

Incidental Taking of Endangered or Threatened Species

Arenzville Rural Water Cooperative Phase I Orchard Road, Arenz Lane and Arenzville Road Extensions

1080.10 Conservation Plan

- a.1.A** 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.

Arenzville Rural Water Cooperative (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. (see attached map)

- a.1.B** The ECO CAT application was completed for the proposed sites and the results were as follows;

Orchard Road – 1103196

Bluff Springs Sand Pond INAI Site
The Fiedler Family Farm Natural Heritage Landmark
Illinois Chorus Frog (*Pseudacris strickeri*)
Regal Fritillary (*Speyeria idalia*)

*Airport Road – 1103805

Anderson Prairie INAI Site
Beardstown Railroad Prairie INAI Site
Charles *Chinee* Colvin Sand Prairie INAI Site
Beardstown Railroad Prairie Natural Heritage Landmark
Charlies Chinee Colvin Sand Prairie Land and water Reserve
Excel Sand Prairie natural Heritage Landmark
Illinois Chorus Frog (*Pseudacris strickeri*)

Arenz Lane – 1103804

Illinois Chorus Frog (*Pseudacris strickeri*)

Arenzville Road – 1103806

Illinois Chorus Frog (*Pseudacris strickeri*)

*Extension is omitted from the project due to lack of interest in receiving water.

Upon IDNR's review of the ECO CAT it was determined that the project is likely to have an adverse impact on the Illinois Chorus Frog (*Pseudacris stricken*) Their habitat includes sand prairies and remnants such as sandy agricultural fields and waste areas. They burrow in sand and will emerge after heavy, early spring rains to breed in nearby flooded fields, ditches, and other vernal ponds.

The species is unusual because it digs forward with its stout front legs, rather than backward like the spadefoot and toads. Their diet consists of small insects and spends most of life underground, coming to surface during rain to breed for a few

weeks during February, March, and April. 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.

Threats include drainage and cultivation of breeding ponds and adult habitat. They are locally abundant in undisturbed sand prairies in Cass and Morgan counties.

http://www.inhs.illinois.edu/animals_plants/herps/species/ps_strecke.html

- a.1.C** 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 main is to be installed below grade with a minimum of 42" of cover. Since installation requires for soil to be dug up, burrowed Chorus Frogs could be disturbed.
- a.1.D** The maximum trench width is only 12-inches and the maximum construction area is 15 feet. We do not anticipate any adverse effects on the Illinois Chorus Frog population.
- a.2.A** In order to minimize the chances of incidental taking of the Chorus Frog the proposed water main installation construction will NOT take place during the breeding season which occurs a few weeks out of February, March and April. Also, 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. Following these mitigation measures we do not anticipate the taking of any Chorus Frogs.
- a.2.B** Once water main is installed the area will be returned back to its original state which will not affect or change the Chorus Frogs habitat.
- a.2.C** In order to minimize the chances of incidental taking of the Chorus Frog the proposed water main installation construction will NOT take place during the breeding season which occurs a few weeks out of February, March and April. The maximum trench width is only 12-inches and the maximum construction area is 15 feet. 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 chorus frog and contact information for IDNR incase they do run into issues with the Chorus Frog. If they do see the Chorus Frog the job will halt until the owner can consult with IDNR. They will contact Joe Kath at IDNR within 24 hours of the finding.
- a.2.D** 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 the areas that the Chorus Frog may be present.
- a.2.E** If an unforeseen circumstance that affects the effectiveness of the measure instituted to minimize or mitigate the effects of the proposed action on the Chorus Frog the job will shut down until the owner can consult with IDNR to further discuss the situation and their options.
- a.2.F** This project is being funded by the USDA Rural Development and there are adequate funds to carry out all aspects of the conservation plan.

a.3.0 Alternate #1: Chose a different route that avoids any habitat of the Chorus Frog. This alternative was not chosen because all other possible routes were costly and resulted that the Chorus Frog was in the vicinity of the project
Alternate #2: Do not install water main. This option was not chosen because this is a severe threat to the health and safety of the residents of rural Cass County. They currently have shallow wells that run dry or are contaminated.
Alternate #3: Install water main along proposed roadways within right-of-way and easements. This Alternate was chosen because it is cost efficient and will serve the most residents with potable water. It also disturbs the least amount of ground where the Chorus Frog could be.

a.4.0 The proposed project will not reduce the likelihood of the survival of the Chorus Frog within the State of Illinois. An area of approximately 3.5 miles will be temporarily disturbed to install water main and then returned to its original state. Also all 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 Chorus Frog.

a.5.A Emily Y. Fortschneider Emily Y. Fortschneider
Engineering Technician/Biologist/LEED Green Associate

Ewell Andrews Ewell Andrews
Arenzville Rural Water Cooperative Board Chairman

Craig Thurston Craig Thurston
Resident Project Representative

Brandon Egelhoff Brandon Egelhoff
Project Manager/SIT/Resident Project Representative

a.5.B Emily Y. Fortschneider is the preparer of the conservation plan for the Arenzville Rural Water Cooperative. Ewell Andrews is the Arenzville Rural Water Cooperative Board Chairman. Ms. Fortschneider will be responsible for any changes that need to be made to the conservation plan and also to make sure that the plan is followed through. Mr. Andrews will be responsible to make sure the plan is followed through and to publish all necessary publications required by the Incidental Taking process. Construction is to start in May of 2011 after the Chorus Frogs breeding season. Craig Thurston and Brandon Egelhoff will be responsible for monitoring the construction site for signs of the Chorus frogs and contacting IDNR if they do see them.

a.5.C Ms. Fortschneider, Mr. Andrews, Mr. Thurston and Mr. Egelhoff have authority to execute the conservation plan and legal authority to carry out their respective obligations and responsibilities under the conservation plan.

a.5.D Because this project is being funded by USDA Rural development, Arenzville is in compliance will all other federal, state and local regulations pertinent to the proposed action and execution of the conservation plan.

a.5.E There have been no other final federal authorizations for a taking that have been previously issued for Arenzville Rural Water Cooperative Phase I project.