

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), the Illinois State Toll Highway Authority (ISTHA), authorization for the incidental take of the State endangered Eastern Massasauga Rattlesnake (*Sistrurus catenatus*) associated with the reconstruction and widening of an approximate 36-mile segment of Interstate 94/294 Tri-State Tollway between Balmoral Avenue and the Wisconsin State Line in Cook and Lake Counties, Illinois (as described/shown in the conservation plan received by the Department on 7 February 2008) is hereby granted. This is 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 reconstruction and widening of an approximate 36-mile segment of Interstate 94/294 (Tri-State Tollway) between Balmoral Avenue and the Wisconsin State Line in Cook and Lake Counties, Illinois.

Procedural History

The ISTHA in conjunction with the Illinois Natural History Survey (INHS) prepared a conservation plan for the North Tri-State Tollway (I-294) improvements and subsequent activities related to the installation of a bioswale along a defined portion of this route, as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and ISTHA's request for authorization for the incidental take of the Eastern massasauga rattlesnake were received by the Illinois Department of Natural Resources (Department) on 7 February 2008. Public notice of ISTHA's request was published in the *Edwardsville Intelligencer* (Official State newspaper) and the *Daily Herald* on March 7, as well as on March 14, 2008 and March 21, 2008. Public comments on ISTHA's conservation plan were accepted by the Department until May 21, 2008. No comments were received by the public during the period of March 7, 2008 through May 21, 2008.

The Illinois Tollway developed a comprehensive, long-range plan for modernizing and rebuilding the 50-year old, 274-mile Tollway to create a more efficient transportation system for commuters throughout the Chicago Metropolitan Area. More than 1.3 million vehicles travel on the Illinois Tollway each day and 44% of those vehicles travel along the Tri-State Tollway daily. The proposed improvements will greatly improve congestion for commuters and business in Cook County, Lake County, and Northeast Illinois.

The purpose of this proposed project is to 1) reconstruct the nearly fifty-year old roadway to eliminate increasing maintenance and rehabilitation costs including the traffic delays associated with them, 2) increase capacity to an acceptable level of service, and 3) provide a safe and efficient travel way for Tollway patrons.

The primary interest location of the Eastern Massasauga Rattlesnake is in northern Cook County, on property owned by the Forest Preserve District of Cook County (FPDCC). The legal description of the primary disturbance areas are Sec 1 and 12 of R11E, T42N and Sec18, R12E, T42N.

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 criteria 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 take would come from activities associated with the construction of a bioswale on land owned by the FPDCC. The runoff from the Tollway is proposed to be conveyed into bioswales. Bioswales are drainage systems that are designed to improve water quality of the roadway runoff. They are planted with water tolerant grasses and forbs, contain underdrains, and are generally considered to be more state-of-the-art with regard to water treatment than simply allowing overland flow or using detention basins to treat roadway runoff. Many of the bioswales are to be constructed on FPDCC property, with one (1) in the vicinity of known historic Eastern Massasauga Rattlesnake habitat.

The bioswale that is proposed within known historic Eastern Massasauga habitat will be approximately 1,700' long and will vary in width from 8'-12'; it will occupy approximately 0.50 acre. An additional 0.5 acre of linear nature may be necessary for other temporary impacts due to construction activities and equipment movement however all activities are currently planned to take place within Tollway right-of-way and within the 0.5 acre of bioswale. The proposed bioswale plan identifies the bioswale as up to 3,500' in length, however only the northern portion of the bioswale is in the habitat location on Forest Preserve District property. The disturbance during the construction activities are of concern and the purpose of this Incidental Take application. However, the construction includes clearing undesirable woody species and replacing them with grasses and forbs. Once the bioswale is constructed, the rattlesnakes may in fact utilize the site.

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

The anticipated adverse effects include:

- 1) Eastern Massasauga Rattlesnakes may be crushed or entombed by construction equipment or vehicles.
- 2) Temporary loss of habitat associated with excavation and construction activities for a bioswale.

