

**Stribley, Sara**

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**From:** TERRY ESKER [TERRY.ESKER@illinois.gov]  
**Sent:** Thursday, March 01, 2007 3:45 PM  
**To:** Stribley, Sara  
**Subject:** Terry Esker Contact Info.

The following is my contact information. Please feel free to contact me if you need any addition information or assistance. Thanks

Terry L. Esker  
Natural Heritage Biologist Dist 21/22  
Illinos Department of Natural Resources  
4295 N. 1000th St.  
Newton, IL 62448  
Phone: 618-783-2685  
Fax: 618-783-8416  
Please note new email address: [terry.esker@illinois.gov](mailto:terry.esker@illinois.gov)

# CONFIDENTIAL

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## TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting            ENSR  
Date/Time of Meeting        March 1, 2007  
Keystone Team Member(s)    Sara Stribley

### Contact Information:

Name	Terry Esker
Title	Natural Heritage Biologist Dist 21/22
Organization	Illinois Department of Natural Resources
Address	4295 N. 1000 <sup>th</sup> St. Newton, IL 62448
County	
Phone	618-783-2685
.-mail address	

### Meeting Information:

Type of Contact (phone, in-person, etc.): Phone

Issue: Survey Protocols for Illinois State Threatened/Endangered Bird Species

Concern Level: High  Moderate  Low

### Description:

Bob Hammel forwarded several of my emails on to Terry Esker in regards to several data requests I had made. Terry called to let me know that he had just received my emails, and that he had not heard much about the Project or the planned bird surveys. I explained generally where the proposed Project route ran through Illinois, and gave him a brief update on where we are at with biological surveys. Terry stated that he was willing to provide guidance and information where he could, and that he would like to be kept updated as the survey work progresses. Terry was going to gather some survey reports for bird surveys that had occurred in the Carlyle Lake Wildlife Management area and send those on to me. He again stated that if we need any information, to please contact him, and he will try to help where he can.

## Stribley, Sara

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**From:** Castle, Carla  
**Sent:** Monday, February 26, 2007 10:37 AM  
**To:** Rick.Pietruszka@illinois.gov; Bob.Hammel@illinois.gov; Joseph.Smothers@mus02.usace.army.mil  
**Cc:** Johnson, Charlie; Stribley, Sara  
**Subject:** Keystone Pipeline Meeting 020607  
**Attachments:** IDNR\_COE\_Minutes 020607D.doc

Thank you for meeting with ENSR representatives for the Keystone Pipeline Project on February 6, 2007. Please find attached the Draft Minutes for your review. Please reply to all in; this e-mail with comments. The meeting minutes will be finalized and posted to the Keystone Sharepoint website on Thursday, March 1<sup>st</sup>. Thank you for your time.

Janie Castle  
Project Coordinator  
ENSR  
1601 Prospect Parkway  
Fort Collins, CO 80525  
T (970) 493-8878  
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ccastle@ensr.aecom.com

**Draft – Illinois Department of Natural Resources, Army Corps of Engineers;  
Carlyle Lake Army Corps of Engineers Management Office; Carlyle, IL  
Tuesday, February 6, 2007, 8:00am – 9:00 am**

**Attendees:**

Joe Smothers (USCOE)  
Rick Pietruszka (IDNR)  
Bob Hammel (IDNR)  
Charles Johnson (ENSR)  
Sara Stribley (ENSR)

**Meeting Objectives**

ENSR met with the Illinois Department of Natural Resources (IDNR) and Carlyle Lake Army Corps of Engineers (COE) to discuss issues pertaining to wildlife and special status species that have been identified for the Project. The goal of this discussion was to: 1) discuss the 2006 survey results for federally listed, and candidate species, and state-listed species; 2) obtain concurrence on the proposed 2007 survey protocols and survey locations; 3) discuss other issues or concerns that IDNR or the COE have regarding the Project.

**Project Update and Overview**

ENSR provided a brief overview of the Keystone Pipeline Project to make sure all parties were familiar with the Project.

***Agency Issues, Concerns, and Recommendations:***

ENSR reviewed the proposed biological survey schedule for 2007 in Illinois, including species, survey locations, and protocols. IDNR stressed that they are only concerned about sensitive species affected on Illinois public land. IDNR also indicated that they could not sign the concurrence form that ENSR provided.

**Indiana Bat:** ENSR reviewed current habitat survey work that has been conducted in Illinois. IDNR indicated that no known hibernacula are located near the Project area. The IDNR had no further comments or concerns regarding the survey protocol for this species.

**River Otter:** The river otter was recently delisted in the state of Illinois; however, based on reintroduction efforts of this species within the Carlyle Lake area the COE and IDNR strongly recommended that surveys be conducted along the Kaskaskia River and Shoal Creek. Survey reports should be sent to Rick and Bob for their review.

**Bald Eagle and Raptors:** ENSR informed IDNR that aerial surveys are currently being conducted along the entire Project route to identify bald eagle winter roost and nest sites within 1-mile from the construction ROW at all major rivers crossed by the Project. ENSR is also gathering information regarding raptor nests located within the construction ROW. The IDNR indicated that bald eagles have been sighted within the Carlyle Lake WMA over the past several years, and that eagles continue to move into the area each year. There are 3 known nest sites at Carlyle Lake. ENSR should check the ROW again in 2008 to ensure that eagles have not moved in to the Project area. Send copies of the raptor and bald eagle report to Bob Hammel.

**Loggerhead shrike:** IDNR had no comments or concerns regarding the survey protocol for this species.

**Least bittern, pied-billed grebe, and yellow-crowned night heron:** The COE indicated that these three species are known to occur at Carlyle Lake. As a result, surveys should be conducted in 2007 for these birds.

**Massasauga and Kirtland's Snake:** Chris Phillips with the Illinois Natural History Survey (INHS) has studied the massasauga at Carlyle Lake. This population may be an endemic population, and possibly one of the most significant populations in the Midwest. Chris Phillips (INHS), Glen Kruse (IDNR), and Joe Cath (IDNR) would be able to provide ENSR with guidance on developing mitigation for the massasauga and Kirtland's snake. The Carlyle Lake COE provided ENSR with the management plan developed for the Carlyle Lake massasauga population (see attached).

#### Incidental Take (ITA) Permit

- Rick Pietruszka submitted the massasauga and Kirtland's snake study proposal to the ITA Committee last week. The Committee suggested that ENSR apply for an ITA Permit for these two species.
- Rick emphasized the need for ENSR to contact the ITA Committee as soon as possible regarding their recommendation to apply for an ITA Permit for the massasauga and Kirtland's snake.
- The ITA Committee falls under the Office of Resource Conservation at the IDNR, and is the body responsible for administering this permit. Generally speaking the ITA application process usually takes 4 to 6 months to get approved. The IDNR recommends first submitting a draft application to the committee for their review and recommendations, and then submitting a final application.
- ENSR should contact Joe Cath (ITA Committee) for the Kirtland's Snake or Indiana Bat ITA Application as examples.

**Decurrent False Aster:** IDNR indicated that this species could potentially occur within the Carlyle Lake area. The IDNR clarified that in Illinois, plants are the property of the landowner, and animals are the property of the state. If this species was found within the ROW within the Carlyle Lake area, ENSR should contact the Carlyle Lake COE (landowner). If this species was found during occurrence surveys, the COE indicated that they would have to consult with the USFWS to determine proper mitigation for this species, if needed.

**Eastern Fringed Orchid, Prairie Spiderwort, Royal Catchfly, and Spring Ladies' Tresses:** IDNR had no comments or concerns regarding these species.

#### **Action Items**

Bob Hammel requested that he be notified 2-3 days ahead of survey crews working at the Carlyle Lake WMA to ensure that they receive appropriate access to the area.

ENSR to complete ITA Permit for the massasauga and Kirtland's snake.

