



Illinois Department of Natural Resources

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Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of the Arenzville Rural Water Cooperative (ARWC), authorization for the incidental take of the State listed (threatened) Illinois chorus frog (*Pseudacris streckeri*) in Cass County, Illinois [associated with the proposed water main extensions that will follow public road right-of-ways: Orchard Road, Arenz Lane, and Arenzville Road; as described/shown in the final conservation plan received by the Department on 15 December 2010] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of proposed water mains (Phase I Extensions) that will follow public road right-of-ways in Cass County, Illinois.

Arenzville Rural Water Cooperative (ARWC) began construction on their Phase I Water Distribution System in October 2009. The project consists of approximately 60 miles of 8-inch, 6-inch, and 4-inch water main and related appurtenances installed on easements and right-of-way. ARWC is planning to expand the project even further with extensions to serve residents of rural Cass County. The proposed extensions will be along Orchard Road, Arenz Lane and, Arenzville Road and will consist of installing approximately 18,360 lineal feet of 4-inch water main and related appurtenances along right-of-way and easements.

Procedural History

Heneghan and Associates, Inc. (on behalf of the ARWC) prepared a conservation plan for the (Phase I extensions) water main project in Cass County, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and ARWC's request for authorization for incidental take of the State listed Illinois chorus frog (*Pseudacris streckeri*) in Cass County, Illinois were received by the Illinois Department of Natural Resources (Department) on 15 December 2010. Public notice of ARWC's request for authorization of incidental take of this State listed species was published in the Breeze-Courier (Official State newspaper) and the Cass County Star Gazette on December 23 and December 30, 2010 as well as January 6, 2011. Public comments on ARWC's conservation plan were accepted by the Department until February 6, 2011. No public comments were received by the public during the period of December 23, 2010 through February 6, 2011.

Target Species

Illinois chorus frog (*Pseudacris streckeri*) - (Illinois) State Threatened [ICF]

The Illinois chorus frog (*Pseudacris streckeri*) is a small (up to 4.7 cm SVL) tan to gray frog with dark brown and/or black lines on the back, a white belly, and granular skin rather than smooth. Their diet consists of small insects. Habitats include sand prairies and remnants, such as sandy agricultural fields and waste areas. This animal typically burrows in sand and emerges after heavy, early spring rains during February through April to breed in nearby flooded fields, ditches, and or other vernal ponds. The breeding call is a series of clear, high-pitched whistles. Eggs are laid in small, jelly-covered clusters attached to twigs and branches underwater.

Embryos hatch in a few days and tadpoles transform in about two months. This frog is somewhat unusual because it digs forward with its stout front legs, rather than backward like the spadefoot and other toads. This species is somewhat locally abundant in undisturbed sand prairies in Cass and Morgan counties. Threats include uncontrolled and unregulated drainage activities and cultivation of breeding ponds and adult habitat.

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met 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 only be incidental to, the carrying out of an otherwise lawful activity:

The activities that could possibly result in taking of the Illinois chorus frog (ICF) from this specific ARWC project are the actual construction (and associated environmental disturbances) of the proposed water mains (and associated disturbances), water services, and related appurtenances. Due to the size of the actual disturbance, the anticipated adverse affects are expected to be minimal. Of the construction practices utilized for this water main project, cutting the trench and boring for the water mains appears to have the highest probability of disturbance for the chorus frog. The water main will be installed by a trenching machine in accordance with Illinois Department of Agriculture Water and Sewer Line Construction Standards and Policies. All water mains are to be installed below grade with a minimum of 42" of cover. The maximum trench width is only 12", and the construction area will be kept at a maximum of 15 feet wide. The total area to be disturbed is approximately 3.5 miles in length. Avoidance of construction during the breeding season (February through April) will greatly reduce the chance of above-ground disturbance by machinery, vehicles, foot traffic, etc. Once the water main is installed, the area will be returned to its original state, which will not affect or change the ICF habitat.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking:

Only the minimum area needed shall be utilized by the ARWC for the construction of the proposed water mains - for the Phase I water main extension. Surface disturbance in the project area(s) shall be kept to a minimum. All construction for the Phase I water main extension (and any subsequent phases of this water main extension project proposed by the ARWC or any other party) shall take place **only** outside of the breeding season of the ICF (February 1 through April 30). Site grading shall always be kept to a minimum in any and all project areas; all water mains are to be installed below grade with a minimum of 42" of cover.

