Rod R. Blagojevich, Governor

Joel Brunsvold, Director

One Natural Resources Way • Springfield, Illinois 62702-1271 http://dnr.state.il.us

### 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, Part 1080), authorization is hereby granted to the Gateway Regional Water Company (hereinafter referred to as Gateway) for the incidental take of the eastern massasauga (*Sistrurus catenatus*). The Illinois Department of Natural Resources (hereinafter referred to as the Department) has determined that this taking is incidental to activities associated with the construction and operation of a raw water intake and pump station on the eastern shore of Carlyle Lake in Clinton County, Illinois.

## Procedural History

Heneghan and Associates, P.C. (hereinafter referred to as Heneghan) prepared a conservation plan as described by the Act (520 ILCS 10/5.5) on behalf of Gateway. That plan and Gateway's request for incidental take of the eastern massasauga were received by the Department on August 26, 2003. Public notice of Gateway's request for authorization of incidental take was published in the Edwardsville Intelligencer on September 3, 2003, and in the (Centralia) Morning Sentinel on September 3, 10, and 17, 2003. Public comments on Gateway's conservation plan were accepted by the Department until October 17, 2003. Comments were received from three individuals and one organization. One commentor suggested that nothing should be done to protect the eastern massasauga. One recommended that the water intake be relocated to avoid any impact to eastern massasauga habitat. The third individual suggested that the facility be relocated if possible or that Gateway be held to their conservation plan if construction proceeded at the proposed site. The one organization that submitted comments raised numerous questions about the language and structure of the conservation plan and expressed a desire for greater detail and stronger commitments in portions of the plan. All comments were forwarded to Heneghan for their analysis on behalf of Gateway. Heneghan's analysis of the comments was received by the Department on October 28, 2003. Minor modifications were made to the conservation plan based on the comments received.

# 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 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 construct and operate a raw water intake facility on the eastern shore of Carlyle Lake in Clinton County, Illinois. The proposed facility will be part of a system to provide potable water to several surrounding communities. The take that could result from this project is not the purpose of Gateway'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 Gateway describes measures that will be taken to minimize the potential adverse effects of their project on the eastern massasauga. Construction limits will be delineated in order to minimize the total area disturbed by the activities of equipment and personnel. Topsoil will be removed and stockpiled from areas that are to be disturbed to a depth greater than 18 inches. The topsoil will be replaced after final grading to facilitate the establishment of vegetative cover. That cover will be composed of native species that will provide suitable habitat for use by eastern massasaugas.

Gateway also plans to conduct a prescribed burn on the project site to facilitate a preconstruction survey for the eastern massasauga. Silt fencing will be erected and maintained around the project site to prevent entry of eastern massasaugas during construction. Gateway also has agreed to provide access to their site in subsequent years for follow-up surveys to determine if eastern massasaugas are using the area.

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

This construction project will be funded through USDA Rural Development fund, funds from the State of Illinois and Gateway. The overall cost estimates of the project include amounts needed for various environmental and mitigative needs, including the measures described in Gateway's 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 in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

The Gateway construction project includes the construction of a raw water intake line and pump station on the eastern shore of Carlyle Lake in Clinton County. Eastern massasaugas have not been found at the project site, but there are records from nearby locations. If massasaugas use the project site, it is possible that snakes could be entombed or excavated during hibernation or be crushed by construction equipment during periods of above-ground activity.

Eastern massasaugas are known to occur at fewer than 10 locations in Illinois. The area

around Carlyle Lake provides habitat for what is apparently the largest population of this species remaining in the state. Radio-tracking of eastern massasaugas in the Carlyle Lake area has shown them to use a variety of habitats, but to avoid crop fields, maintained lawns and developed (paved) areas. Massasaugas can be active above ground during any month of the year if temperatures are high enough, but typically hibernate during the colder months of the year. Crayfish burrows are frequently used as hibernacula.

The Gateway project will disturb an area of slightly greater than one (1.06) acre of potential habitat for the eastern massasauga. Disturbance will be primarily through excavation and grading. Approximately 2,700 square feet of potential habitat will be permanently converted to use for the pump building, access drive, and detention well. The remainder of the project area will be graded and revegetated with native species that provide habitat suitable for eastern massasaugas upon completion of construction. If eastern massasaugas use the project site, the number of snakes present and potentially affected is likely to be very small because of the small area involved.

