

Illinois Department of Natural Resources

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

Pat Quinn, Governor

Marc Miller, Acting Director

June 18, 2012

Andrew Jennings, Village Planner
Village of Wheeling, Community Development Department
Planning Division
2 Community Blvd
Wheeling, IL 60090

RE: *Incidental Take Authorization - Conservation Plan for the Eastern Massasauga
Dundee Road Bicycle / Pedestrian Path Project, Stage 1 and 2, Cook Co, IL*

Dear Mr. Jennings:

Enclosed please find the Village of Wheeling's completed and approved Incidental Take Authorization for the state endangered Eastern Massasauga (*Sistrurus catenatus catenatus*) in Cook County, Illinois associated with the construction of the Dundee Road Bicycle / Pedestrian Path, Stage 1 and 2, in Wheeling, Cook County, Illinois. The Village of Wheeling has agreed to all the actions in the Authorization to minimize and mitigate the potential taking of this species.

As part of this Authorization, the Village of Wheeling has agreed to the following reporting:

- Throughout the effective period of this Authorization, the Village of Wheeling will report all encounters, observations, and reports of eastern massasaugas from within the project area to IDNR Incidental Take Coordinator, by email (DNR.ITACoordinator@illinois.gov), within 2 working days of the encounter, observation and report, including all known details of that encounter.
- Throughout the effective period of this Authorization, the Village of Wheeling will annually submit a written report (MS Word or PDF) to the IDNR ITA Coordinator (DNR.ITACoordinator@illinois.gov) summarizing all encounters reported by email over the past 12 months as well as any additional information obtained. This report is required even if no encounters are reported for the 12 month period and will be due November 1st of each year.

Thank you for your cooperation and assistance during the incidental take process. Please do not hesitate to contact me at (217)348-0175 with any questions or comments you may have regarding the implementation of this agreement.

Sincerely,

Robert E. Szafoni
IDNR ITA Coordinator (Acting)
1660 W. Polk
Charleston, IL 61920
robert.szafoni@illinois.gov

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), the Village of Wheeling authorization for the incidental take of the State endangered Eastern Massasauga (*Sistrurus catenatus catenatus*) in Cook County, Illinois is hereby granted, subject to the terms and conditions described in this Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the Dundee Road Bicycle / Pedestrian Path Stage 1 and 2 in Wheeling, Cook County, Illinois.

Procedural History

The Village of Wheeling and their contractor (Hey and Associates, Volo, IL) prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and the Village of Wheeling's request for authorization for incidental take of eastern massasauga were received by the Illinois Department of Natural Resources (Department) on 28 November 2011. Public notice of the Village of Wheeling's request for authorization of incidental take of eastern massasauga was published in the Breeze Courier (Official State newspaper) on 28 December 2011 and in the Wheeling Herald (local paper) on 28 December 2011, 4 and 11 January 2012. Public comments on Village of Wheeling's conservation plan were accepted by the Department until 12 February 2012. No comments were received by the public during the period of 28 December 2011 and 12 February 2012.

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 a state-listed endangered or threatened species. These criteria and associated terms and conditions for the Dundee Road Bicycle / Pedestrian Path Stage 1 and 2 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:

This project involves the construction of paved bicycle and pedestrian path in the right of way of Dundee Road. Construction of Stage 1 in the south right of way is planned to begin in 2013. Stage 2 will be constructed after Stage 1 and after a traffic light is installed and operational at Portwine Road and Dundee Road (Route 68). The project will involve pre-construction layout, tree removal, erection of a retaining wall, earth grading, material placement and compaction, asphalt paving, and other activities associated with multi-purpose path construction. The paths will vary in width from 5 to 10 feet and will accommodate both bicyclists and pedestrians.

The path will be built in existing right of way along Dundee Road (IL Rt. 68) between the Des Plaines River and Interstate 294. The path will extend from the river eastward in the south right of way. The project is being funded by an Illinois Transportation Enhancement Program grant that was approved by the State of Illinois in October 2010.

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

The Village is aware of its responsibilities regarding listed species and will demonstrate its commitment to those responsibilities through implementation of this plan.

a. Plans to minimize area affected, estimated number of individuals of listed species taken, and amount of habitat affected

The Village will minimize the risk of taking Eastern Massasaugas by:

- confining the project to the existing highway right of way and minimizing the width of the path and the work zone needed to construct the 5 to 10 foot wide path,
- minimizing the size of the staging and work areas required for the project,
- implementing physical snake protection and exclusion measures,
- scheduling the work to minimize impacts to snakes and to coincide with times of the year when snakes are expected to be active and not in hibernacula (see c.) below),
- implementing measures to educate village inspectors, contractor supervisors, and work crews and to train them in proper identification of eastern massasaugas, and
- providing a protocol to be followed for work stoppage and notification of agency snake rescue experts if any snakes should be encountered during the project.