A) Plans to minimize the area, estimated number of take and the amount of habitat affected.

The INHS surveyed the available habitat during the 2005 and 2006 survey seasons. This information coupled with documented observations by others has established a baseline for the number and locations of the Eastern Massasauga Rattlesnake(s). The Tollway will have the habitat locations surveyed again, prior to construction, in the Spring/Summer of 2008. The INHS is under contract to conduct the surveys. In order to aid that search, the Tollway is also arranging for controlled burns (by contractor) at the sites to clear vegetation and improve search efficiency when feasible.

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), the Illinois State Toll Highway Authority (ISTHA), authorization for the incidental take of the State endangered Eastern Massasauga Rattlesnake (*Sistrurus catenatus*) associated with the reconstruction and widening of an approximate 36-mile segment of Interstate 94/294 Tri-State Tollway between Balmoral Avenue and the Wisconsin State Line in Cook and Lake Counties, Illinois (as described/shown in the conservation plan received by the Department on 7 February 2008) is hereby granted. This is 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 reconstruction and widening of an approximate 36-mile segment of Interstate 94/294 (Tri-State Tollway) between Balmoral Avenue and the Wisconsin State Line in Cook and Lake Counties, Illinois.

Procedural History

The ISTHA in conjunction with the Illinois Natural History Survey (INHS) prepared a conservation plan for the North Tri-State Tollway (I-294) improvements and subsequent activities related to the installation of a bioswale along a defined portion of this route, as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and ISTHA's request for authorization for the incidental take of the Eastern massasauga rattlesnake were received by the Illinois Department of Natural Resources (Department) on 7 February 2008. Public notice of ISTHA's request was published in the *Edwardsville Intelligencer* (Official State newspaper) and the *Daily Herald* on March 7, as well as on March 14, 2008 and March 21, 2008. Public comments on ISTHA's conservation plan were accepted by the Department until May 21, 2008. No comments were received by the public during the period of March 7, 2008 through May 21, 2008.

The Illinois Tollway developed a comprehensive, long-range plan for modernizing and rebuilding the 50-year old, 274-mile Tollway to create a more efficient transportation system for commuters throughout the Chicago Metropolitan Area. More than 1.3 million vehicles travel on the Illinois Tollway each day and 44% of those vehicles travel along the Tri-State Tollway daily. The proposed improvements will greatly improve congestion for commuters and business in Cook County, Lake County, and Northeast Illinois.

The purpose of this proposed project is to 1) reconstruct the nearly fifty-year old roadway to eliminate increasing maintenance and rehabilitation costs including the traffic delays associated with them, 2) increase capacity to an acceptable level of service, and 3) provide a safe and efficient travel way for Tollway patrons.

The primary interest location of the Eastern Massasauga Rattlesnake is in northern Cook County, on property owned by the Forest Preserve District of Cook County (FPDCC). The legal description of the primary disturbance areas are Sec 1 and 12 of R11E, T42N and Sec18, R12E, T42N.

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 criteria 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 take would come from activities associated with the construction of a bioswale on land owned by the FPDCC. The runoff from the Tollway is proposed to be conveyed into bioswales. Bioswales are drainage systems that are designed to improve water quality of the roadway runoff. They are planted with water tolerant grasses and forbs, contain underdrains, and are generally considered to be more state-of-the-art with regard to water treatment than simply allowing overland flow or using detention basins to treat roadway runoff. Many of the bioswales are to be constructed on FPDCC property, with one (1) in the vicinity of known historic Eastern Massasauga Rattlesnake habitat.

