

**Illinois Department of Transportation Conservation Plan for
the state-threatened Marsh Rice Rat (*Oryzomys palustris*) for the
FAP 312 (IL 146) highway project in Alexander County**

1. Description of the impact likely to result from the proposed taking

A. Legal Description of the project area

This expansion project begins at the intersection of IL Route 3 with IL 146 1.7 miles south of McClure (McClure Quadrangle 7.5', Township 14 South/Range 3 West/Section 16, 3rd Principal Meridian), continues west along Illinois Route 146, and ends near the intersection with Bader Lane in East Cape Girardeau, IL. (McClure Quadrangle 7.5', Township 14 South/Range 3 West/Section 18, 3rd Principal Meridian, see Figure 1.)

The proposed improvement and resulting impacts will occur within the proposed project limits that required an additional 23 acres of IDOT right-of-way adjacent to the existing right-of-way limits.

B. Biological Data

The marsh rice rat (*Oryzomys palustris*) occurs from Texas, Oklahoma, and southeastern Kansas eastward to the Atlantic coast, and north to Pennsylvania and southern New Jersey. Their range within Illinois includes the area south of the Shawnee Hills Section and extends northward along the Mississippi River on the west and through the Shawnee Hills Section by way of the Big Muddy River valley into the poorly drained upland of the Mt. Vernon Hill Country. According to the Illinois Natural Heritage Database (INHD), the rice rat has been found in 12 Southern Illinois counties. In addition, there are 14 records for Alexander and Union Counties alone.

This species is known to occupy a variety of wetland types including swamps, drainage ditches, farm ponds, and wet meadows.

C. Habitat and Description of activities that will result in take

Wetlands provide habitat for rice rats. The Illinois Natural History Survey (INHS) found this species at trapping line B only (see Figure 2), no rice rats were found at the other traplines. It is anticipated that most rice rats will leave or can move away from the construction zone once work begins. However, there may be an incidental taking from construction activity on those rice rats unable to move out of harms way such as nesting young.

D. Explanation of the anticipated adverse effects on the listed species

It is anticipated that the project will adversely impact rice rats due to habitat loss and potential for harming individual species.

2. Measures the applicant will take to minimize and mitigate the impact

A. Plans to minimize the area affected by the proposed action, the number of individuals of an endangered or threatened species that will be taken, and the amount of habitat affected.

Impacts were minimized since this project is an improvement and affects wetlands only adjacent to the project. Impacts would have been much greater if this project was on new alignment.

It is unknown if any individuals will be taken by construction activity since they may move away from construction activity, except nesting young. While there are a total of 9 jurisdictional wetlands in the project area and a total of 2.3 acres of wetlands converted for highway right-of-way, only three wetlands were successfully trapped for rice rats. (See Figure 3.) The amount of impact to these three wetlands totals 0.51 acres of habitat affected.

B. Plans for management of the area affected by the proposed action that will allow continued use of the area by the species.

IDOT is converting only a small percentage of each wetland impacted by this project. The rest of the wetland will be available for use by the rice rat as well as all other wetland plants and animals. As mentioned above, 2.3 acres of wetlands will be permanently converted to highway right-of-way. The remaining habitat will be held in private ownership. The new roadside ditches will provide habitat and replace those ditches previously used by rice rats.

C. Description of all measures to be implemented to minimize or mitigate the effects of the proposed action on the endangered or threatened species.

IDOT minimized the take of rice rat habitat by minimizing the ditch backslopes and adjusting the ditch grades. Restoring wetland habitat in an on-site wetland compensation site will mitigate the take of rice rats and their habitat. (See Figure 4 for compensation site location map.) 7.6 acres of wetlands will be restored at an on-site parcel adjacent to the project to compensate the loss of 2.3 acres.

D. Plans for monitoring the effects of the measure implemented.

Once construction is complete, INHS will re-survey the project area to determine any affect on rice rats by the highway project. Also, the compensatory wetland site will be monitored for its overall performance and the presence of rice rats for five years. These reports will be coordinated with IDNR, Division of Natural Resource Review and Coordination.

E. Projected cost of each measure that will minimize or mitigate the effects of proposed action on endangered or threatened species.

The project cost for constructing the wetland mitigation site is estimated at \$84,000.

F. Adaptive management practices that will be used to deal with changed or unforeseen circumstances that affect the effectiveness of measures instituted to minimize or mitigate the effects of the proposed action on endangered or threatened species.

IDOT will ensure that the wetland compensation site /rice rat habitat meets performance goals approved by the IDNR and the US Army Corp of Engineers and IDOT will remedy any failure(s) so that all performance goals are met.

G. Verification that funding to support mitigation activities will be available for the life of the conservation plan.

Funding was granted by the Delta Regional Authority with additional funding from the Federal Highway Administration and State of Illinois.

3. Alternative actions considered

There are three alternatives for this project and the reasoning why these alternatives are not being considered as a viable option.

