ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Illinois Department of
Natural Resources

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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 the Illinois Department of Natural Resources, Division of Wildlife Resources (hereinafter referred to as IDNR-Wildlife) for the incidental take of the great plains rat snake (*Pantherophis emoryi)*, timber rattlesnake (*Crotalus horridus)*, and eastern narrowmouth toad (*Gastrophryne carolinensis*). The Illinois Department of Natural Resources, Division of Natural Heritage (hereinafter referred to as the Department) has determined that this taking is incidental to activities associated with levee and water level control structure repairs at Kidd Lake Marsh State Natural Area in Monroe County, Illinois.

Procedural History

The Department received a conservation plan from IDNR-Wildlife on May 13, 2014, as a request for authorization for the incidental take of the great plains rat snake, timber rattlesnake, and eastern narrowmouth toad. On May 19, 2014, the Department requested additional information from IDNR-Wildlife to make the conservation plan complete as prescribed by 17 Ill. Adm. Code 1080.10. That additional information was received by the Department on May 27, 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 which must be satisfied for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criterion are listed below.

1. The taking will not be the purpose of, but will be only incidental to, the carrying out of an otherwise lawful activity:

   The stated and apparent purpose of this proposed action is to repair levees and water control structures at Kidd Lake Marsh State Natural Area in Monroe County, as described in the conservation plan. The repairs will include removal of borrow material from 15 acres within the wetland basin to rebuild 4,000 linear feet of levees that will also be armored with rip-rap. Take may result from traveling the levee with heavy equiptment, placing of soil and rock on levees, or removal of borrow material. The Department concurs that the take of great plains rat snake, timber rattlesnake, and eastern

narrowmouth toad that could result from this project is not the purpose of IDNR-Wildlife'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:

   The conservation plan prepared by IDNR-Wildlife describes measures that will be taken to avoid, minimize, and mitigate the potential adverse effects of the project on the great plains rat snake, timber rattlesnake, and eastern narrowmouth toad. All work will be conducted late in the summer or in the fall (e.g., August through November) when the wetland will be mostly dry to minimize impact to habitat and species. A biologist will be present periodically to monitor construction activity impacts and relocate any individuals encountered. Drift fences will be installed in close proximity to construction areas to preclude listed species from entry or reentry after being removed. Construction work will take place on 15 acres of wetland and 2,500 linear feet of levee and will improve 200 acres of wetland habitat.

   It is the opinion of the Department that these measures, along with any additional terms and conditions listed in the Authorization section of this document will, to the maximum extent practicable, minimize and mitigate the impact caused by the potential taking.

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

   Funding for this project came from the Illinois Migratory Waterfowl Stamp Fund. This fund has an annual budget of approximately $500,000 to spend on habitat projects related to wetland habitat in Illinois. Should this project require additional funds, an application could be made to the Duck Stamp Committee to approve more funds to cover the costs of mitigation activities related to the project.

   The Department accepts this provision as assurance that adequate funding will be available to carry out the terms of the conservation plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of survival or recovery of the endangered species or threatened species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

   The great plains rat snake is listed as an endangered species by the State of Illinois due to its restricted range within Illinois. There are collection records from five counties in southwest Illinois. Great plains rat snake habitat includes rocky hillsides, meadows, stream courses and river bottoms, canyons and arroyos, barnyards, abandoned houses and ranch buildings, cave entrances, and wooded areas. It is an inconspicuous, nocturnal species that spends daylight hours under rocks and logs, or underground in small mammal burrows. Females lay 3-30 eggs between late June and early July that typically hatch in September. There are three records in the Illinois Natural Heritage Database,

and only two observations have been in the last ten years both of which were in Monroe County. Monroe County habitat is critical for the Illinois population of the great plains rat snake. Records are restricted to areas around the Mississippi River bluffs with snakes found in hill prairies, forested bluffs, talus piles, floodplain, agriculture fields and roadways. Great plains rat snake is particularly vulnerable to habitat loss and traffic casualties due to its restricted range. There have been no previous ITAs issued for great plains rat snake.

The timber rattlesnake is listed as threatened by the State of Illinois due to loss of historic populations. It once had an extensive range in non-prairie areas of Illinois with occurrence records from 33 counties. The timber rattlesnake moves between bluffs, talus slopes, and rocky outcrops used for overwintering and nearby forests, prairies, and agricultural lands that are used as summer feeding grounds. They emerge from their dens in late March and return in early to mid-September. Timber rattlesnakes are active during the daytime in the spring and fall but are active at night during hot summer months. The species is threatened by habitat loss and indiscriminate killing. There are 56 occurrence record in the Illinois Natural Heritage Database, 26 of which are extant. Timber rattlesnakes are recorded from grassy hillsides, woodlands, forested bluffs, glades, house foundations, levees, and roadways. Three records are from Monroe County. There have been no previous ITAs issued for timber rattlesnake.

The eastern narrowmouth toad is listed as threatened by the State of Illinois due to a reduction in its already restricted range in the state. There are historic records from six Illinois counties along the Ohio and Mississippi Rivers. Eastern narrowmouth toads are found in open moist areas with abundant ground cover and loose, moist soil that allows for burrowing. They are secretive in nature, spending most of their time in underground burrows or under rocks or debris in contact with the ground. They feed on insects, especially ants. In the mid-summer breeding season they will be found around temporary and permanent waters, where they will breed after heavy rains. There are 17 element occurrence records for eastern narrowmouth toad in the Illinois Natural Heritage Database, nine of which been seen in the last ten years. Occurrences have been recorded around sinkhole ponds, wetlands, creeks, large rivers, and ditches with toads found under rocks or logs within prairie restorations, agriculture areas, talus slopes, bluffs, and forest. Monroe County is critical for the Illinois population with ten element occurrence records (eight of the nine eastern narrowmouth toad records located in the last ten years). There have been no ITAs issued for the eastern narrowmouth toad.