It is the opinion of the Department that the minimization and mitigation measures proposed by Gateway will assure that the water intake and pump station construction project will not reduce the likelihood of the survival or recovery of the eastern massasauga in 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 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - Section 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 Gateway's signature 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:

Public notice of Gateway's request for authorization of incidental take was published in the Edwardsville Intelligencer on September 3, 2003, and in the (Centralia) Morning Sentinel on September 3, 10, and 17, 2003. Public comments on Gateway's conservation plan were accepted by the Department until October 17, 2003. Comments were received from three individuals and one organization. One commentor suggested that nothing should be done to protect the eastern massasauga. One recommended that the water intake be relocated to avoid any impact to eastern massasauga habitat. The third individual suggested that the facility be relocated if possible or that Gateway be held to their conservation plan if construction proceeded at the proposed site. The one organization that submitted comments raised numerous questions about the language and structure of the conservation plan and expressed a desire for greater detail and stronger commitments in portions of the plan. All comments were forwarded to Heneghan for their analysis on behalf of Gateway. Heneghan's analysis of the comments was received by the Department on October 28, 2003. Minor modifications were made to the conservation plan based on the comments received.

#### Authorization

It is the determination of the Department that the measures that will be implemented by Gateway will adequately minimize and mitigate the anticipated taking of eastern massasaugas. Further, it is our opinion that the take authorized herein will not diminish the likelihood of the survival of the eastern massasauga 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 and Ill. Adm Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

- 1. This authorization is effective upon 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 pursuant to Section 5.5 of the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 and Ill. Adm. Code Part 1080.80).
- 2. Gateway shall conduct, or cause to be conducted, a prescribed burn of the project site to reduce vegetative cover. Upon completion of the prescribed burn, the project area shall be enclosed with silt fencing or another suitable barrier to prevent the movement of eastern massasaugas into or out of the project site. "Project site" shall include all areas to be directly disturbed by project-related activities, including staging and materials storage areas and areas to be traversed by equipment. The silt fencing or other barrier erected around the project site shall be maintained throughout the construction period.
- 3. Upon completion of the activities described in Item #2 above, Gateway shall conduct, or cause to be conducted, a survey of the project site to determine if eastern massasaugas are present on the site. The survey shall be conducted by personnel approved by the Department who are experienced in the detection and identification of the eastern massasauga. Any eastern massasaugas located during the survey will be handled according to protocols approved by the Department.
- 4. Gateway shall require all project personnel to limit their activities to the delineated construction limits. Equipment operators, truck drivers and all other project personnel will be given instructions on snake identification and shall be required to report any sightings of eastern massasaugas as described in Attachment A. Workers shall be instructed to avoid killing snakes of any species and to report immediately any mortality of snakes. Gateway shall include language in all contracts and work orders requiring contractors entering the project site to conform to the instructions provided.
- 5. Gateway shall grade, or cause to be graded, post-construction areas not hard-surfaced to their original contour and seed, or cause to be seeded, those areas with native grasses of species approved by the Department.
- 6. As lessee of the property described in Attachment B, Gateway shall allow access to that

property by Department employees or their agents for the purpose of conducting surveys for the eastern massasauga. Access shall be allowed without notice to Gateway. Department employees or their agents shall not enter the pump station or in any way interfere with the operation of the raw water intake or pump station or cause any damage to the property.

- 7. The effective period of this authorization may be altered by mutual agreement between Gateway and the Department.
- 8. This authorization may be revoked pursuant to Section 5.5 of the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 and Ill. Adm. Code Part 1080.80) if the Department finds that Gateway has failed to comply with any of these terms and conditions or has been responsible for the taking of eastern massasauga beyond that which is incidental to the construction and operation of a raw water intake and pump station on the eastern shore of Carlyle Lake in Clinton County
- 9. The Gateway official identified below is authorized to execute this agreement. Execution by Gateway indicates acceptance of all terms and conditions as described in this document.

For the Illinoi	s Department of
	Natural Resources

For the Gateway Regional Water Company

Brian D. Anderson, Director

Office of Resource Conservation

Keith Ritter, President

Stoned

Printed Name and Title

January 28, 2004 Date Signed

## ATTACHMENT A

#### PROCEDURES IN CASE OF ENCOUNTER WITH EASTERN MASSASAUGA

If a massasauga is encountered on the project site, the following steps should be taken:

- 1) Immediately call Dr. Chris Phillips, Illinois Natural History Survey at (217)244-7077. If no answer at that number, call Dr. Phillips on his cell phone at (217)369-3495. Dr. Phillips will contact someone to respond to the site for proper handling of the snake.
- 2) Stop any activities that could harm the snake (for example, heavy equipment operation within a few yards of the snake).
- 3) If the snake moves away, let it go, but follow at a safe distance until it stops again or it goes into an inaccessible area (thick brush, underground, etc.).
- 4) Mark the area where the snake was first seen and where it was last seen or be able to point out these locations to the person who arrives to handle the snake. Wait as near as possible to the snake or its last observed location until that person arrives.
- 5) Provide as much information as possible to the person who comes to handle the snake.

REMEMBER - Eastern massasaugas are venomous and should not be handled by inexperienced people. The snakes are typically very docile, but will attempt to bite if handled improperly. The eastern massasauga is listed as a threatened species in Illinois. It is illegal to harm an eastern massasauga in any way.