The bioswale that is proposed within known historic Eastern Massasauga habitat will be approximately 1,700' long and will vary in width from 8'-12'; it will occupy approximately 0.50 acre. An additional 0.5 acre of linear nature may be necessary for other temporary impacts due to construction activities and equipment movement however all activities are currently planned to take place within Tollway right-of-way and within the 0.5 acre of bioswale. The proposed bioswale plan identifies the bioswale as up to 3,500' in length, however only the northern portion of the bioswale is in the habitat location on Forest Preserve District property. The disturbance during the construction activities are of concern and the purpose of this Incidental Take application. However, the construction includes clearing undesirable woody species and replacing them with grasses and forbs. Once the bioswale is constructed, the rattlesnakes may in fact utilize the site.

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

The anticipated adverse effects include:

- 1) Eastern Massasauga Rattlesnakes may be crushed or entombed by construction equipment or vehicles.
- 2) Temporary loss of habitat associated with excavation and construction activities for a bioswale.

A) Plans to minimize the area, estimated number of take and the amount of habitat affected.

The INHS surveyed the available habitat during the 2005 and 2006 survey seasons. This information coupled with documented observations by others has established a baseline for the number and locations of the Eastern Massasauga Rattlesnake(s). The Tollway will have the habitat locations surveyed again, prior to construction, in the Spring/Summer of 2008. The INHS is under contract to conduct the surveys. In order to aid that search, the Tollway is also arranging for controlled burns (by contractor) at the sites to clear vegetation and improve search efficiency when feasible.

The surveys will continue throughout the duration of the roadway and bioswale construction time frame. The Tollway will erect fencing and/or signage at designated "No Intrusion Areas" adjacent to areas with known threatened and endangered species habitat and erect an experimental snake barrier prior to construction activities. These efforts will be coordinated with the INHS, IDNR and USFWS.

The Tollway will develop and implement an Eastern Massasauga education program for all personnel involved in construction, operation and maintenance of the I-294 widening and reconstruction project. Initial meetings with the roadway contractor have already taken place. The education efforts of the personnel involved in the construction of the South Extension of I-355 was very successful with regard to the Blanding's turtles present near that project. That experience and cooperation of the contractors helped in minimizing impacts to known habitat areas adjacent to construction activities and avoided individual turtles that migrated onto the construction site.

The Illinois Tollway has dedicated project funding as part of the Planning Department budget established with Intergovernmental Agreements to provide for the monitoring of the Eastern Massasauga along I-294. This work is primarily being conducted by the Illinois Natural History Survey. Other contractors, such as those to conduct prescribed burns or brush clearing, also have dedicated funding.

B) Plans for Management of the Area Affected that Will Enable the Continued Use

The land and habitats of the area in question are under public ownership. The FPDCC owns and manages the property. Therefore the property is not endangered by secondary impacts due to urban development.

C) Description of All Measures to be Implemented to Minimize or Mitigate the Effects

1) Minimization of impacts is being satisfied by conducting prescribed burns followed by Eastern Massasauga surveys when feasible. Several surveys have taken place in recent years and will take place in Spring/Summer of 2008. The intent was and is to determine the snake's proximity to the bioswale construction sites. Additionally, the areas will be searched immediately prior to the construction activities. These efforts are intended to reduce the possibility that a snake will be killed by the construction activities.

2) The FPDCC has provided the Tollway with a "wish list" of activities that are intended to restore and enhance Eastern Massasauga habitat. This list, entitled "Rattlesnake Management Priorities for the Upper Des Plaines", dated May 21, 2007, was used as a restoration guide to evaluate conservation measures. The Tollway then met with the FPDCC, USFWS, IDNR and the INHS both together and separately on several occasions to discuss, evaluate, and prioritize measures to be implemented. Based on those discussions as well as field visits, it was concluded that area north of Dundee Road and south of Forest View Drive (herein referred to as the Portwine Road Bioswale Area) had the most potential for the Tollway to implement successful habitat restoration work.

