois. The pipeline right-of-way traverses across two Forest Preserve District of Kane County preserves, Burnidge and Hampshire. Pipeline replacement activities involve one of three methods: Open Cut method includes trench excavation, placement of impermeable dam structures if water is encountered, pump dewatering into filter bags, release of clear effluent; OR Conventional Boring method includes excavation at each side of an obstacle and utilization of an auger to remove soil under the obstacle to create a void for pipe installation; OR

Horizontal Directional Drilling method includes excavation of a bore pit on either side of an obstacle, utilization of a drill rod to produce a pilot hole, reaming out a void, utilization of drilling fluid to aid in holding the void open to pull the pipe through. New pipe will be buried with at least 5 feet of cover. Total area of impact to species habitat is estimated to be **5.929 acres**.

Take of the yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell could occur as a result of dispersal from preferred habitat due to the use of heavy equipment; destruction of nests or suitable habitat; being crushed or smothered by equipment, construction vehicles, or during excavations; and/or sedimentation or contamination from potential frac-out. Disturbance from noise and vibration could have an adverse effect on some life history stage of the birds, turtles, and mussels (and their associated host fishes).

The take of yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell that could result from this project is not the purpose of Nicor'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 minimization and mitigation measures were included in NICOR's conservation plan.

To meet the "maximum extent practicable" standard, additional minimization and/or mitigation measures may be required beyond those proposed by Nicor, based on the life history needs of the yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell. **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:

Nicor states that they have a Senior Management-approved Authorization for Expenditure and that the project is accounted for in Nicor Gas' 2017 Capital Budget. Nicor will fully commit the financial resources to support all minimization and mitigation activities described in the conservation plan. Nicor understands that if any additional activities are planned at the work location that may affect the yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell, or other endangered or threatened species, coordination with the Department will be required.

It is the Department's opinion that Nicor'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 are a part, or the habitat essential to the species' existence in Illinois:

The **yellow-headed blackbird** is an Illinois State-endangered migratory bird species. They are typically found breeding in freshwater marshes. During the migratory months they are seen in cultivated land, pastures and fields. Yellow-headed blackbirds breed in central/western United States as well as Canada. Their migratory path goes through all of Illinois and many south-central states. They winter in Mexico. They are often seen foraging or migrating with other blackbird species.

Yellow-headed blackbirds nest in colonies in marshes. Males will select a territory, defend it against rivals, and have several mates. Nests are placed within the marsh and attached to vegetation firmly (cattails and reeds). Nests are built by females from aquatic plants, forming a deep cup. Their clutch size is 3-5 pale green or pale grey eggs with brown or grey spots. Females will incubate the eggs for 11-13 days. Both parents will feed the hatchlings. They leave the nest after 9-12 days, but will remain in the dense marsh plants until they are ready to fly (14-21 days). Parents typically have 1 brood a year.

Yellow-headed blackbird populations are declining due to habitat loss and degradation. Draining of marshes has impacted the population in some areas. Much of their diet consists of grains and weed seeds in crop fields, which can expose them to pesticides. Regional estimates indicate that populations are declining, with fewer sightings being documented.

Yellow-headed blackbirds are found breeding in wetlands in northeastern Illinois. They are also seen migrating throughout the entire state. Yellow-headed blackbirds have been observed breeding in 6 of 102 Illinois counties, including Cook, DuPage, Kane, Lake, McHenry, and Putnam. There are currently 20 extant Element Occurrence Records for yellow-headed blackbirds in the Illinois Natural Heritage Database. The Department has issued 2 pending or previously issued Incidental Take Authorizations for yellow-headed blackbird. Both projects were pipelines. Previous authorizations required applicants to conduct presence/absence surveys, avoid work during breeding season, limit wetland soil compaction by utilizing low ground pressure equipment, use matting to decrease soil compaction, minimize staging and work space near habitat, maintain wetland hydrology, control erosion, and provide compensatory mitigation to support conservation benefit to the species. This is the first authorization to be granted for yellow-headed blackbird in Kane County.

In April 2017, a Habitat Suitability Assessment was performed along the entire project corridor identifying suitable habitat for the four listed species in the

project area. The assessment ranked habitat value according to its suitability for each of the species. Biologists ground-truthed each potential habitat area and collected data. Pre-construction surveys did not detect the yellow-headed blackbird using wetlands within the project area. Habitat impact estimates and take estimates were derived from the assessment. Nicor estimates the potential take of 3-9 yellow-headed blackbirds as a result of this project.