Based on the limited permanent loss of habitat, the habitat benefits that will result from the action, the minimization (especially project timing) and mitigation measures described under #2 above and in the Authorization section below, 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 endangered 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.

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 an official IDNR-Wildlife signature on this authorization indicates its 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 the availability of IDNR-Wildlife's conservation plan for review and comment was published in the (Taylorville) Breeze-Courier on June 5, 2014, and in The County Journal on June 5, 12, and 19, 2014. A copy of the conservation plan was deposited at Red Bud Public Library, where it was available for public review. The deadline for public comment was July 19, 2014. No comments were received from the public.

Authorization

It is the determination of the Department that the measures that will be implemented by IDNR-Wildlife will adequately minimize and mitigate the anticipated taking of great plains rat snake, timber rattlesnake, and eastern narrowmouth toad related to levee and water control structure repairs at Kidd Lake Marsh State Natural Area in Monroe County, Illinois. Further, it is the Department's opinion that the take authorized herein will not diminish the likelihood of the survival of the great plains rat snake, timber rattlesnake, and eastern narrowmouth toad 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.

All terms and conditions included in the aforementioned conservation plan submitted by IDNR-Wildlife 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 Rule 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 IDNR-Wildlife under #2 in the Compliance section above:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of <u>five (5) years</u> 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 IDNR-Wildlife has failed to comply with any of these terms and conditions or has been responsible for the taking of great plains rat snake,

timber rattlesnake, or eastern narrowmouth toad beyond that which is incidental due to levee and water control structure repair at Kidd Lake Marsh State Natural Area in Monroe County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between IDNR-Wildlife and the Department. In this event, the Department shall notify the Illinois Endangered Species Protection Board of such alteration.

   Any substantive changes, including but not limited to a change in the project footprint or a change in the State-listed species which could potentially be impacted, 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. Incidental Take Authorizations are non-transferrable.

4. IDNR-Wildife shall notify the Department upon commencement of the project.

5. 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.

6. Construction shall take place after September 23 when most individuals are expected to have returned to winter habitat in the bluffs. If levee construction is delayed until spring, all work shall be completed prior to March 31.

7. The construction area, including staging areas and travel corridors, shall be limited as much as possible to minimize soil compaction and crushing of burrowed individuals.

8. IDNR-Wildlife shall install and maintain drift fences at the construction site to limit listed species from entering the construction area. These features shall be inspected daily during construction to ensure effectiveness and remedy any malfunctions. Daily inspections for individuals caught within the fence shall take place prior to construction and any individual found shall be moved outside the drift fence on the bluff-side (State-listed species shall only be handled by a qualified biologist who holds a current IDNR Endangered Species Permit).

9. Following completion of construction , non-native, invasive species control shall occur as part of routine maintenance operations for the duration of the authorization.

10. IDNR-Wildlife shall conduct, or cause to be conducted, a post-monitoring survey for the listed species in the project area in year two and year four following completion

of construction and timed in accordance with expected potential presence of respective species. A report including the survey methodology utilized, the species and numbers of individuals located, habitat descriptions, and location information shall be provided to the Department within 60 days of completion of the survey.

11. Documentation, including maps, shall be submitted to:

    Incidental Take Authorization Coordinator
    Illinois Department of Natural Resources
    One Natural Resources Way
    Springfield, IL 62702
    (217)557-8243
    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.

12. Mitigation settlement dollars to the Department earmarked for the conservation benefit of the State-listed species are non-refundable, including in events of revocation or termination.

    The area to be impacted by IDNR-Wildlife activities is 5,200 linear feet by 10 feet (52,000 square feet) of rock truck and heavy equipment impact plus 2,300 linear feet by 50 feet (115,000 square feet) of construction impact [52,000 square feet + 115,000 square feet = 167,000 square feet of impact = 3.83 acres]. In addition, an estimated 15 acres of ground impact will occur within the wetland as a borrow material area for levee improvement [15 acres + 3.83 acres = 18.83 acres of total impact].

    The Department utilizes a 5.5:1 mitigation ratio for impacts to potential habitat of threatened and endangered species. Therefore, the mitigation, as required by this condition is calculated as 18.83 acres of disturbance multiplied by a mitigation ratio of 5.5 for a total of 103.57 acres of habitat creation to the conservation benefit of the species potentially impacted.

    It has been determined by the Department that applicable mitigation settlement dollars are not required due to adequate habitat improvement at the project area and on adjacent properties; including the restoration of the levee construction area (3.83 acres), an adjacent 43-acre tract of IDNR-owned land, and an additional 94-acre wetland habitat restoration in the near vicinity. The total acreage of the restoration project areas are estimated at 141 acres. The Department also recognizes the habitat value of the enhancement of the wetland edge that the installed water control structure will allow (200-acre wetland).

13. The Department reserves the right of entry to inspect potential habitat and species management practices.

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

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

For the Illinois Department of Natural Resources:

Dr. James Herkert, Director
Office of Resource Conservation

9-29-14
Date Signed

For the IDNR, Division of Wildlife:

John Buhnerkempe, Chief
Division of Wildlife

John Buhnerkempe, Chief of Wildlife
Please print name and official title

9/23/14
Date Signed