**Stribley, Sara**

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**From:** RICK PIETRUSZKA [RICK.PIETRUSZKA@illinois.gov]  
**Sent:** Thursday, February 15, 2007 10:18 AM  
**To:** Stribley, Sara  
**Cc:** BOB HAMMEL; RICK PIETRUSZKA  
**Subject:** Re: Keystone ENSR - Follow-up Questions from Meeting with IDNR

Hi Sara, We got snow bombed big time Tuesday/Wednesday- 12+ inches. Pretty well dug out now. I'd like to clarify IDNR's position regarding surveys for listed plants not on IDNR owned/managed property. Under Illinois law listed plant species remain the property of the land owner, unlike listed animals which are state property regardless of where they may be found. IDNR cannot initiate an Incidental Take Authorization application regarding the taking of a listed plant on behalf of the land owner. However, in order to reduce impact upon or maximize listed plant species' survival, IDNR requests that surveys for listed species be conducted in suitable habitats. Unlike surveying for listed animals, IDNR cannot legally require listed plant surveys on property IDNR does not own/manage/control. Nevertheless, IDNR requests that surveys for listed plant species be undertaken in likely habitats as proposed in order to identify whether the listed species is present or not. Hope I made some sense of this "clear as mud" issue for you. If you've any questions please contact me. Thanks. Rick Pietruszka

Rick Pietruszka, Consultation Program  
IDNR, Impact Analysis Section  
Division of Ecosystems and Environment  
217-785-4992

>>> "Stribley, Sara" <sstribley@ensr.aecom.com> 2/14/2007 10:38 AM >>>  
i Bob,

I hear you guys are getting some really bad weather up there in Illinois? I'm not sure if you made it in to work today because of the weather, but I just had a few follow-up questions from our meeting last week that I was hoping you could help clarify:

1) I went back and reviewed the comments I had received from Mike Ward (INHS) and other IDNR and INHP data regarding bird species along the proposed Keystone route. I believe we dropped the yellow-crowned night heron from our survey proposal because we were under the impression that it is a rare, "non-breeding" summer resident? However, if the heron is known to nest and breed in the Carlyle Lake area, we want to include it in our 2007 surveys. I just wanted to get some clarification on the breeding status of this species?

2) Also, I guess we are a little uncertain about the surveys we are proposing to conduct on other "non-state land." For state protected species, such as the prairie spiderwort, royal catchfly, and spring ladies' tresses, is there any justification for us to survey on private land for these species? From a few of Rick's comments at the meeting, I wasn't sure if he was stating we didn't need to conduct any surveys outside of state land for state listed species, or if I misinterpreted his comments? We definitely want to do our part in protecting these species, but we also have to be able to justify the reason for doing all of the proposed surveys.

I have been in contact with Glen Kruse and he is going to send an example of a conservation plan to me. ENSR will get started on putting

the ITA permit application together for the massasauga/kirtland's snake.  
Any input you can provide on the few questions above would be greatly  
appreciated! Thanks, and stay warm!  
Sara

Sara Stribley  
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Stribley, Sara

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**From:** BOB HAMMEL [BOB.HAMMEL@illinois.gov]  
**Content:** Wednesday, February 14, 2007 10:35 AM  
**To:** Stribley, Sara  
**Subject:** Re: Keystone ENSR - Follow-up Questions from Meeting with IDNR

Sara,  
Pretty nasty here yesterday. A lot of rain turning to freezing rain, then sleet and finally snow. Only about three inches, but the wind really howled with some drifting.  
Hope I didn't confuse you too much at the meeting. I forwarded your question about surveying species on non-state properties to Rick. I'll let him answer that. As far as the yellow crowned night heron, they are listed as an uncommon spring, summer, fall visitor here and possibly nesting. No nests have been found, to my knowledge, in recent years, but there is a distinct possibility of it taking place here. I will forward your question to Terry Esker, the Natural Heritage Biologist for the site, and see what he thinks. I'll get back to you as soon as I talk to him. Take care, and I'll do my best to stay warm.  
Bob

>>> "Stribley, Sara" <sstribley@ensr.aecom.com> 02/14/07 10:38 AM >>>  
Hi Bob,

I hear you guys are getting some really bad weather up there in Illinois? I'm not sure if you made it in to work today because of the weather, but I just had a few follow-up questions from our meeting last week that I was hoping you could help clarify:

1) I went back and reviewed the comments I had received from Mike Ward (INHS) and other IDNR and INHP data regarding bird species along the proposed Keystone route. I believe we dropped the yellow-crowned night heron from our survey proposal because we were under the impression that it is a rare, "non-breeding" summer resident? However, if the heron is known to nest and breed in the Carlyle Lake area, we want to include it in our 2007 surveys. I just wanted to get some clarification on the breeding status of this species?

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Illinois Department of  
**Natural Resources**

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

Rod R. Blagojevich, Governor

Sam Flood, Acting Director

February 14, 2007

Sara Stribley  
ENSR - AECOM  
1601 Prospect Parkway  
Ft. Collins, CO 80525

Dear Ms. Stribley:

I have enclosed a copy of a conservation plan prepared as application for authorization of incidental take of an Illinois threatened species, Kirtland's snake (*Clonophis kirtlandii*). Along with the administrative rule for incidental take authorization, this plan can serve as an example of the types of information that should be included in a conservation plan.

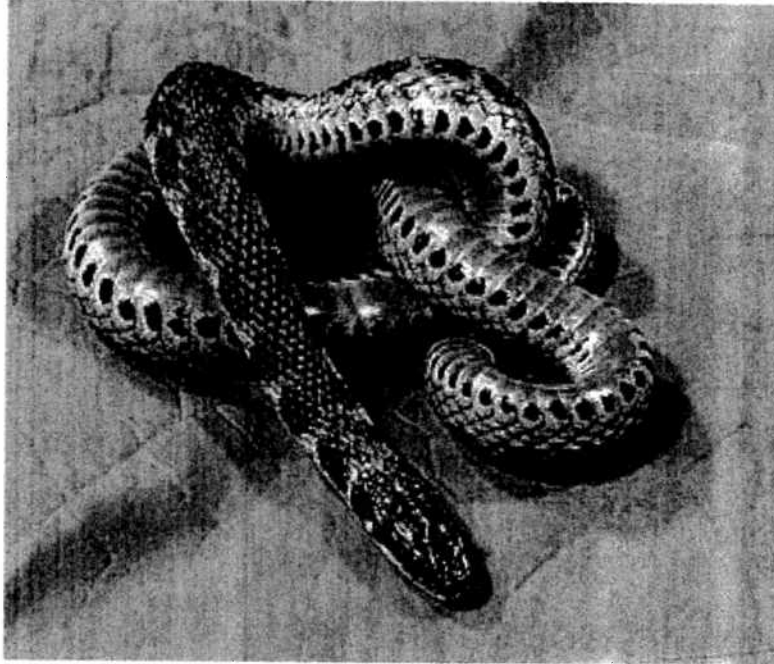
If you have additional questions about the Illinois incidental take process, please contact me at (217)785-8691 or by e-mail at [glen.kruse@illinois.gov](mailto:glen.kruse@illinois.gov).

Sincerely,

A handwritten signature in black ink that reads "Glen Kruse". The signature is written in a cursive, slightly slanted style.

Glen Kruse, Chief  
Division of Natural Heritage

Enclosure



# **CONSERVATION PLAN**

March 15, 2004

**Kirtland's Snake (*Clonophis kirtlandii*)**

**Potential Impacts from Sangchris Lake State Park's  
Boat Access Rehabilitation Project  
(DNR File # 4-03-003, CDB# 102-435-024)**

## **1A BACKGROUND/PROJECT DESCRIPTION**

Located at the northern end of the east arm of Sangchris Lake, the existing East Harbor Boat Access Area serves as the major access point to the 2,162 acre lake. Existing facilities include: a 2-lane concrete boat ramp & maneuvering area, 6 floating boat dock sections, a visitor parking lot accommodating approximately 30 autos and 50-60 auto/trailer units, two single unit vault toilets, multipurpose building, overflow parking lot, and utilities (water, electric, sewer, etc).