Specifically, the Tollway intends to clear and burn 20 acres adjacent to the marsh and I-294 along with conducting an additional 50 acre controlled burn of the surrounding area. Within this surrounding 38 acre area, acres will be selectively cleared to facilitate burning and search activities. The combination of these activities totals 70 acres for Eastern Massasauga habitat management. The purpose of this work is to eliminate the canopy that has encroached within the historical habitat of the Eastern Massasauga. This

location is the number one priority of the FPDCC and the USFWS. Aerial photographs of this area from 1938 indicate it was a mix of farmed land, hay meadows and sparse woodlands. The clearing of woody vegetation may also increase the hydrology of the area by eliminating the wicking action from that woody vegetation. As part of the clearing activity, the remaining stumps will receive an herbicide treatment to prevent resprouting. Once the clearing is complete, the 70 acre area will be burned as part of the Habitat Management plan and to aid in Eastern Massasauga surveys.

3) The Illinois Tollway has dedicated project funding as part of the Planning Department budget to provide for the monitoring of Eastern Massasauga's populations. The rattlesnake monitoring work is being conducted by the Illinois Natural History Survey with possible support of the USFWS; the vegetative management is to be done by private contractors and/or the FPDCC.

In summary, there has been a strong level of support for Eastern Massasauga Rattlesnake habitat restoration by various resource agencies. These agencies are committed to ongoing coordination and evaluation of the restoration efforts.

To further minimize construction impacts, the Tollway's Erosion and Sediment Control, Landscape Design Criteria Manual is being used. This Manual utilizes the latest techniques in sediment and erosion control design and implementation. No-intrusion signs and super silt fence has been installed and diligently maintained within the construction area.

D) Plans for Monitoring the Effects of Measures Implemented

The Illinois Natural History Survey has been contracted to supply Eastern Massasauga Rattlesnake monitoring prior to and during the construction activities. Annual Reports are provided to the Tollway that describe that year's efforts. The first two of the Annual Reports are available now and entitled "Survey and Assessment of Threatened and Endangered Freshwater Mussels, Fishes, Amphibians and Reptiles of the Illinois Interstate I-294/94 Tollway Improvement Corridor in Cook and Lake Counties", INHS Technical Reports 2006(2):1-14, January 25, 2006 and 2007(2):1-29+ii, January 15, 2007.

The Tollway has further committed to conducting "during construction" surveys from 2008-2009 as well as future Eastern Massasauga Rattlesnake surveys. These surveys are proposed to take place one year after roadway construction is complete (approximately 2010) and a final survey five years after bioswale construction (approximately 2015). However, as per the IGA with FPDCC there will be continual monitoring of the bioswales for 10 years. If there is evidence of Eastern Massasauga use of the bioswales or use of the incidental take mitigation area additional surveys will be considered at the request of resource and regulatory agencies.

For follow up management activities in the cleared areas, there will be one additional herbicide treatment to the remaining stumps to prevent resprouting.

E) Adaptive Management Practices That Will Be Used to Deal With the Changed or Unforeseen Circumstances That Affect the Effectiveness of Measures Instituted to Minimize or Mitigate the Effects of the Proposed Action

The education efforts of the personnel involved in the construction of the South Extension of I-355 was very successful with regard to the Blanding's turtles present near that project. In learning from that experience, the Tollway will develop and implement an Eastern Massasauga education program for all personnel involved in construction, operation and maintenance of the I-294 widening and reconstruction project. This will include an identification program and establish a telephone point of contact list. This may help in minimizing impacts to known habitat areas adjacent to construction activities as well as protect individual snakes.

The silt fence/experimental snake barrier will be monitored to ensure that it is maintained in working order. It will also be evaluated as to its effectiveness for preventing snakes from crossing onto the construction site. There will be an erosion control/environmental compliance inspector available to report snakes seen near the construction zone, and assist with any protocols developed to avoid harm to the species. If it appears to be ineffective, the INHS, IDNR, and the USFWS will meet and develop an alternative strategy to keep the snakes away from the construction activities.