After construction, all areas shall be returned to their original states. All persons on the construction job will be informed of the possibility of the threatened species being present in the project area and will be provided with a picture of the ICF.

Contact information for the Illinois Department of Natural Resources (IDNR) will also be provided in case any person on the construction job encounters the ICF. If anyone on the construction job sees the ICF, the job will halt until the site owner can consult with IDNR. The owner will contact Joe Kath at IDNR within 24 hours of the finding. In addition, there will be a resident project representative present on the job site to ensure that the contractors are abiding by all rules and regulations when installing water main in areas where the ICF may be present. If an unforeseen circumstance affects the effectiveness of the measure instituted to minimize or mitigate the effects of the proposed action on the ICF, the job will shut down until the site owner can consult with IDNR to discuss the situation and options.

Overall, it is more than likely the affects of this Phase I water main extension project on the ICF will be of short duration with no anticipated long term affects.

It is possible that some ICFs along/within the project corridor will experience temporary disturbance from noise and other construction activity(ies) during the various construction phases. The construction activities could feasibly result in death or injury to individuals that are within the construction corridor(s). This could include individuals in underground burrows in the line of trenching or similar activities and or individuals that could be run over by personal vehicles and or heavy equipment. The overall intent of the Conservation Plan is to avoid all impacts to the extent practicable, and greatly minimize those impacts that cannot be avoided.

PLEASE NOTE: This Incidental Take Authorization is only applicable to water main construction activities described in the formal Conservation Plan as the "Phase I Extension". Any and all subsequent projects submitted either by the ARWC or any other entity related to this water main extension shall first be reviewed by the Department for potential environmental impacts, and by signing this document, the ARWC recognizes that any and all subsequent Phases of this particular water main extension may require additional and separate Incidental Take Authorizations before any ground disturbance occurs.

*See Also: Authorization Section of this document for more details.

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

All necessary funds needed to minimize and mitigate potential adverse impacts to the ICF emanating directly from this project, are available from funds obtained through the United States Department of Agriculture Rural Development low interest loan and grant. The funds are available to cover costs associated with mitigation efforts as well as those needed to complete the proposed project. The funds are remaining from the Phase I Water Distribution System that is currently in operation.

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

The proposed Phase I Water Main Extension project is planned to be constructed on property adjacent to and within existing public road right-of-ways. Using soil maps of similar areas within the County, the majority of the soil in this area has high concentrations of silt and clay instead of sandier soil that is preferred by the chorus frog due to its fossorial nature. Some of the soils in the project area have the potential to harbor the Illinois Chorus frog if other conditions are met as well, i.e.: wetland areas (areas that pond water) and suitable vegetation. The proposed water main extensions are not located in or through wetlands nor are they in the immediate vicinity of known wetlands.

The likelihood that the proposed (Phase I) water main extensions will cause a reduction of survival of the Illinois Chorus Frog is minimal due primarily to the following factors: The aforementioned sites do not contain wetlands, the actual size of the area to be disturbed is small (maximum trench width of 12" with a maximum construction area of 15'), and the project area will be returned to its pre-construction condition at the conclusion of the project causing no long term disturbance. Construction personnel will be trained on identification of the Illinois Chorus Frog. Information, including pictures of the Illinois Chorus Frog(ICF), shall be distributed to construction personnel before commencement of construction.