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The **common gallinule** is an Illinois State-endangered bird species. They are found in forested, herbaceous or scrub-shrub wetland habitats. They favor marshes with still or slow-moving water. Most are migratory and spend the breeding season in the United States (east of the Rocky Mountains) and winter in Central America. Others are non-migratory and will be found year-round in the southern United States.

The common gallinule nests in marsh plants over water or next to water. Nests are platforms made from cattails, bulrushes, and reeds. Both sexes will build nests and incubate eggs. They lay clutches of 4-17 (mostly commonly 7-12) eggs that are buff with brown spots. The incubation period of the common gallinule eggs is 18-21 days. Young can swim well shortly after hatching. Young are tended by both parents or a sibling from an earlier brood. They find their own food independently by 5 weeks and can fly in 6-7 weeks. The species has 1-2 broods each year.

Common gallinule populations are declining due to habitat loss and degradation. Regional estimates indicate that populations are declining, with fewer sightings and breeding being documented.

Common gallinules, a breeding resident of Illinois, are found throughout the state from April to October. After which they migrate to Central America for the winter. Common gallinules have been observed breeding in 10 of 102 Illinois counties, including Cook, DuPage, Fulton, Kane, Lake, Lee, Massac, McHenry, Monroe, and Putnam. There are currently 19 extant Element Occurrence Records for common gallinules in the Illinois Natural Heritage Database. The Department has issued 1 previous Incidental Take Authorization for common gallinule. The previous project was a transmission line. The project applicant avoided impact to wetlands, conducted surveys, employed a biological monitor to survey for nests, and controlled erosion near suitable habitat. This is the first authorization to be granted for common gallinule in Kane County.

In April 2017, a Habitat Suitability Assessment was performed along the entire project corridor identifying suitable habitat for the four listed species in the project area. The assessment ranked habitat value according to its suitability for each of the species. Biologists ground-truthed each potential habitat area and collected data. Pre-construction surveys did not detect the common gallinule using wetlands within the project area. Habitat impact estimates and take

estimates were derived from the assessment. Nicor estimates the potential take of 1-2 common gallinules as a result of this project.

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The **Blanding's turtle** is an Illinois State-endangered semi-aquatic turtle species. They can be found in water bodies such as creeks, marshes, and ponds that are adjacent to sandy upland areas. They spend most of their time in water, though they are known to sometimes leave the water to travel between ponds and for females to lay eggs. Blanding's turtles enter a period of dormancy during the winter, during which they remain buried in the muddy bottoms of deep marshes, backwater pools, and streams.

Blanding's turtles are long-lived, not reaching sexual maturity until 14-20 years old. Mating likely occurs in April or early May, and nesting takes place from early June to early July. Eggs are typically laid in well-drained, sandy soil in a sunny upland area, and females may travel up to a mile over land to their nesting location. Clutch sizes are varied, ranging from 10-26 eggs per nest, and females only lay one clutch of eggs per year. Since nests are typically far from water, hatchlings must travel long distances after emerging from their nest, subjecting them to increased threat of predation, road mortality, and desiccation.

The decline of Blanding's turtle populations can be largely attributed to habitat loss and degradation. With high levels of egg and juvenile mortality and low reproductive potential, Blanding's turtle populations have had difficulty recovering. There are several captive breeding programs for this species in Illinois making efforts to supplement the wild populations.

Blanding's turtles are most often found in northern Illinois and sporadically found throughout the central part of the state. They have been found in 18 of 102 counties. There are 89 extant Element Occurrence Records for Blanding's turtles in the Illinois Natural Heritage Database. The Department has issued 20 previous Incidental Take Authorizations for Blanding's turtles. Previous projects included residential or commercial developments, highway and bridge construction, wind energy facilities, the construction of an athletic field, and the construction and maintenance of electrical lines. Mitigation actions required in previous authorizations included habitat restoration and management, the construction of artificial nesting berms, the installation of exclusionary curbing and fencing, the placement of critical habitat into conservation easements, and monetary support of future Blanding's turtle research and habitat restoration. This is the third authorization granted for the potential take of Blanding's turtles in Kane County.

In April 2017, a Habitat Suitability Assessment was performed along the entire project corridor identifying suitable habitat for the four listed species in the project area. The assessment ranked habitat value according to its suitability for each of the species. Biologists ground-truthed each potential habitat area and collected data. No soils with a sandy component suitable for nesting were found

in the project footprint. Habitat impact estimates and take estimates were derived from the assessment. Nicor estimates the potential take of 3-10 Blanding's turtles as a result of this project.