Furthermore, the Agreement with the INHS is to continue the surveys for the Eastern Massasauga not just prior to but during the construction seasons. If snakes are located near construction activities, measures will be taken to ensure the individuals are not harmed.

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

The Illinois Natural History Survey has been contracted by the Illinois Tollway to complete the studies. Also, the construction measures and minimization measures described above are all funded within existing Tollway contracts with the contractors and consultants and backed by "AAA" Bonds.

The Tollway has dedicated project funding as part of the Planning Department budget. At the conclusion of the 2008 monitoring and survey season, the Tollway will work with the Illinois Natural History Survey to determine the necessary efforts for the 2009 season. The Illinois Tollway has dedicated project funding as part of the Planning Department budget to provide for the monitoring of Eastern Massasauga's populations. The rattlesnake monitoring work is being conducted by the Illinois Natural History Survey with possible support of the USFWS; the vegetative management is to be done by private contractors and/or the FPDCC.

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 take would come from activities associated with the construction of a bioswale on land owned by the FPDCC. The runoff from the Tollway is proposed to be conveyed into bioswales. As explained previously, bioswales are drainage systems that are designed to improve water quality of the roadway runoff. They are planted with water tolerant grasses and forbs, contain underdrains, and are generally considered to be more state-of-the-art with regard to water treatment than simply allowing overland flow or using detention basins to treat roadway runoff. Many of the bioswales are to be constructed on FPDCC property, with one in the vicinity of known historic Eastern Massasauga Rattlesnake habitat.

The bioswale that is proposed within known historic Eastern Massasauga habitat will be approximately 1,700' long and will vary in width from 8'-12'; it will occupy approximately 0.50 acre. An additional 0.5 acre of linear nature may be necessary for other temporary impacts due to construction activities and equipment movement however all activities are currently planned to take place within Tollway right-of-way and within the 0.5 acre of bioswale. The proposed bioswale plan identifies the bioswale as up to 3,500' in length, however only the northern portion of the bioswale is in the habitat location on Forest Preserve District property. The disturbance during the construction activities are of concern and the purpose of this Incidental Take application. However, the construction includes clearing undesirable woody species and replacing them with grasses and forbs. Once the bioswale is constructed, the rattlesnakes may in fact utilize the site.

The proposed action of widening the Tollway does not require additional Right-of-Way in northern Cook County for the roadway itself. The potential impact to habitat is due to the introduction of bioswales and their construction. The bioswales are located in, near or adjacent to potential Eastern Massasauga habitat. Bioswales are proposed to improve the water quality of the area. The surface runoff from the roadway will be directed through the bioswales and not overland into the Forest Preserve, as it does under the current condition. This should improve the overall condition of the Forest Preserve and habitats for all species.

The no-action alternative for the bioswales was evaluated extensively. Numerous meetings with the Forest Preserve District staff, Board of Directors, the Illinois DNR, the USFWS, as well as private interest groups were held. Simply put, the no-action would allow surface runoff from the roadway to continue to flow onto the adjacent land with no treatment. The compensation measures of removing woody vegetation, restoring hydrology within some areas and improving the water quality will all contribute to the overall improvement of the adjacent habitats which are more beneficial to the species than doing nothing. Furthermore, the survey methods and protective construction measures were developed with resource agency input and were considered prudent to protect the species.

The Tollway will work diligently with the Forest Preserve District, IDNR, INHS, and the USFWS to develop a list of management and habitat restoration activities. The ecologists with the history and knowledge of the Eastern Massasauga Rattlesnake locations and habitat requirements were involved in the restoration recommendations. As such, it is the opinion of Tollway that the activities proposed will restore and enhance the habitat in such a way that the Eastern Massasauga will expand its current range. The ultimate goal is that the range and population numbers will increase as a result of the proposed habitat restoration measures.