The existing ramp is in poor condition, is oriented to shallow water, and does not provide adequate access at less than normal pool. Due to siltation, there is inadequate water depth to/from the boat ramp. There is inadequate hydrological and siltation data that will require documentation. The existing boat docks, aggregate sidewalks, vault toilets, and water service are not accessible, are in poor condition, and have outlived their useful service life. In addition, there are no fish cleaning facilities at this site.

This project provides for the overall improvement of the East Harbor Boat Access Area facility and will include: hydrological and siltation study, mechanical silt removal to assure adequate water depth between the new ramp and deeper water, new accessible two-lane concrete boat ramp and maneuvering area reoriented toward deeper water, new accessible floating boat docks, new accessible double unit vault toilet, new accessible water hydrant, and new accessible fish cleaning station adjacent to the existing overflow parking lot. Other associated construction items include: site grading and drainage improvements, existing facility demolition and removal, fill material, riprap, site amenities, site/security lighting, utility trenching, concrete sidewalks, low level stone retaining walls, vehicular and pedestrian signage, the seeding and mulching of disturbed areas, and landscaping.

This project will be submitted for federal reimbursement from the boating fund and will be subject to federal review and approval prior to bidding. Any mitigation items, if required, will be included as part of the overall project cost.

## **1B BIOLOGICAL DESCRIPTION OF AFFECTED SPECIES**

The Kirtland's Water Snake (*Clonophis kirtlandii*; referred to as *Natrix kirtlandi* in older literature; Collins, 1990) was discovered near Chicago in 1856 by Robert Kennicott who named it in honor of Jared Kirtland (the Kirtland's Warbler is also named in his honor), a physician, naturalist, founding member of both the medical branch of Case Western Reserve University and the Cleveland Museum of Natural History. This least aquatic of the water snakes prefers the wet meadows and open swamp forests of the upper Midwest, within the lower Great Lakes and the Ohio River valley.

This species can be identified due to its 19 rows of keeled upper-body scales that are gray to reddish-brown, with two rows of alternating small and large diffuse dark blotches along the midline and a generally darker head with a whitish chin, throat and scales around the mouth. The most distinguishing feature is a reddish belly with a row of black spots along each margin and a divided anal plate. The snake grows to be about 2 feet in length. Juveniles are generally darker on the back and sides, and may appear less conspicuously blotched (Bavetz, 1994; Phillips et al., 1999).

The Kirtland's snake prefer prairie wetlands, wet meadows, and grassy edges of creeks, ditches, and ponds, usually in association with crayfish burrows. This species has been found within remnant habitats within vacant lots of urban settings. Individuals will emerge from hibernation in late March or April with mating occurring in May. Live young (4-6 inches in length) are born in August in litters ranging from 4 to 15. Females are known to breed when they have are about half their eventual length, while males may before that length is obtained (Conant, 1943; Minton 1972; Tucker, 1976; Mierzwa, 1985; Martin, 1986). The species diet consists mostly of earthworms, slugs, other softer bodied macro-invertebrates, amphibians and minnows (Conant, 1943; Minton, 1972; Wilsmann and Sellers, 1988; Tucker, 1993). The species is secretive and nocturnal and shelters beneath logs, other surface debris, or in crayfish burrows, by day throughout the summer. Crawfish holes are also known to serve as hibernating sites for this species from late October until late March. When threatened, it flattens itself into a ribbon and remains motionless unless disturbed when it may make a few feeble attempts to strike.

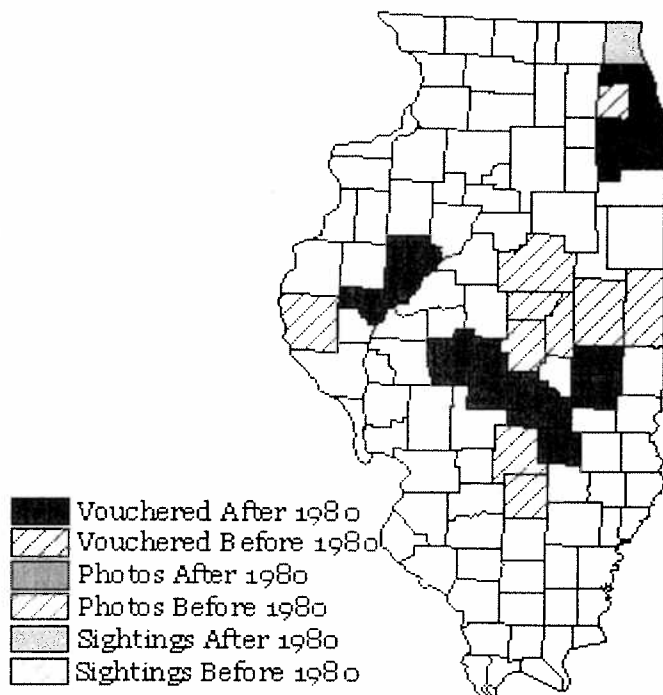


Figure 1. Distribution of Kirtland's snake in Illinois (Phillips et al., 1999)

In Illinois and west-central Indiana, populations require unsaturated soil with a high subsurface water table (NatureServe. 2003) and are therefore most often found on mollisols, soils that develop under grasslands that have excellent water retaining abilities (Wilsmann and Sellers 1988). However, open grassy habitats may harbor populations that are relatively difficult to detect and document due to the secretive nature and that they are often below ground (NatureServe. 2003). This species commonly uses chimney crayfish (*Cambarus diogenes*) burrows as cover and underground passageways because the burrows provide moisture, less severe temperature extremes, and food resources (Wilsmann and Sellers 1988). This fossorial habit allows for the survival

during prescribed fire. The species apparently hibernates underground, possibly using crayfish burrows, in or near the wetlands it inhabits the remainder of the year. However, live individuals have been found on the surface in every month (NatureServe. 2003), with basking occurring on warm winter days. Individuals usually emerges in early spring (Conant 1943; Minton 1972) with activity peaks in April and October. Individuals appear to have a small home ranges (Wilsmann and Sellers 1988). Potential predators include other snakes, birds, carnivorous mammals, and fish (Wilsmann and Sellers 1988).

The species is listed as Threatened in Illinois where it is known historically from 33 sites in 23 counties (Illinois Natural Heritage Database, 2003). Only 11 counties are known to have extant populations (Figure 1). Threats include drainage of wetlands, destruction of native prairie

marshlands, and reduction of earthworm populations by herbicides and pesticides. The species has a Global Status Rank of G2 (NatureServe. 2003). With a range centered in Illinois, Indiana, and Ohio and peripheral populations in Kentucky, Michigan, Wisconsin, Missouri and Pennsylvania. The species is listed as endangered, threatened or extirpated in every state and has apparently declined in abundance over its entire range. Most records are clustered near the southern end of Lake Michigan in Illinois, northwestern Indiana; and southwestern Michigan and in Lucas County, Ohio (Harding 1997). The Kentucky distribution is along the Ohio River valley (Barbour 1971). Historically, the range included all of northeastern and central Illinois, most of Indiana and Ohio, north-central Kentucky, southern Michigan, western Pennsylvania, and extreme northeastern Missouri. In Wisconsin it is known from a single unsubstantiated report in 1883 (Hoy 1883, Vogt 1981). In Missouri it is known from a single record in 1964 (Jones 1967, Johnson 1987). Records from southeastern Wisconsin and from eastern Pennsylvania have been regarded as erroneous (Conant 1943). It was last recorded from Pennsylvania in 1965. Forty-eight occurrences have been documented in Illinois, Indiana, Kentucky, Ohio, and Michigan between 1980 and 1987 (Wilsmann and Sellers 1988).

Since this snake is difficult to detect, all occurrences may not have been documented and historical sites may not have been extirpated as suspected unless habitat destruction is the cause, there may be as many as 100 total occurrences within the current range. However, the Kirtland's snake was once known from more than 100 counties in eight states, but since 1980 it has only been observed in less than one quarter of those counties (Wilsmann and Sellers 1988).