The proposed Phase I water main project will not reduce the likelihood of the survival of the ICF within Illinois. An area of approximately 3.5 miles in length will be temporarily disturbed to install water main and then returned to its original state. Throughout Cass County and not far from the project sites are numerous Sand Nature Preservation sites that will not be disturbed during construction that provide habitat for the ICF.

Due to a combination of factors listed above, this ARWC Project will more than likely have minimal direct impacts on ICF habitat and/or individuals. Any impacts that occur in accordance with this incidental take permit/authorization would most likely be limited to an individual or small number of individuals that are not disturbed (and hence do not move out of the area) by surface pre-construction activities. Therefore, the Department supports ARWC's belief that implementing its proposed Conservation Plan will not reduce the likelihood of the 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.

DESCRIPTION OF ALTERNATIVE ACTIONS CONSIDERED:

The following alternatives considered pertain to the Scott County Rural Water Cooperative Phase I Water Distribution System. Since this project is an extension of the Phase I Distribution System, the only reasonable solution for supplying the customers along these water main routes is the "Phase I Extensions Project".

*NO ACTION: This alternative would leave the residents of rural Cass County with the current problems they face. Residents currently have shallow, private-dug wells that do not supply the quality or quantity of water necessary to carry out daily domestic and/or farming activities. Due to the location of the wells in farming communities, the water supplies are subject to contamination from pesticides, fertilizer, herbicides and fecal coli form bacteria from livestock waste runoff. "No Action" does not present a solution to this problem and is therefore not considered.

*ROUTE CHANGE: Another alternative considered would be to choose a different route that avoids ICF habitat. This alternative was not chosen because all other possible routes were costly and showed that the ICF was still located in the vicinity of the proposed alternative route.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and official ARWC signature(s) on this authorization 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:

Heneghan and Associates, Inc. (on behalf of the ARWC) prepared a conservation plan for the (Phase I extensions) water main project in Cass County, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and ARWC's request for authorization for incidental take of the State listed Illinois chorus frog (*Pseudacris streckeri*) in Cass County, Illinois were received by the Illinois Department of Natural Resources (Department) on 15 December 2010. Public notice of ARWC's request for authorization of incidental take of this State listed species was published in the Breeze-Courier (Official State newspaper) and the Cass County Star Gazette on December 23 and December 30, 2010 as well as January 6, 2011. Public comments on ARWC's conservation plan were accepted by the Department until February 6, 2011. No public comments were received by the public during the period of December 23, 2010 through February 6, 2011.

Authorization

It is the determination of the Department that the measures to be implemented by the ARWC and its environmental consultant, Heneghan and Associates, Inc., will adequately minimize and mitigate for the possible taking (disturbance/harassment/relocation/lethal take) of a small number of the State listed Illinois chorus frogs (*Pseudacris streckeri* - ICF) in Cass County, Illinois [associated with the proposed Phase I water main extension construction efforts; as described/shown in the final conservation plan received by the Department on 15 December 2010].

Further, it is our opinion that the possible take (disturbance/harassment/relocation/lethal take) authorized herein would not diminish the likelihood of the survival of either this aforementioned 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.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is applicable only to the Phase I Extension of this Water Main Project in Cass County, Illinois. This authorization is effective upon signature of the Department and shall remain in effect for a period of five (5) years, commencing the first day of official use of the entire ARWC Phase I water main route for proposed for commercial/residential purposes, unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].

As stated above in *Section 2* of this Authorization: This Incidental Take Authorization is only applicable to water main construction activities described in the formal Conservation Plan as the "Phase I Extension". Any and all subsequent projects submitted either by the ARWC or any other entity related to this water main extension shall first be reviewed by the Department for potential environmental impacts and by signing this document, the ARWC recognizes that any and all subsequent Phases of this particular water main extension may require additional and separate Incidental Take Authorizations before any ground disturbance occurs.

2. All construction for the Phase I water main extension (and any subsequent phases of this water main extension project proposed by the ARWC) shall take place only outside of the breeding season of the ICF (February 1 through April 30). All creek and road/ditch crossings shall be directional bored instead of open cut. In the case of trenches/ditches left open during this time, please see Condition #5 below.