b. Plans for management of the area affected that will enable continued use of the area by threatened and endangered species

The proposed work will occur only within the existing road right of way. Since the area is currently maintained as right of way with periodic mowing there are no changes proposed for management plans.

c. Description of all measures to be implemented to minimize or mitigate the effects of proposed actions on listed species

The Village of Wheeling agrees to employ the following measures to minimize potential impacts and to mitigate the effects of impacts:

Scheduling of Construction Since no wetland impacts are proposed for the trail development, trail construction may be performed at any time of the year after exclusionary fencing (i.e. silt fence) is properly installed during the snake's hibernation period (typically between October 31 to April 1). It is assumed that any area snake will hibernate in crayfish burrows in the wetland area. By installing the fencing after hibernation and before emergence, movement of any snake into the work zone will be prevented.

Exclusion Fencing Exclusion fencing will be installed prior to the start of construction to sequester any eastern massasaugas from the construction zone. The fencing will consist of standard silt fencing the Village contractor will install and maintain along the entire length of the project corridor. The exclusion fencing will be in addition to and coordinated with any silt fencing required for erosion and sediment control purposes.

The silt fence will be trenched into the soil to a depth of at least 4 inches and backfilled and compacted to prevent snakes from passing beneath. The fencing will include fence "turn-arounds" at the east and west ends as well as the Dam No. 1 Woods and Potawatomi Woods access roads. The silt fence will be inspected daily for breaches and any breaks in fencing or any downed fencing will be repaired immediately. If inspections encounter any eastern massasaugas, the agency notification protocol will be immediately activated so that individual can be quickly captured and re-located to Lincoln Park Zoo.

Contractor Education/Snake Sighting Protocol Prior to the onset of construction, a mandatory

meeting will take place on-site involving the Village and its ecological consultant, the project contractor and any sub-contractors. Additionally, interested natural resource agency personnel will be notified of the meeting. The meeting will be used to inform those associated with the project about the possible presence of eastern massasaugas in or near the path corridor. At the meeting, it will be stressed that any snakes encountered are not to be harmed. The meeting will also be used to educate attendees about key identifying characteristics as well as the established procedures established to be followed if any snakes should be encountered. An informational handout will be prepared and distributed by the Village of Wheeling to contractors, sub-contractors and project inspectors.

Construction Zone Restoration All disturbed areas adjacent to the paved surface will be restored using native forb and grass seed or other approved seed mix.

Other Mitigation Measures The Village of Wheeling agrees to participate in any inter-agency discussions with the U.S. Fish and Wildlife Service, the Illinois Department of Natural Resources, the Cook County Forest Preserve District, and the Lincoln Park Zoo regarding plans to protect remaining eastern massasaugas in the Dundee Road / IL Rt. 68 corridor and to evaluate the efficacy of restoring snake habitat in the project vicinity. The most immediate area where potential habitat restoration could take place is the Dam No. 1 Woods Forest Preserve between the Des Plaines River and the Tri-State Tollway. The Pottawatomie Woods Forest Preserve which lies on the north side of Dundee Road / IL Rt. 68 also could be considered. However, there are currently no known funds available for conducting mitigation activities in connection with this project. Also, the Village does not own any land in the project area that could provide additional habitat.

Future consideration of potential mitigation measures could include:

1. Removing areas of tree canopy in portions of the Dam No. 1 Woods Forest Preserve to resemble the more open grassy conditions that historically occurred (See contrasting 1939 and 2010 aerial photos in Exhibit 4 for comparison). A mosaic of sunlight and shade would benefit breeding habitat for remaining snakes over the forested conditions that now prevail. An objective would be to create (and maintain) at least 50 percent open cover with most vegetation less than 0.5 meters tall. Any such habitat improvements should occur a minimum of 300 feet south of Dundee Road and the Dundee Road Bike Path Stage 1 or 300 feet north of Dundee Road in Stage 2 so that any snakes attempting to utilize restored open areas would not be unduly imperiled by highway traffic. A 300 foot buffer would also maintain the wooded corridor character along Dundee Road / IL Rt. 68 to which motorists are accustomed and thus reduce likely public opposition that would ensue regarding tree removal on forest preserve property.
2. Employ prescribed burning, winter mowing, and herbicide treatments to maintain open canopy. Any burning and herbicide treatments, as well as any tree clearing or tree thinning operations, would be timed to coincide with the snake's normal hibernation period.
3. Investigate whether drain tiles are present in the Dam No. 1 Woods Forest Preserve. These could be disrupted to raise the on-site water table and re-create wet meadow conditions favorable to the snake. Raising the water table also would expand and improve crayfish habitat, thereby also benefiting the snake.
4. Prioritize habitat restoration efforts in specific sites where eastern massasaugas are known by agency experts to occur or where they recently have occurred.