In general, population size at a site is difficult to determine, even with a mark-and-recapture study, because these snakes are so secretive. Research suggests that local populations can sometimes be fairly large with reported numbers of 24 found along 20 feet of a state road in Washington County, Indiana (NatureServe. 2003) and Minton (1972) mentioned that some colonies near suburbs might be quite dense. However, it is not clear at what level is needed to sustain a population in the long term and high population densities may be necessary for normal population function.

The most important factor affecting this species has been loss of former habitat to agriculture (Wilsmann and Sellers 1988) as well as succession which allows grassy habitats to become more woody when surrounding land use patterns change. Many remnant populations inhabit small areas in urban or suburban areas which are highly vulnerable to extirpation by development. These colonies may thrive for a period of time but eventually will decline. Activities that negatively impact crayfishes and their burrows are considered detrimental. Collecting for the pet trade is a threat in urban populations (NatureServe. 2003) where large amounts of litter and debris increase the chances of finding these snakes (Wilsmann and Sellers 1988). Other potential threats to this species are disease, predation, competition, pesticide use, road kills, mowing and long-term climatic changes.

Remaining wet prairie habitats that have not been unchangeably altered can be used for restoration purposes but the species will utilize natural open areas, streams or ditches, upland hillsides that have subterranean refuges and managed open areas such as yards or parks. Within these last two areas, mowing schedules, foot and car traffic, potential environmental



contaminants, hydrology, and ground cover need to be considered as the snakes may frequent these areas (NatureServe. 2003).

A study of Killdeer Plains Wildlife Area in Ohio, which is a state-owned remnant of prairie managed for Canada geese, reported snake mortality from mowing and vehicle traffic. During the fall hunting season when both factors were heavy, snake mortality was high. The study recommended rescheduling mowing operations to coincide with the snakes' periods of inactivity, and rerouting traffic, placing speed bumps and signs to caution motorists to avoid hitting snakes (Wilsmann and Sellers 1988).

Monitoring should be conducted during the prime seasonal, diel, and weather-related activity periods, with repeated visits to each site. Natural areas may be difficult to survey because of the lack of cover under which snakes may be easily found. Some monitoring techniques include overturning of natural and artificial covers, shining with flashlights, seining in streams, drift-fencing, and searching roadways for dead and injured snakes. Drift-fencing may be more successful earlier in the spring or fall when the snakes are moving to and from their hibernacula (Wilsmann and Sellers 1988).

#### Sangchris Lake State Park East Boat Dock

There are two occurrences of Kirtland's snake at Sangchris Lake State Park (Natural Heritage Database, 2003). Both occurrences were first observed in 1985. One occurrence, was observed again in 1992. This species has been traditionally hard to locate since it feeds predominantly at night and below ground and hides during the day below ground (in crawfish holes) or under debris. This species has been relocated at sites after not being seen for over 30 years because it is so secretive and sampling procedures have been inadequate for this species (Wilsmann and Sellers 1988). Continued existence at Sangchris Lake is probable even with the lack of consistent sightings.

#### **1C DESCRIPTION OF ACTIVITIES/IMPACTS LIKELY TO RESULT FROM THE PROPOSED TAKING**

The proposed boat dock improvement activities at the East Boat Dock at Sangchris Lake State Park will be changing the current state of condition where the state threatened Kirtland's snake is known to occur. The boat dock improvement, vault toilet replacement, the construction of the fish cleaning station and the other associated items have the likely hood of impacting 0.903 acres of suitable habitat (Figure 2) thus have the potential to result in "incidental takes" of the Kirtland's snake. This take may occur through direct construction related mortality and may occur within the breeding and/or non-breeding portions of the species life cycle.

Using crawfish burrows as an indicator for habitat preference for this species (since there is little surface debris), an examination of crawfish hole densities was conducted at the East Boat Dock in November of 2003. Ten 0.02 acre circular plots were located within the three habitat types at the east boat dock (Figure 3). The three habitats were mowed lawn (4 points), old field (4 points) and early successional woodland (2 points). This may not have been the best time of the year to

conduct this survey but the results probably reflect correct habitat prioritization by the crawfish with actual density figures more than likely being greater during the warmer seasons. Density estimates for the three habitat types averaged 112.5 holes/acre for mowed lawn, 62.5 holes/acre for old field and 0 holes /acre for successional woodlands. Within the East Boat Dock area there is approximately 1.35 acres of mowed lawn, 5.35 acres of early successional woodland, 6 acres of old field and 4 acres of paved or built upon surfaces (Figure 4).

## **2A PLANS TO MINIMIZE AREA AFFECTED BY PROPOSED ACTION**

Measures have been taken into consideration during design phase to avoid habitat intrusion and fragmentation although avoidance of all potential impact is not possible. To avoid further intrusion and fragmentation and creation of paved surfaces, during the vault toilet improvement to ADA standards, the toilet will be moved closer to the parking lot. All new construction activities will be adjacent to existing paved surfaces.

## **2B/C/F PLANS TO MANAGE AREA AFFECTED BY THE PROPOSED ACTION**

Each impact site will be enclosed with drift fence at least 1 week prior to construction and remain enclosed until the project is completed. For 1 week prior to construction, nightly searches will be conducted during peak activity time for this species (to be determined depending upon time of the year). If individuals of this species are found they will be marked and removed from the impact site. If the drift fence is found to be permeable (underground connections via crawfish holes) through the capture of previously marked individuals, a trench will be dug around the impact site and the drift fence will be buried to a depth of two feet and be monitored for another 1 week period. If previously marked individuals are still being found within the construction zone after the drift fence has been buried, the Department of Natural Resources shall be consulted to determine a course of action. All construction activities and/or construction support activities will be limited to those enclosed areas or already paved surfaces. If the species is found within the enclosed areas, nightly monitoring will continue until no individuals of this species are found for ten consecutive nights or the Department of Natural Resources deems further searches unnecessary.

No specific mitigation for impacts to the 0.903 acres is being proposed. However, the entire East Boat Dock Area will be managed more holistically to actively benefit this species and it's habitat needs. Management considerations for this species will include mowing schedule alterations as well as habitat modifications. Mowing within the East Boat Dock area will be limited to between 10:00am and 4:00pm to coincide with the time of least activity for this species. Mowing guidelines will recommend mowing once every other week in March through May and again in September through October (if feasible and weather permitting). The old fields that are currently being impacted by woody intrusion and are being dominated by goldenrod will be restored to a short stature wet-mesic prairie mix with abundant forbs to keep the grass from becoming too thick and will be managed with fire to offset woody intrusion (Figure 3). The woodlands within the East Boat Dock area are currently dense with an understory of elm, ash, hackberry and bush honeysuckle with an overstory of predominantly cottonwood, sycamore, and

oaks (Figure 3). Portions of these woodlands will be thinned to 40-50% canopy cover and some limited mowing of understory will be allowed to facilitate crawfish usage. The woodlands will then be managed with fire in an attempt to keep the desired structure. All management / mitigation activities will be funded from the Sangchris Lake State Park farm lease program as monies become available. These activities will be phased in over a 10 year period to allow the species to become acclimated to new areas.

## **2D/E MONITORING MITIGATION AND ADAPTIVE MANAGEMENT PRACTICES**

DNR will conduct searches for this species 1, 3, and 5 years post construction. If the species is not found in that time it will be considered extirpated from that particular site and reintroduction will be considered. Site staff will collect all dead snakes found within the east boat dock area for positive ID by the appropriate biologist. If dead individuals are found and mortality appears excessive, DNR will formulate plans to address the apparent cause of the mortality. Change in mowing strategy, further alteration of habitat or day use areas, posting of informative signs, change administrative rules to close site to snake harvest (currently allowed under definition of aquatic life with a limit of 8 per day) or restrict vehicular speed.

## **3 ALTERNATIVE ACTIONS CONSIDERED**

**No-action** - The no-action alternative is defined as no change in the boat dock. This alternative was not considered due the needed dredging and reorientation of the boat dock to ensure continued access to the lake by boaters.

**Design A** - The Design A alternative is defined as improvements to the boat dock but no improvements to the vault toilet or the construction of the fish cleaning station. This alternative was not considered because of the need to improve the current vault toilet to ensure ADA compliance. Currently the toilet vault is in a low lying area and fills with water that leaks out gradually after heavy episodic rains.