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The **slippershell** mussel is an Illinois State-threatened mussel species. It is predominantly found in small to medium-sized creeks and headwaters of rivers in areas with flowing water, but has also been found in larger rivers and lakes. It is known to prefer sand, mud, or fine gravel substrates.

Little is known about slippershell reproduction. With mussels in general, there are separate male and female individuals. Sperm is released by the male into the water. The sperm enters the female through the incurrent siphon. After fertilization, the eggs develop into the larval stage called glochidia. Slippershells are typically long-term brooders, with females flushing oxygen-rich water over the developing glochidia in their gills for a year before release. Once released, the glochidia temporarily parasitize a fish host, attaching themselves to the fish's fins or gills. Glochidia require a specific fish host and eventually dropping off to the bed of a waterbody. Slippershell host fish include banded sculpin (*Cottus carolinae*), mottled sculpin (*Cottus bairdii*), and johnny darter (*Etheostoma nigrum*).

Slippershell populations have declined due to habitat degradation, poor water quality, increased siltation and pollution, and impacts from invasive zebra mussels (*Dreissena polymorpha*).

In Illinois, slippershells have been found in the Sangamon, Embarras, Vermilion, Mackinaw, and Kishwaukee River basins, primarily in creeks and tributaries within the rivers' drainages. They have been found in 19 of 102 Illinois counties. There are currently 69 extant Element Occurrence Records for slippershell mussels in the Illinois Natural Heritage Database. The Department has issued 20 previous Incidental Take Authorizations for slippershell. Types of projects included bridge removal and construction/replacement, pipeline construction, and creek re-meandering. Previous authorizations required applicants to conduct presence/absence surveys, relocate mussels from the project footprint, keep equipment out of the water, control erosion, and provide compensatory mitigation to support conservation benefit to the species. This is the fourth authorization granted for the potential take of slippershell in Kane County.

In April 2017, a Habitat Suitability Assessment was performed along the entire project corridor identifying suitable habitat for the four listed species in the project area. The assessment ranked habitat value according to its suitability for each of the species. Biologists ground-truthed each potential habitat area and collected data. Habitat impact estimates and take estimates were derived from the assessment. Nicor estimates the potential take of 1-8 slippershell mussels as a result of this project.

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Based on the amount of habitat impacted by this project, the number of known occurrences of the yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell, an assessment of the potential effect of this project on individuals 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 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:

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 Nicor 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 Nicor's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on July 10, 2017, and in the *Daily Herald* on July 10, 17, and 24, 2017. A copy of the conservation plan was deposited at the Elgin Public Library, where it was available for public review. The deadline for public comment was August 23, 2017. No comments were received from the public.

#### Authorization

It is the determination of the Department that the measures that will be implemented by Nicor will adequately minimize and mitigate the anticipated taking of yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell incidental to activities associated with the replacement of the Nicor Gas (Dubuque Line) Pipeline in Kane County, Illinois. Further, the Department has concluded that the take 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. Additional listed species may inhabit the pipeline replacement footprint, **this agreement does not authorize take of any species except the yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell.**

All terms and conditions included in the aforementioned conservation plan submitted by Nicor 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 Nicor 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 Nicor has failed to comply with any of these terms and conditions or has been responsible for the taking of yellow-headed blackbird, common gallinule, Blanding's turtle, and slippershell beyond that which is incidental to activities associated with the replacement of the Nicor Gas (Dubuque Line) Pipeline in Kane County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between Nicor 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 is non-transferable.
4. All on-site personnel shall be educated on the sensitive biological resources in the area, the identification of 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, and the importance of avoiding take of the species. Nicor 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 Nicor 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 and an IDNR Endangered Species Permit.
7. Nicor shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of the replacement of the Nicor Gas (Dubuque Line) Pipeline within the permit coverage area. 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 including any relocations, description of any injuries or mortalities, and the disposition of any individuals that were injured or killed.