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 ISTHA 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 ISTHA in conjunction with the Illinois Natural History Survey (INHS) prepared a conservation plan for the North Tri-State Tollway (I-294) improvements and subsequent activities related to the installation of a bioswale along a defined portion of this route, as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and ISTHA's request for authorization for the incidental take of the Eastern massasauga rattlesnake were received by the Illinois Department of Natural Resources (Department) on 7 February 2008. Public notice of ISTHA's request was published in the *Edwardsville Intelligencer* (Official State newspaper) and the *Daily Herald* on March 7, as well as on March 14, 2008 and March 21, 2008. Public comments on ISTHA's conservation plan were accepted by the Department until May 21, 2008. No comments were received by the public during the period of March 7, 2008 through May 21, 2008.

Authorization

It is the determination of the Department that the measures to be implemented by the ISTHA and the INHS will adequately minimize and mitigate for the anticipated taking (disturbance/harassment/death) of a small number of Eastern massasauga rattlesnakes due to the North Tri-State Tollway (I-294) improvements and subsequent activities related to the installation of a bioswale along a defined portion of this route. Further, it is our opinion that the take (disturbance/harassment/death) authorized herein would not diminish the likelihood of the survival of either the Eastern massasauga rattlesnake 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 effective upon signature of the Department and shall remain in effect for a period of ten (10) years - starting in 2008 and commencing in 2019, 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 following measures shall be implemented with regards to the North Tri-State Tollway (I-294) improvements and subsequent activities related to the installation of a bioswale along a defined portion of this route:

Minimization of impacts is being satisfied by conducting prescribed burns followed by Eastern Massasauga surveys when feasible. Several surveys have taken place in recent years and will take place in Spring/Summer of 2008. The intent was and is to determine the snake's proximity to the bioswale construction sites. Additionally, the areas will be searched immediately prior to the construction activities. These efforts are intended to reduce the possibility that a snake will be killed by the construction activities.

The Tollway also intends to clear and burn 20 acres adjacent to the marsh and I-294 along with conducting an additional 50 acre controlled burn of the surrounding area. Within this surrounding 38 acre(s) area, acres will be selectively cleared to facilitate burning and search activities. The combination of these activities totals 70 acres for Eastern Massasauga habitat management. The purpose of this work is to eliminate the canopy that has encroached within the historical habitat of the Eastern Massasauga. This location is the number one priority of the FPDCC and the USFWS. Aerial photographs of this area from 1938 indicate it was a mix of farmed land, hay meadows and sparse woodlands. The clearing of woody vegetation may also increase the hydrology of the area by eliminating the wicking action from that woody vegetation. As part of the clearing activity, the remaining stumps will receive an herbicide treatment to prevent resprouting. Once the clearing is complete, the 70 acre area will be burned as part of the Habitat Management plan and to aid in Eastern Massasauga surveys.

3. The following Monitoring Measures shall be implemented with regards to the I-294 (North Tri-State Tollway) project:

The Illinois Natural History Survey has been contracted to supply Eastern Massasauga Rattlesnake monitoring prior to and during the construction activities. Annual Reports are provided to the Tollway that describe that year's efforts. The first two of the Annual Reports are available now and entitled "Survey and Assessment of Threatened and Endangered Freshwater Mussels, Fishes, Amphibians and Reptiles of the Illinois Interstate I-294/94 Tollway Improvement Corridor in Cook and Lake Counties", INHS Technical Reports 2006(2):1-14, January 25, 2006 and 2007(2):1-29+ii, January 15, 2007.

The Tollway has further committed to conducting during construction surveys from 2008-2009 as well as future Eastern Massasauga Rattlesnake surveys. These surveys are proposed to take place one (1) year after roadway construction is complete (approximately 2010) and a final survey five years after bioswale construction (approximately 2015). However, as per the IGA with FPDCC there will be continual monitoring of the bioswales for 10 years. If there is evidence of Eastern Massasauga use of the bioswales or use of the incidental take mitigation area additional surveys will be considered at the request of resource and regulatory agencies.