**Design B** - The Design B alternative is defined as improvements to the boat dock and the improvements and moving of the vault toilet but no construction of the fish cleaning station. This is not the preferred alternative because of the general need and desire to construct a sanitary fish cleaning station at the site.

**Design C (Preferred Alternative)** - The Design C alternative is defined as the proposed improvements to the boat dock alignment, the upgrade and relocation of the vault toilet and the construction of a fish cleaning station.

## **4 AFFECTS ON SPECIES SURVIVAL AND RECOVERY**

The project will not jeopardize and is likely to enhance, the long term survival and recovery of the Kirtland's snake. The active management of the East Boat Dock Area will result in more



preferred and stable habitat for this species.

## **5 IMPLEMENTING AGREEMENT**

DNR Regional, Site, and District Staff will be responsible for: periodic inspections of the drift fence enclosure to insure integrity and compliance with the IT stipulations, overseeing of all monitoring, mitigation, and the adaptive management efforts identified within the Conservation Plan.

The District Natural Heritage Biologist (or District Wildlife Biologist in his absence) will have approval over acceptance of individual responsible for surveying for and the marking of individual Kirtland's snakes for the purpose of compliance with the Incidental Take.

The successful contractor will be responsible for erecting and maintaining drift fence prior to and during completion of the project as well as providing a suitable individual to conduct the nightly surveys for the snake during the week prior to the start of construction and if the Kirtland's snakes are found, throughout the stipulated time frame or until the Department of Natural Resources deems further searches unnecessary. Results of each nightly survey will be reported to the Site Superintendent at Sangchris Lake State Park or his designee the following morning.

Glen Kruse and Joe A. Kath, Program Manager and Project Manger, respectively, Office of Resource Conservation, Illinois Department of Natural Resources, are responsible for reviewing this Conservation Plan. They are also responsible for the issuance of the Illinois Department of Natural Resources Incidental Take Authorization

## References

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USGS 130 km NE of St. Louis, Missouri, United States 11 Apr 1998

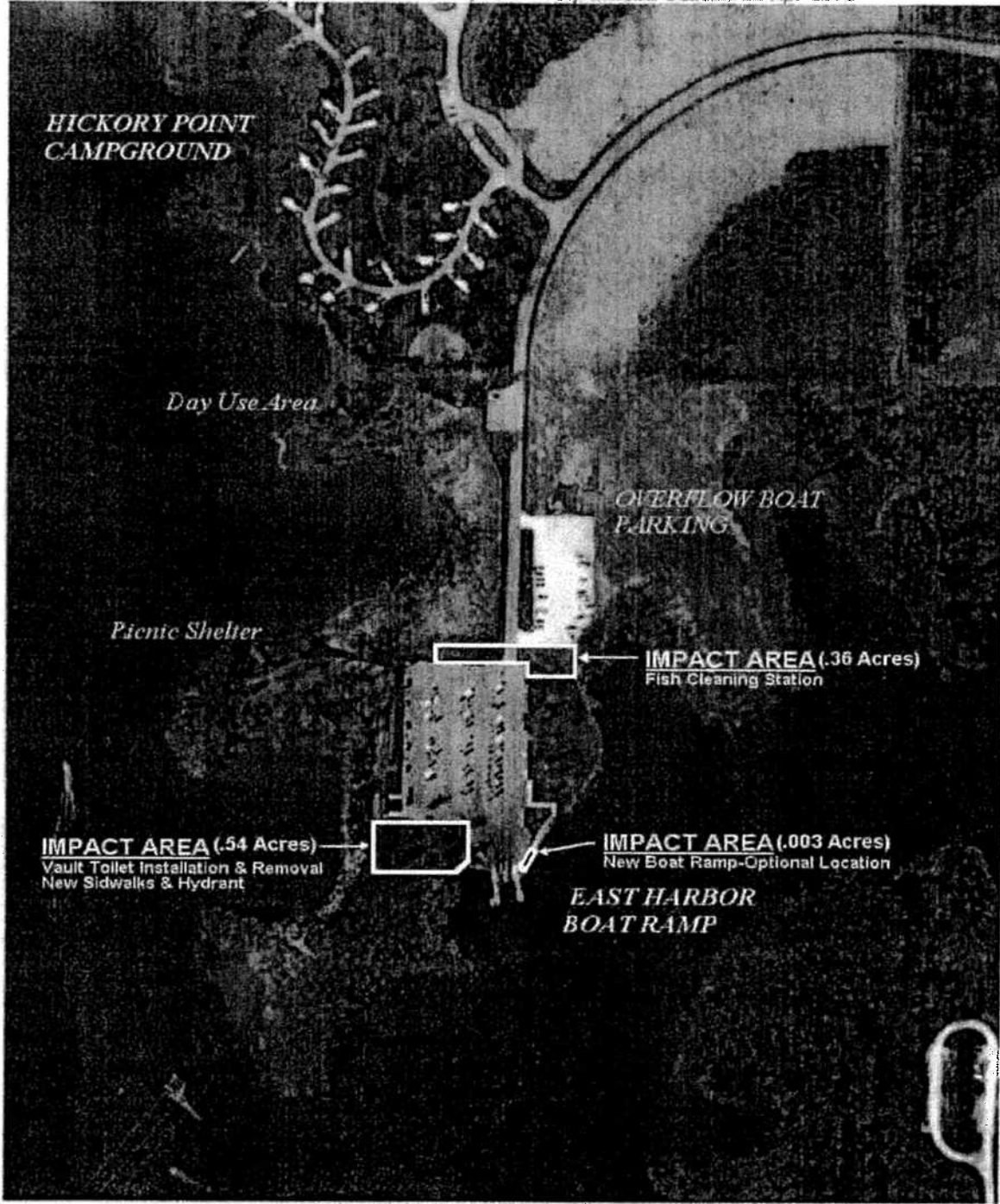


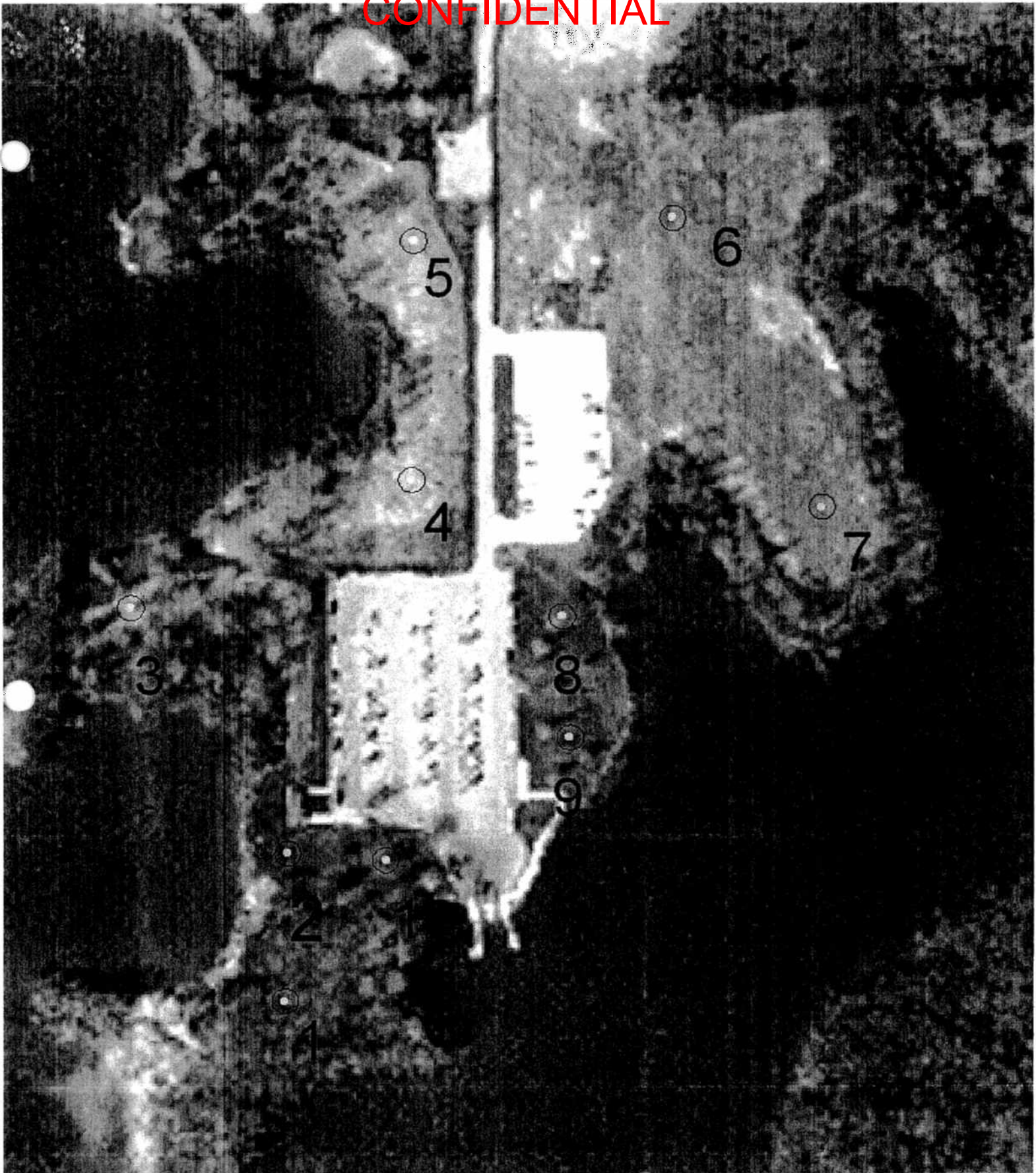
Image courtesy of the U.S. Geological Survey  
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## Sangchris Lake State Park East Side Use Areas