A. Alternative 1: No build

Currently, IL Route 146 is a major highway for residents to use in the western portion of Southern Illinois. It is the main route to Cape Girardeau, Missouri, a major economic region for Southern Illinois. Increased traffic warrants the expansion of this roadway to tie into the existing four-lane section that runs from East Cape Girardeau, Illinois to Cape Girardeau, Missouri. The no build alternative will not meet the needs of Southern Illinois residents.

B. Alternative 2: Add lanes to provide a four-lane roadway

In order to address the increasing traffic volumes, expansion of the existing roadway would require the additional lanes to be constructed to the north or south of the existing pavement. Currently, IL Route 146 is a four-lane facility from Bader Lane in East Cape Girardeau to the four-lane Mississippi River bridge at Cape Girardeau. The geometric orientation of that existing four-lane facility would require the proposed additional lanes in this section to be constructed to the south of the existing roadway.

a: Four-lane facility separated by concrete barrier median

Using a concrete barrier to separate the westbound lanes from the eastbound lanes presents a safety hazard to the motorists. With traffic levels increasing in this corridor, an alternative that compromises safety would not be practicable.

b: Four-lane facility separated by a grass median

This alternative would provide the additional roadway capacity to accommodate the existing and projected traffic levels. In addition, the grass median would offer a traversable surface for the motorists and increase safety. This alternative best fits the purpose and need for the project.

4. Data and information to assure that the proposed taking will not reduce the likelihood of the survival of the species.

This species has been trapped in twelve counties in Southern Illinois (Alexander, Franklin, Hamilton, Jackson, Johnson, Massac, Pope, Pulaski, Saline, Union, White, and Williamson). This species has been recently found in the project areas of numerous IDOT highway projects. Two examples are the IL 127 improvement in Union and Alexander Counties and the widening and proposed reconstruction of the Herrin-Johnston City Blacktop.

Locally, there are fourteen INHD records in Alexander and Union Counties, including four locations in the vicinity of the IL Route 146 project area where rice rats were trapped by the Illinois Natural History Survey in 2007. Furthermore, a nest was found at the Union County Conservation Area in 1993 and rice rats were trapped in the conservation area in 1998 and 2008. Rice rats also were trapped along Clear Creek drainage ditch, just southeast of McClure IL and more were trapped just northeast of McClure also in 1998. Therefore, this species is not isolated in one geographic area but is distributed in other locations.

5. An implementing agreement, which shall include, but not be limited to:

A. Names of all participants in the execution of the conservation plan, including public bodies, corporations, organizations, and private individuals.

Charles J. Ingersoll
Bureau Chief
Bureau of Design and Environment
Illinois Department of Transportation

Mary C. Lamie
Deputy Director of Highways
District 5 Engineer
Illinois Department of Transportation

B. The obligations and responsibilities of each of the identified participants with schedules and deadlines for completion of activities in the conservation plan and a schedule for preparation of progress report to be provided to the Department.

District 9 of the IDOT will be responsible for the funding, construction and maintenance of the compensatory wetland/rice rat habitat site. The INHS will provide technical information and will perform follow-up surveys for the rice rat and determine the quality of the compensation site. The Illinois State Geological Survey (ISGS) will perform hydrologic studies of the wetland compensation site and send these annual reports to IDOT. The monitoring reports will be coordinated with the IDNR and US Army Corp of Engineers.

The activities in the conservation plan will be implemented concurrently with the contract for the highway work.

C. Assurances that each participant in the execution of the conservation plan has the legal authority to carry out their respective obligations and responsibilities under the conservation plan.

IDOT is authorized by the Illinois Highway Code to carry out its duties of providing safe and efficient highways for Illinois citizens.

D. Assurances of compliance with all other federal, state, and local regulations pertinent to the proposed action and to execution of the conservation plan.

The rice rat is listed as threatened in Illinois and is covered by the Illinois Endangered Species Act of 1971 only. Therefore, compliance under the federal Endangered Species Act of 1973 is not required. Wetland impacts will be compensated per the rules of the Interagency Wetland Policy Act of 1989. No known local regulations are pertinent to this conservation plan.

E. Copies of any federal authorizations for taking already issued to the applicant.

Not applicable since the rice rat is not federally threatened or endangered.

F. For projects that will result in the taking of endangered or threatened species of plant, copies of expressed written permission of the landowner.

Not applicable since the rice rat is an animal, as defined by the Illinois Endangered Species Act of 1971.

Kath, Joe

From: Traeger, Barb J
Sent: Tuesday, March 03, 2009 11:13 AM
To: Kath, Joe
Subject: FW: ITA for IL 146 in Alexander County
Attachments: FINAL IT Public Notice.doc

FYI

From: Klamm, Julie A
Sent: Tuesday, March 03, 2009 11:00 AM
To: Traeger, Barb J
Subject: FW: ITA for IL 146 in Alexander County

Hi Barb, Attached is the revised Public Notice with all the dates of publication. (The one I sent you earlier and recalled had an error in the dates. This one is good.) I put the closing date for comments on April 20, because the 30 day period ended on Saturday and the notice mentions the comment period ending at the close of business for that date.