For follow up management activities in the cleared areas, there will be one additional herbicide treatment to the remaining stumps to prevent resprouting.

4. The following Adaptive Management Practices shall be implemented with regards to the I-294 (North Tri-State Tollway) project:

The education efforts of the personnel involved in the construction of the South Extension of I-355 was very successful with regard to the Blanding's turtles present near that project. In learning from that experience, the Tollway will develop and implement an Eastern Massasauga education program for all personnel involved in construction, operation and maintenance of the I-294 widening and reconstruction project. This will include an identification program and establish a telephone point of contact list. This may help in minimizing impacts to known habitat areas adjacent to construction activities as well as protect individual snakes.

The silt fence/experimental snake barrier will be monitored to ensure that it is maintained in working order. It will also be evaluated as to its effectiveness for preventing snakes from crossing onto the construction site. There will be an erosion control / environmental compliance inspector available to report snakes seen near the construction zone, and assist with any protocols developed to avoid harm to the species. If it appears to be ineffective, the INHS, IDNR, and the USFWS will meet and develop an alternative strategy to keep the snakes away from the construction activities.

Furthermore, the Agreement with the INHS is to continue the surveys for the Eastern Massasauga not just prior to but during the construction seasons. If snakes are located near construction activities, measures will be taken to ensure the individuals are not harmed.

5. The following Reporting Practices shall be implemented with regards to the I-294 (North Tri-State Tollway) project:

The Tollway will work diligently with the Forest Preserve District, IDNR, INHS, and the USFWS to develop a list of management and habitat restoration activities. The ecologists with the history and knowledge of the Eastern Massasauga Rattlesnake locations and habitat requirements were involved in the restoration recommendations. As such, it is the opinion of Tollway that the activities proposed will restore and enhance the habitat in such a way that the Eastern Massasauga will expand its current range. The ultimate goal is that the range and population numbers will increase as a result of the proposed habitat restoration measures.

In addition, the Illinois Natural History Survey has been contracted to supply Eastern Massasauga Rattlesnake monitoring prior to and during the construction activities. Annual Reports are provided to the Tollway that describe that year's efforts. The first two of the Annual Reports are available now and entitled "Survey and Assessment of Threatened and Endangered Freshwater Mussels, Fishes, Amphibians and Reptiles of the Illinois Interstate I-294/94 Tollway Improvement Corridor in Cook and Lake Counties", INHS Technical Reports 2006(2):1-14, January 25, 2006 and 2007(2):1-29+ii, January 15, 2007.


The Tollway has further committed to conducting during construction surveys from 2008-2009 as well as future Eastern Massasauga Rattlesnake surveys. These surveys are proposed to take place one (1) year after roadway construction is complete (approximately 2010) and a final survey five years after bioswale construction (approximately 2015). However, as per the IGA with FPDCC there will be continual monitoring of the bioswales for 10 years. If there is evidence of Eastern Massasauga use of the bioswales or use of the incidental take mitigation area additional surveys will be considered at the request of resource and regulatory agencies.

6. The effective period of this authorization may be altered by mutual agreement between the ISTHA and the Department.

7. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that the ISTHA has failed to comply with any of these terms and conditions or has been responsible for the take of any Eastern massasauga rattlesnakes beyond that which is incidental to the North Tri-State Tollway (I-294) improvements and subsequent activities related to the installation of a bioswale along a defined portion of this route.

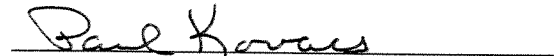
8. The ISTHA official identified below is authorized to execute this agreement. Execution by ISTHA official indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources



Mike Conlin, Acting Director
Office of Resource Conservation

For the ISTHA



9.22.08
Date Signed

Paul D. Kovacs, P.E. / Chief Engineer
Please print name and official title

9/10/08
Date Signed