Figure 2. Identified impact areas at Sangchris Lake State Park, East Boat Dock Area showing general layout and acreage estimates for the vault toilet improvements, fish cleaning station and boat dock construction.



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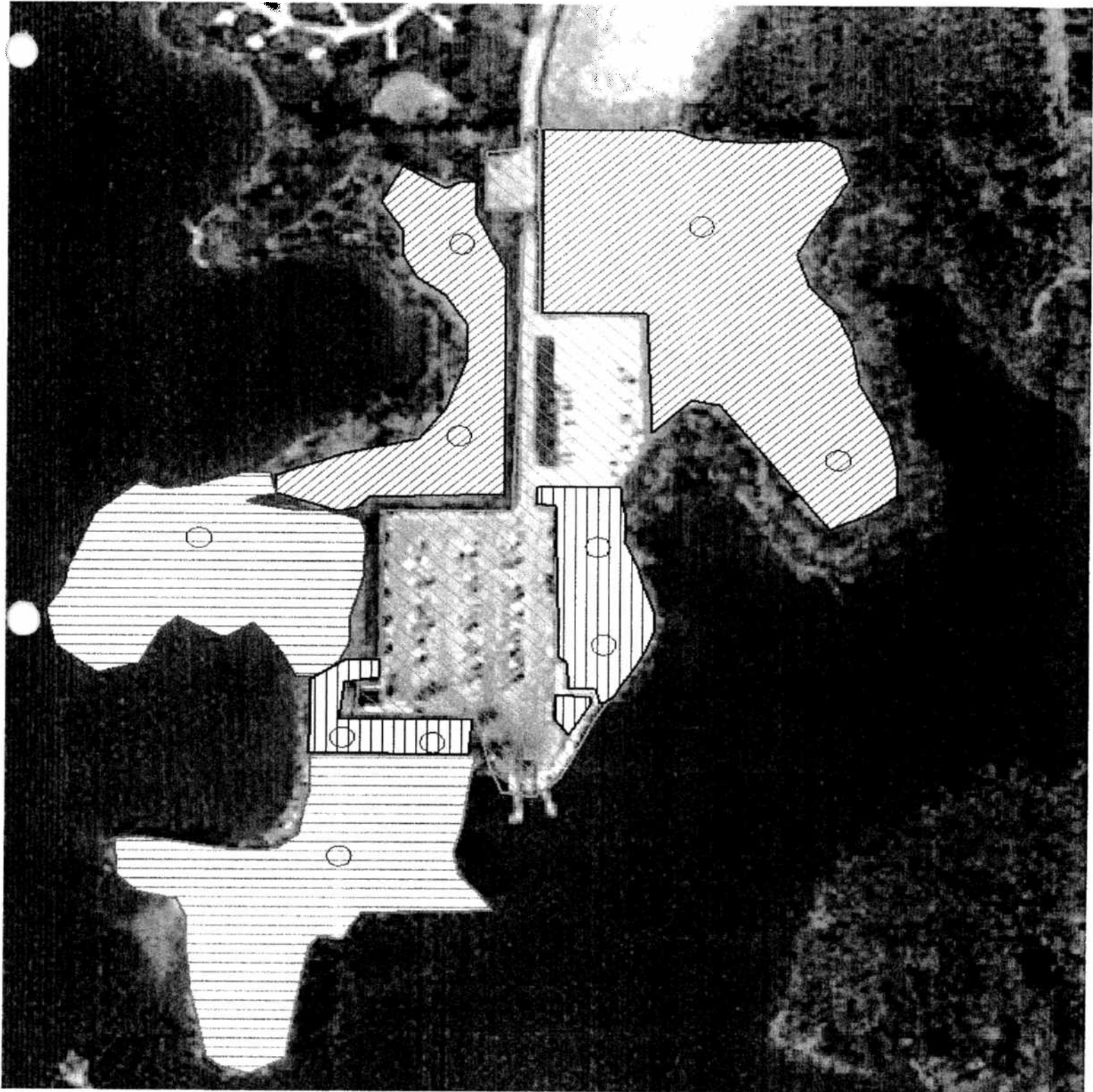


Sangchris East Boat Dock Sample Locations



Figure 3. Sample locations used to determine the densities of crawfish holes at the various habitat types at Sangchris Lake State Park East Boat Dock.





Sangchris East Boat Dock Management Blocks

 Old fields	 Mowed ground
 Currently developed	 Early successional woods

0 200 400 Feet




Figure 4. Habitat types at Sangchris Lake State Park East Boat Dock.

## PUBLIC NOTICE

The Illinois Department of Natural Resources (IDNR) has applied for an incidental take authorization regarding the Kirtland's Snake (*Clonophis kirtlandii*). The application is based upon potential impacts from the East Boat Dock Improvement project within the Sangchris Lake State Park property located approximately 3 miles south west of Edinburg, Illinois, in Christian County.

1. The mailing address of the Illinois Department of Natural Resources, is One Natural Resources Way, Springfield, Illinois 62702-1271.
2. The project is located within the east central portion of Sangchris Lake State Park at the East Boat Dock. United States Geological Quadrangle map reference: Edinburg Quadrangles, T14N, R3W, Section 29. (See Attached Project Location Map)
3. Authorization is being requested for incidental take of the above mentioned species due to construction activities required to improve the alignment and depth of the boat dock, to upgrade the current vault toilet to comply with ADA standards and to construct a fish cleaning station.
4. Significant measures that will be taken to minimize and mitigate the effects of an incidental taking include: drift fencing around construction zones with appropriate searches for the species, and the holistic management of the East Boat Dock Area to ensure habitat suitability and stability for needs of this species.
5. A copy of the Conservation Plan is available for review at Illinois Department of Natural Resources, Office of Resource Conservation, One Natural Resources Way, Springfield, Illinois 62702-1271; the Taylorville Public Library, 121 W Vine St, Taylorville, 62531; Sangchris Lake State Park, Site Office, 9898 Cascade Road, Rochester, Illinois 62563; and the Illinois Department of Natural Resources, Region IV Office, 4521 Alton Commerce Parkway, Alton, Illinois 62002.
6. Comments from the public can be mailed to the Illinois Department of Natural Resources, Office of Resource Conservation, One Natural Resources Way, Springfield, Illinois 62702-1271.
7. Any comments made by the public must be received by the Illinois Department of Natural Resources in Springfield by (Month, Day, 2004).