*Julie Klamm, Environmental Studies Coordinator
IDOT, Division of Highways, Region 5, District 9
P.O. Box 100
2801 W. Murphysboro Rd.
Carbondale, IL 62903
Phone: (618) 351-5286
E-mail: Julie.Klamm@illinois.gov*

From: Traeger, Barb J
Sent: Monday, March 02, 2009 4:16 PM
To: Klamm, Julie A
Subject: FW: ITA for IL 146 in Alexander County

FYI – Ready for the next step. Please make the indicated change to the Public Notice and proceed with having it published. The State newspaper is now the Arlington Heights Daily Herald. Let me know when they get published so I can keep track of the time frame for comments. If you have any questions, please call. Thanks.

From: Kath, Joe
Sent: Monday, March 02, 2009 3:46 PM
To: Traeger, Barb J
Subject: RE: ITA for IL 146 in Alexander County

Hello, Barb - I apologize again for my delay. I have reviewed the Conservation Plan and Public Notice for the above referenced project (IL 146/Alexander County - potential impacts to the Marsh Rice Rat). This document contains all of the necessary components described in Part 1080, Title 17-Chapter 1: IDNR Administrative Rules for the Incidental Taking of Endangered or Threatened Species. You may now formally proceed to the Public Notice phase of this project. Please notify me of the official publication dates as soon as they are established as this will mark the official start of the public comment period.

There is only one slight change that needs to be made to the Public Notice: Please substitute my name for Glen Kruse's - all ITA related materials should be delivered directly to me. Thank you for your cooperation - please don't hesitate to contact me with any questions you may have regarding this matter.

5/14/2009

PUBLIC NOTICE

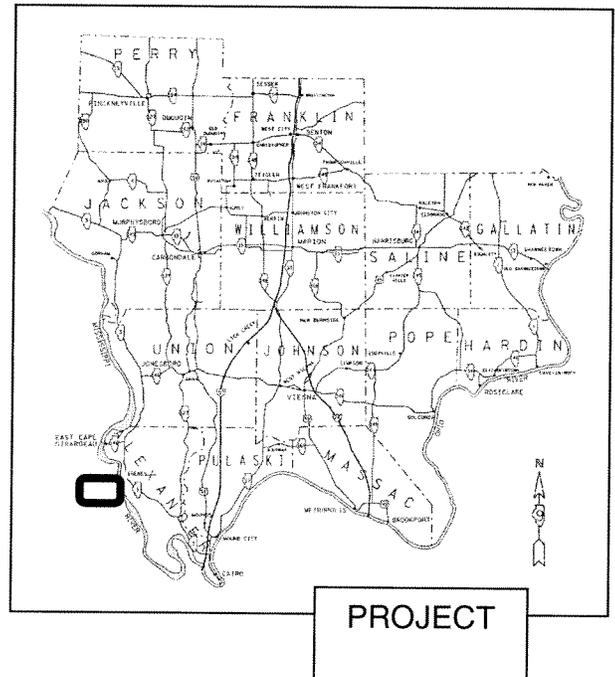
The Illinois Department of Transportation (IDOT) has applied for Incidental Take Authorization with the Illinois Department of Natural Resources, Office of Resource Conservation (IDNR) concerning an Illinois threatened mammal species, the marsh rice rat (*Oryzomys palustris*).

The mailing address for the IDOT office responsible for this project is: Division of Highways, District 9, P.O. Box 100, 2801 W. Murphysboro Rd., Carbondale, Illinois 62903.

It is anticipated that proposed improvements to IL Route 146 in Alexander County may cause an incidental take of marsh rice rats. A take may result when 2.3 acres of wetlands, which provide habitat for rice rats, are converted for the highway improvement.

To offset impacts to the marsh rice rat, IDOT will be constructing a 7.6-acre wetland compensation site along the project corridor. This site will also provide habitat for the marsh rice rat.

As stated in the IDOT Conservation Plan, the Illinois Natural History Survey will re-visit the project corridor and set non-lethal traps to determine if project activity has had an effect on this species and monitor the wetland compensation site.



A copy of the IL Route 146 Conservation Plan is available for inspection at the following locations:

- 1) IDOT District 9, P.O. Box 100, 2801 W. Murphysboro Rd., Carbondale, IL, 62903
- 2) Illinois Department of Natural Resources, Office of Resource Conservation, One Natural Resource Way, Springfield, IL, 62701-1271
- 3) Union County Refuge, 2755 Refuge Road, Jonesboro, IL, 62952
- 4) Jonesboro Public Library, 412 South Main, Jonesboro, IL, 62952

Comments to this proposal should be directed to:

Joseph A. Kath
Endangered Species Project Manager
Illinois DNR - Division of Natural Heritage
One Natural Resources Way
Springfield, Illinois 62702-1271

This comment period closes 30 days after the final publication of this notice that first appears in the Gazette Democrat on March 5, 2009. The final publication is scheduled for

March 19, 2009, marking the closing date for comments at the end of business on April 20, 2009.