In the event of an ARWC Phase I extension water main break (of any kind), environmental disturbances shall be kept to a minimum. Also, in the event of such an ARWC Phase I extension water main break, Joseph Kath of the Department shall be notified within 24 hours, via phone (217/785-8764) and or e-mail: Joe.Kath@illinois.gov, of break discovery. Any and all animal specimens injured or killed (listed or non-listed) as a direct result of this water main break shall be reported during this time.

3. After Phase I construction is complete and major ground disturbance is kept to a minimum, all impact zones and associated habitat quality shall be restored to better than pre-construction conditions. All areas now in natural vegetation shall be reseeded with a native vegetation mix (warm season grasses at a recommended sparse density planting rate at or near 2-3 lbs/acre). Restoration in applicable cultivated and non-cultivated areas shall be completed using native species (warm season grasses).

All planting methods and timing efforts shall be compatible with the life cycle of the ICF and avoid the emergent and breeding season of this animal (February through April). Site restoration shall return the entire area to its original contours and areas with natural vegetation shall be seeded with native prairie/warm season grasses and returned to original conditions. If after 4 years, the native seed/warm season mix was deemed unsuccessful (less than 60% germination and/or survival), ARWC (and/or its environmental consultant) shall reseed all affected areas with a native seed mix at least two (2) more times, if not successful the first time.

4. Appropriate erosion control methods for Phase I will be implemented and monitored until final completion of the entire ARWC Phase I water main extension project. Formal erosion control inspections along the entire Phase I construction corridor shall be conducted at least once (1x) a month by an appropriate environmental consultant (hired by ARWC), and erosion control reports shall remain on file with this consultant. These reports shall be faxed/e-mailed to the ARWC immediately upon completion. Any and all recommendations made by the consultant to ARWC to repair/replace erosion control devices shall be completed by ARWC and or a recognized agent/subcontractor/consultant of ARWC within 72 hours of report receipt.

5. With reference to Condition #2: During the ICF emergent and breeding season (February through April), any and all open trenches related to water main construction activities shall be surrounded by silt fence that is buried beneath the soil surface at all points; this shall prevent animals from escaping and/or passing through the bottom of the fence. A perimeter silt fence shall serve as a barrier to either keep animals, namely the ICF, out of the construction zone, or help construction personnel remove animals trapped within the construction zone. *Any and all animals, including the ICF, found on the interior or exterior of the fence shall be safely and humanely placed in a suitable container and then released within one (1) hour of capture at least one (1) mile from the project site in similar or suitable habitat; for the ICF, this shall be a vernal pool, pond, wetland, drainage ditch, moist soil unit, sand blowout, sand prairie, or sand deposit near or surrounding an agricultural or fallow field.

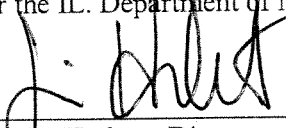
6. With relation to Condition #5 above, any ICFs witnessed or handled during any portion of the entire ARWC Phase I water main extension project in Cass County, Illinois, shall be reported to the IDNR, attention: Joseph Kath at 217/785-8764 (e-mail: Joe.Kath@illinois.gov) within 24 hours of discovery/translocation. A series of clear and readable digital photographs shall also be provided at the same time for documentation purposes.

7. The effective period of this authorization may be altered only by mutual agreement between the Arenzville Rural Water Cooperative (ARWC) and the Department.

8. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that the ARWC, and or its environmental consultant(s), has failed to comply with any of these terms and conditions and or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of new water mains (**Phase I Water Main Extension ONLY**) in Cass County, Illinois.

9. The ARWC official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources



Dr. Jim Herkert, Director
IDNR Office of Resource Conservation

7-22-11

Date Signed

For the ARWC



Signature

Ewell Andrews, President

Please print name and official title

6/2/11

Date Signed