This notice is being published in the Breeze Courier, a daily newspaper in Christian County, Illinois, once a week for three consecutive weeks (Month, Days, 2004) and is being published in the Edwardsville Intelligencer, the official State newspaper (Date, Days, 2004).

**Stribley, Sara**

---

**From:** Stribley, Sara  
**Sent:** Wednesday, February 14, 2007 9:38 AM  
**To:** 'BOB HAMMEL'  
**Subject:** Keystone ENSR - Follow-up Questions from Meeting with IDNR

Hi Bob,

I hear you guys are getting some really bad weather up there in Illinois? I'm not sure if you made it in to work today because of the weather, but I just had a few follow-up questions from our meeting last week that I was hoping you could help clarify:

1) I went back and reviewed the comments I had received from Mike Ward (INHS) and other IDNR and INHP data regarding bird species along the proposed Keystone route. I believe we dropped the yellow-crowned night heron from our survey proposal because we were under the impression that it is a rare, "non-breeding" summer resident? However, if the heron is known to nest and breed in the Carlyle Lake area, we want to include it in our 2007 surveys. I just wanted to get some clarification on the breeding status of this species?

2) Also, I guess we are a little uncertain about the surveys we are proposing to conduct on other "non-state land." For state protected species, such as the prairie spiderwort, royal catchfly, and spring ladies' tresses, is there any justification for us to survey on private land for these species? From a few of Rick's comments at the meeting, I wasn't sure if he was stating we didn't need to conduct any surveys outside of state land for state listed species, or if I misinterpreted his comments? We definitely want to do our part in protecting these species, but we also have to be able to justify the reason for doing all of the proposed surveys.

I have been in contact with Glen Kruse and he is going to send an example of a conservation plan to me. ENSR will get started on putting the ITA permit application together for the massasauga/kirtland's snake. Any input you can provide on the few questions above would be greatly appreciated! Thanks, and stay warm!

Sara

Sara Stribley  
Environmental Coordinator  
ENSR | AECOM  
1601 Prospect Pkwy  
Ft. Collins, Colorado 80525  
P: 970.493.8878  
F: 970.4930213  
sstripley@ensr.aecom.com  
www.ensr.aecom.com

## Stribley, Sara

---

**From:** Stribley, Sara  
**Sent:** Wednesday, February 14, 2007 9:00 AM  
**To:** 'GLEN.KRUSE@Illinois.gov'  
**Subject:** Keystone Pipeline Project - Habitat Conservation Plan Example

Hi Glen,  
If you wouldn't mind sending the conservation plan example to the address below, I would greatly appreciate it! Thanks again for your help!

Sincerely,  
Sara

Sara Stribley  
Environmental Coordinator  
ENSR | AECOM  
1601 Prospect Pkwy  
Ft. Collins, Colorado 80525  
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F: 970.4930213  
[sstribley@ensr.aecom.com](mailto:sstribley@ensr.aecom.com)  
[www.ensr.aecom.com](http://www.ensr.aecom.com)



## Stribley, Sara

---

**From:** Stribley, Sara  
**Sent:** Friday, February 09, 2007 3:38 PM  
**To:** 'RICK PIETRUSZKA'; 'BOB HAMMEL'  
**Cc:** Johnson, Charlie

Rick and Bob,  
Charles and I just wanted to thank you for taking time to meet with us this past week. We will be distributing meeting minutes for you review in the next few days to ensure that we accurately represented the information we discussed at our meeting. We really appreciate your feedback and input, and your willingness to work with us so that we can get accomplished all that we need to do on a project of this size! Once again, if you ever have any concerns or questions, please feel free to give us a call or send us an email! Thanks again.  
Sincerely,  
Sara

P.S. can you also forward our thanks on to Joe? I don't seem to have his email address!

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FOR INTERNAL KEYSTONE PROJECT USE ONLY

## TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting ENSR

Date/Time of Meeting January 30, 2007

Keystone Team Member(s) Sara Stribley

### Contact Information:

Name	Joe Smothers
Title	Ranger
Organization	Corps of Engineers, Carlyle Lake
Address	
County	
Phone	618-594-2484
E-mail address	

### Meeting Information:

Type of Contact (phone, in-person, etc.): Phone

Issue: Scheduling meeting with the IDNR and COE to review biological surveys

Concern Level: High  Moderate  Low

#### Description:

I spoke with Ranger Joe Smothers on the phone this morning regarding setting up a meeting time and place to discuss the biological surveys that ENSR is planning for the Keystone Project this coming year. I explained to Joe that I have been talking to Bob Hammel (IDNR) about these meetings, and that Bob gave me Joe's name as a contact to try and set up a meeting at the COE's office at Carlyle Lake. Joe stated that because the COE owns the Carlyle Lake land, and leases it to the IDNR, that he and Lynn Neer (spelling?) should also probably attend the meeting. We confirmed the meeting for 8-10 am on Tuesday, February 6<sup>th</sup>, 2007.

Issue: \_\_\_\_\_

Concern Level: High  Moderate  Low

#### Description:

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**Stribley, Sara**

---

**From:** Stribley, Sara  
**Sent:** Tuesday, January 30, 2007 8:29 AM  
**To:** 'BOB HAMMEL'  
**Subject:** FW: Keystone ENSR - Meeting with IDNR

Bob,  
Just got off the phone with Joe Smothers. He reserved a conference room for us from 8-10 am on Tuesday, February 6th. He also stated that he and Lynn Neer (spelling?) would like to join us at the meeting!  
Thanks,  
Sara

-----Original Message-----

**From:** Stribley, Sara  
**Sent:** Monday, January 29, 2007 5:04 PM  
**To:** 'BOB HAMMEL'  
**Subject:** RE: Keystone ENSR - Meeting with IDNR

Hi Bob,  
Just wanted to confirm that you would still be willing to meet with ENSR on Tuesday, February 6th at 8:00 am? I called and left a message at the Corps Carlyle Lake Mang. Office today to reserve a conference room. Also just wanted to check that you had received the ENSR Keystone Survey Package that we sent out last week? Let me know if you need us to bring any additional items to the meeting.  
Thanks Bob,  
Sara

Sara Stribley  
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Ft. Collins, Colorado 80525  
P: 970.493.8878  
F: 970.4930213  
sstripley@ensr.aecom.com  
www.ensr.aecom.com

-----Original Message-----

**From:** BOB HAMMEL [mailto:BOB.HAMMEL@illinois.gov]  
**Sent:** Tuesday, January 16, 2007 8:24 AM  
**To:** Stribley, Sara  
**Subject:** RE: Keystone ENSR - Meeting with IDNR

Sara,  
If it can be held locally, then I suggest the meeting take place at the Corps Carlyle Lake Mang. Office in Carlyle. They have a suitable conference room. That's where we have held the other meetings. Molly can give you more info on it or you can call the Corps office at 618-594-2484 and ask for Ranger Joe Smothers. if I can be of any other assistance, let me know.  
Bob

>>> "Stribley, Sara" <sstripley@ensr.aecom.com> 01/15/07 2:48 PM >>>  
Bob,  
To answer your first question, biological surveys are planned for the following species in 2007:  
Indiana Bat  
River otter  
Bald eagle  
Loggerhead shrike  
Eastern massasauga

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Kirtland's snake  
Decurrent false aster  
Eastern prairie fringed orchid  
Prairie spiderwort  
Royal catchfly  
Spring ladies' tresses

To answer your second question, we can definitely hold the meeting locally. I wasn't exactly sure where you were located, so I just left Springfield in as a question mark(?).