5. Investigate whether any type of permanent exclusion fencing could be installed south of the bike path to reduce snake roadway mortality.

d. Plans for monitoring the effects of measures used to minimize or mitigate effects on listed species.

Since the potential number of eastern massasauga is very small, monitoring to show the effectiveness would be difficult to accomplish. Therefore, only the regular inspection of the exclusion fencing will be conducted. The contractor selected for construction will be required to hire a qualified environmental consulting firm to monitor the eastern massasauga per any State and/or Federal permit requirements.

As per #4 and #5 in the Authorization below, the Village of Wheeling will report to IDNR encounters with eastern massasaugas in the project area immediately and in a summary report to be submitted annually for the life of this agreement.

e. Adaptive management practices to be employed to deal with changes or unforeseen circumstances

In the unlikely event that the measures planned to minimize takings are ineffective, the Village will work with the IDNR, the U.S. Fish and Wildlife Service, and the Lincoln Park Zoo to develop and employ alternate management practices.

No additional on-site surveys or habitat assessments will be conducted. The extensive historical surveys by local, state and federal natural resource agencies have sufficiently documented the potential habitat and relatively recent occurrence in the area. The Village will seek assistance from the agencies to facilitate any transfer of knowledge of snake usage and likely travel corridors prior to final design and installation of the project area exclusionary fencing (silt fence).

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

The Village of Wheeling is a home rule municipality of the State of Illinois with adequate revenue resources and grant funding to complete the project and conservation plan as described.

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 IDNR's Natural Heritage Database (Feb 2012) identifies eastern massasaugas at 13 locations across 11 counties. However, 7 of these have not been confirmed in over 10 years and the existence of the specie at these locations is problematic. Of the remaining 4 locations, one supports a substantial populations of the species and the other three (including Lake and Cook counties) are represented by one to 9 snakes encountered in the last 10 years including many hours spent searching by experienced biologists.

Eastern Massasauga rattlesnakes have historically inhabited the project area. Several sites "in the vicinity" of this project that have records for Eastern Massasauga. The Natural Heritage Database indicates that the last observation of the Eastern Massasauga in Cook County occurred in May 2006 and in neighboring Lake County in 1987. Information compiled by the U.S. Fish and Wildlife Service marks the last observations for Cook County in 2009 and for Lake County in

1999. The draft *Illinois Eastern Massasauga (Sistrurus catenatus catenatus): Species Recovery Plan* prepared by the Illinois Natural History Survey (INHS) lists 2010 as the most recent date of observation for the "Des Plaines population" which includes the Wheeling area. These two snakes were captured and brought into the captive breeding program at Lincoln Park Zoo. The INHS draft recovery plan shows the Des Plaines population trend as declining and identifies several major threats including: small population size, vegetative succession, small habitat patches, development, fragmentation, predation, and human persecution.

Existing habitat for the species has already been fragmented by the urbanization that has occurred in Cook and Lake Counties since World War II. Furthermore, vegetative succession in the Wheeling area forest preserves with more open, grassy prairie areas giving way to shaded forested canopy also has impacted habitat for eastern massasauga rattlesnakes.

Habitat in the project area is poor for eastern massasaugas. It consists of mowed grass right-of-way (with unauthorized dirt bike trails) and upland forest. Habitat here is also compromised by the existing four-lane Dundee Road / IL Rt. 68 which supports high volume, high-speed traffic. The primary transportation-related threat posed to snakes in the project area is posed by the existing roadway, although some unauthorized pedestrian and bicycle traffic currently exists.

Project-related activities that might result in takings of the snake include crushing injuries or death to individual snakes during tree removal operations, grading operations, sub-base installation, or paving. Post-project, there will be a risk of snakes being killed or injured by bicyclists or hikers or taken by predators if individual snakes choose to bask in an exposed position on the finished pathway. Exposed snakes might also be seen and captured by collectors. However, the potential risk posed by the new pedestrian/bike path is judged to be small in comparison to existing risks posed to snakes by traffic on four-lane Dundee Road / IL Rt. 68.

There appears to be general consensus among experts that the northeastern Illinois population of eastern massasaugas is not stable and indeed has already reached such a critically low number that the species will be unlikely to achieve a sustainable level in the wild under existing conditions. Accordingly, the focus of the current federal, state, and local recovery effort is to locate and capture the last remaining snakes in northeastern Illinois and place them in appropriate propagation facilities for captive breeding. The hoped for outcome is that a sufficient number of captive-bred and reared snakes can eventually be re-introduced to suitably restored wild sites that historically harbored the species. In the Chicago area, the recovery effort is being led by the U.S. Fish & Wildlife Service, the IDNR, and the Lincoln Park Zoo.