8. Any discoveries of additional listed species beyond those identified in this agreement shall be reported to the Department within 48 hours accompanied by location information (photograph, map, and GPS coordinates).
9. Nicor shall conduct, or cause to be conducted, the following pre-construction or construction efforts:
  - a. Erosion and sediment control measures shall be implemented in all areas affected by activities. Disturbance of vegetation shall be minimized to prevent erosion and sedimentation.
  - b. A qualified biologist shall be present during construction in potential habitat areas to search for species and relocate to suitable habitat, preferably under conservation protection, as necessary.
  - c. Soil will be segregated and stockpiled for restoration to original profiles.
  - d. Prior to construction, survey-grade profiles of the site will be established so the site can be restored to pre-existing profiles.
  - e. All disturbed areas shall be seeded or otherwise stabilized upon completion of construction activities.
  - f. Exclusionary fencing shall be utilized at trenches and excavations within areas of suitable habitat and shall be inspected daily for disrepair and/or trapped species.
  - g. All staging of materials shall take place in an upland area. Upland areas shall be accessed through unsuitable or marginal habitat.
  - h. No construction debris shall be deposited into the stream channel. All excavated material shall be removed from the channel and disposed in an upland location. There shall be no temporary stockpiling of excavated material in the channel.
  - i. After construction completion, the excavations shall be backfilled using the existing substrate, ensuring placement of the top substrate layer back on top of the excavation.
  - j. Impermeable dam structures may be installed upstream and downstream of the trench should water be present in a drainage feature at the time of a proposed activity to facilitate construction. Any pumped water will be filtered and released downstream via overland flow through vegetation. The effluent shall be visually clear and released at a non-erosive velocity, otherwise a settling structure shall be utilized.
10. The salvage and relocation of non-listed mussels is hereby authorized by the Department with signature of this agreement per the Illinois Fish and Aquatic Life Code (515 ILCS 5/1-150).
11. Nicor shall conduct, or cause to be conducted, post-construction monitoring for yellow-headed blackbird and common gallinule during Year 2 following project completion utilizing point count surveys within all potential habitat areas that were disturbed during the project. **A report including, but not limited to, the survey methodology utilized**

**and a map of the species locations shall be provided to the Department within 90 days of completion of each survey.**

12. Nicor shall conduct, or cause to be conducted, post-construction monitoring for Blanding's turtle during Year 1 and Year 2 following construction completion utilizing visual time and area constraint searches, basking searches, and nesting/habitat searches. Monitoring will occur within all potential habitat areas that were disturbed during the project. Any Blanding's turtles encountered at any time during the project or during post-construction searches shall be scanned for microchips; if none exist, a microchip will be inserted in the individual, and tracking data shall be collected. **A report including, but not limited to, the survey methodology utilized, number of turtles located (noting any microchipped individuals), the estimated age of each individual sampled, and a map of the species locations shall be provided to the Department within 90 days of completion of each survey.**
13. Nicor shall conduct, or cause to be conducted, post-construction monitoring for slippershell presence/probable absence in Tyler Creek when water temperatures are above 50° Fahrenheit during Year 2 following construction completion. **A report including, but not limited to, the survey methodology utilized, water temperature, species and numbers of mussels located, the age class ( $\leq 5$  or  $> 5$ ) of each individual sampled indicating whether recruitment is evident, and a map of the species locations shall be provided to the Department within 90 days of completion of the survey.**
14. Nicor shall conduct, or cause to be conducted, post-construction vegetation monitoring during Year 2 and Year 5 following construction completion or until performance standards have been met. Reports on vegetation progress shall be provided to the Department by December 31 of Year 2 and Year 5.
15. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization are as follows:
  - a. In lieu of onsite mitigation, Nicor shall spend **\$150,000.00** on habitat restoration in Forest Preserve District of Kane County's preserves that will benefit Blanding's turtle, yellow-headed blackbird, and common gallinule.
  - b. Nicor shall commit **\$100,000** to the Forest Preserve District of Kane County to contribute to their collaboration with the Urban Stream Research Center (Forest Preserve of DuPage County) efforts to research and perform slippershell mussel propagation.
  - c. The \$100,000 donation shall be provided to the recipient facility and habitat restoration shall begin **within 90 days of execution of this agreement**. Mitigation payments are nonrefundable, including events of revocation or termination. Proof of donation must be provided to the Department.

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

16. 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](mailto: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.

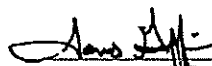
17. The Nicor official identified below is authorized to execute this agreement. Execution by Nicor indicates acceptance of all terms and conditions described in this authorization.

18. The execution of this agreement does not waive or excuse the responsibilities of Nicor 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 Nicor Gas:*

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

  
\_\_\_\_\_  
Mr. James Griffin  
Vice President of Operations

9/15/17  
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Date

9/8/2017  
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Date