Given the foregoing, an objective of this *Conservation Plan* is to transport any snakes that are discovered and captured during the project to the Lincoln Park Zoo for protection and captive breeding. This *Conservation Plan* and the snake protection measures it will employ with this Authorization may help further recovery of the species by potentially being able to capture a snake suitable for captive breeding.

The protective measures and agency coordination steps proposed in this *Conservation Plan* will not reduce the likelihood of continued survival of eastern massasaugas in the wild and may aid the species eventual recovery by providing an eastern massasauga(s) for the captive population breeding effort at Lincoln Park Zoo.

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:

This authorization is, by definition, subject to these terms and conditions and official Village of Wheeling 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:

The Village of Wheeling request for authorization of incidental take of eastern massasauga was published in the Breeze Courier (Official State newspaper) on 28 December 2011 and in the Wheeling Herald (local paper) on 28 December 2011, 4 and 11 January 2012. Public comments on Village of Wheeling's conservation plan were accepted by the Department until 12 February 2012. No comments were received by the public during the period of 28 December 2011 and 12 February 2012.

Authorization

It is the determination of the Department of Natural Resources that the measures described in this Authorization and Implementing Agreement to be implemented by the Village of Wheeling will adequately minimize and mitigate for the very unlikely but possible incidental taking of eastern massasaugas due to the construction of the Dundee Road Bicycle / Pedestrian Path Stage 1 and 2 in Wheeling, Cook County, IL. Further, it is our opinion that the take authorized herein would not diminish the likelihood of the survival of the eastern massasaugas 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.

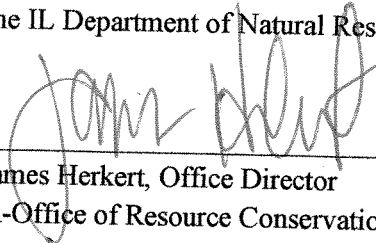
The Illinois Department of Natural Resources has determined that this authorized take is incidental to the Construction of the Dundee Road Bicycle / Pedestrian Path Stage 1 and 2 in Wheeling, Cook County, IL.

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 effective upon signature of the Department and shall remain in effect for a period of one year after the official "project completion date". "Completion date" shall be defined as the date the Path Stage 1 and 2 is officially open for public use. This authorization is effective 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].
2. The effective period of this authorization may be altered by mutual agreement between IDOT/WCHD and the Department.
3. Any massassauga encountered during the period of this Authorization will, in cooperation with the U. S. Fish and Wildlife Service, Chicago Office, be captured and transported to the captive breeding program at Lincoln Park Zoo as per MOU b/t US Fish and Wildlife Service, IDNR, Cook County Forest Preserve District, Lake Co Forest Preserve District, and Lincoln Park Zoo.
4. Throughout the effective period of this Authorization, the Village of Wheeling will report all encounters, observations, and reports of eastern massasaugas from within the project area to IDNR Incidental Take Coordinator, by email (DNR.ITACoordinator@illinois.gov), within 2 working days of the encounter, observation and report, including all known details of that encounter.
5. Throughout the effective period of this Authorization, the Village of Wheeling will annually submit a written report (MS Word or PDF) to the IDNR ITA Coordinator (DNR.ITACoordinator@illinois.gov) summarizing all encounters reported by email over the past 12 months as well as any additional information obtained. This report is required even if no encounters are reported for the 12 month period and will be due November 1st of each year.
6. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that IDOT/WCHD has failed to comply with any of these terms and conditions or has been responsible for the take of any eastern massasaugas (or any other State listed species) beyond that which is incidental to the construction of the Dundee Road Bicycle / Pedestrian Path Stage 1 and 2, Wheeling, Cook County, IL.

7. The Village of Wheeling official identified below is authorized to execute this agreement. Execution by the Village of Wheeling indicates acceptance of all terms and conditions described in this document.

For the IL Department of Natural Resources

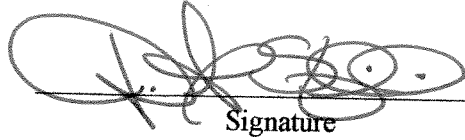


Dr. James Herkert, Office Director
IDNR-Office of Resource Conservation

6-13-12

Date Signed

For the Village of Wheeling



Signature

Jon A. Spadulis Village Manager

Please print name and official title

May 29, 2012

Date Signed

Attach:
Submitted Conservation Plan
Submitted Implementing Agreement