Please let me know if you have any other questions!  
Thanks,  
Sara

-----Original Message-----

From: BOB HAMMEL [mailto:BOB.HAMMEL@illinois.gov]  
Sent: Monday, January 15, 2007 1:40 PM  
To: Stribley, Sara  
Subject: Re: Keystone ENSR - Meeting with IDNR

Sara,  
I guess I have a couple of questions. First of all, what surveys are planned? And second, why do you want to hold the meeting in Springfield and who in Springfield do you want at this meeting? Field personnel don't set up meetings in Springfield. If you only need the people who have been attending the last three pipeline meetings, then we can set it up locally. Let me know. Otherwise, the Feb. 6th date is okay with me.  
Bob Hammel  
Site Supt.  
Carlyle Lake SFWA  
RR2, Box 233  
Vandalia, IL 62471  
68-425-3533

>>> "Stribley, Sara" <sstribley@ensr.aecom.com> 01/15/07 1:33 PM >>>  
When: Tuesday, February 06, 2007 8:00 AM-10:00 AM (GMT-07:00) Mountain Time (US & Canada).  
Where: Springfield, IL - IDNR Office

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Hello Bob,  
ENSR would like to meet with and IDNR representative regarding the biological surveys that are planned for the Keystone Pipeline Project in 2007. I initially contacted Rick Pietruska to try and set up a meeting, but Rick may not be able to attend. Molly Giere (ENSR) recommended that I contact you as an alternative to set up a meeting with. Would the following meeting date and time work for you?

Date: Tuesday, February 6, 2007  
Time: 8:00 - 10:00 am  
Location: Springfield, IL - IDNR Office (? or other location)

ENSR is planning on sending out packages by the end of this week containing all of the information regarding the upcoming biological surveys for the Project in Illinois. We are hoping to use the information contained in this package as the template for discussions at the February meeting. Please feel free to invite other IDNR representatives if needed. Please let me know at your earliest convenience if you would or would not be able to attend this meeting, or if we should be coordinating with an alternative IDNR representative!

Sincerely,  
Sara

Sara Stribley  
ENSR | AECOM

# CONFIDENTIAL

1601 Prospect Parkway  
Fort Collins, Colorado 80525  
970-493-8878 ext 168  
sstribley@ensr.aecom.com

**Stribley, Sara**

---

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**To:** 'BOB HAMMEL'  
**Subject:** RE: Keystone ENSR - Meeting with IDNR

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Sent: Tuesday, January 16, 2007 8:24 AM  
To: Stribley, Sara  
Subject: RE: Keystone ENSR - Meeting with IDNR

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Spring ladies' tresses

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Sara

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Sent: Monday, January 15, 2007 1:40 PM  
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Subject: Re: Keystone ENSR - Meeting with IDNR

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Bob Hammel  
Site Supt.  
Carlyle Lake SFWA  
RR2, Box 233  
Vandalia, IL 62471  
68-425-3533

>>> "Stribley, Sara" <sstribley@ensr.aecom.com> 01/15/07 1:33 PM >>>  
When: Tuesday, February 06, 2007 8:00 AM-10:00 AM (GMT-07:00) Mountain Time (US & Canada).  
Where: Springfield, IL - IDNR Office

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Hello Bob,  
ENSR would like to meet with and IDNR representative regarding the biological surveys that are planned for the Keystone Pipeline Project in 2007. I initially contacted Rick Pietruska to try and set up a meeting, but Rick may not be able to attend. Molly Giere (ENSR) recommended that I contact you as an alternative to set up a meeting with. Would the following meeting date and time work for you?

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Sincerely,  
Sara

Sara Stribley  
ENSR | AECOM  
1601 Prospect Parkway  
Fort Collins, Colorado 80525  
970-493-8878 ext 168  
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**Stribley, Sara**

---

**From:** RICK PIETRUSZKA [RICK.PIETRUSZKA@illinois.gov]  
**Sent:** Wednesday, January 24, 2007 8:30 AM  
**To:** Stribley, Sara  
**Subject:** Re: Keystone ENSR - Meeting with IDNR  
**Follow Up Flag:** Follow up  
**Flag Status:** Red

Hi Sara, I received the proposed study plan for snake habitat assessment last Friday. Yesterday, I presented the proposal to IDNR's internal Incidental Take Authorization (ITA) Committee for their input. The committee recommends that an Incidental Take Authorization be applied for by Keystone to address Kirtland's and Massasauga concerns along the route near the north end of Carlyle Lake (Carlyle Fish and Wildlife Area.) The ITA legislation and administrative rules can be accessed from the IDNR's home page-[www.dnr.state.il.us](http://www.dnr.state.il.us). Feel free to give me a call.

"Stribley, Sara" <[sstribley@ensr.aecom.com](mailto:sstribley@ensr.aecom.com)> 1/4/2007 9:59 AM >>>

*see attached*

When: Tuesday, February 06, 2007 8:00 AM-10:00 AM (GMT-07:00) Mountain Time (US & Canada).  
Where: Springfield, IL

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Hi Rick,  
ENSR would like to meet with you in early February to review the biological surveys that are planned for the Keystone Pipeline Project in 2007 and 2008 in Illinois. Would the following meeting date and time work for you?

Date: Tuesday, February 6, 2007  
Time: 8:00 - 10:00 am  
Location: Springfield, IL - IDNR Office

ENSR is planning on sending you a package by next week containing all of the information regarding the upcoming biological surveys for the Project. We are hoping to use the information contained in this package as the template for discussions at the February meeting. Please feel free to invite other IDNR representatives if needed. Please let me know at your earliest convenience if you would or would not be able to attend this meeting, or if we should be coordinating with an alternative IDNR or INHP representative!

Thanks and Happy New Year,  
Sara

Sara Stribley  
ENSR | AECOM  
1601 Prospect Parkway  
Fort Collins, Colorado 80525  
970-493-8878 ext 168  
[sstribley@ensr.aecom.com](mailto:sstribley@ensr.aecom.com)

Rick Pietruszka, Consultation Program  
IDNR, Impact Analysis Section  
Division of Ecosystems and Environment  
317-785-5500  
[r.k.pietruszka@illinois.gov](mailto:r.k.pietruszka@illinois.gov)

2/1/2007



TITLE 17: CONSERVATION  
CHAPTER I: DEPARTMENT OF NATURAL RESOURCES  
SUBCHAPTER c: ENDANGERED SPECIES

PART 1080  
INCIDENTAL TAKING OF ENDANGERED OR THREATENED SPECIES

Section	
1080.10	Conservation Plan
1080.20	Notice and Review of Conservation Plans
1080.30	Comments
1080.40	Final Review
1080.50	Notice of Decision
1080.60	Effective Date, Term
1080.70	Separability, Exclusions
1080.80	Appeal, Revocation

AUTHORITY: Implementing and authorized by Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5].

SOURCE: Adopted at 25 Ill. Reg. 9877, effective July 17, 2001.

**Section 1080.10 Conservation Plan**

Incidental taking of endangered and threatened species shall be authorized by the Department of Natural Resources (Department) only if the applicant submits to the Department a conservation plan that satisfies all criteria established in this Part.

- a) A conservation plan submitted to the Department's Office of Resource Conservation as the application for authorization for incidental taking of an endangered or threatened species shall, at a minimum, include:
  - 1) A description of the impact likely to result from the proposed taking of the species that would be covered by the authorization, including but not limited to:
    - A) legal description, if available, or detailed description including street address and map of the area to be affected by the proposed action and indicia of ownership or control of affected property;
    - B) biological data on the affected species; on

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JULY 17, 2001

17 ILL. ADM. CODE

CH. I, SEC. 1080

- request of the applicant, the Department shall provide biological data in the Department's possession on the affected species;
- C) description of the activities that will result in taking of an endangered or threatened species; and
  - D) explanation of the anticipated adverse effects on listed species.
- 2) Measures the applicant will take to minimize and mitigate that impact and the funding that will be available to undertake those measures, including, but not limited to:
- A) plans to minimize the area affected by the proposed action, the estimated number of individuals of an endangered or threatened species that will be taken and the amount of habitat affected;
  - B) plans for management of the area affected by the proposed action that will enable continued use of the area by endangered or threatened species;
  - C) description of all measures to be implemented to minimize or mitigate the effects of the proposed action on endangered or threatened species;
  - D) plans for monitoring the effects of measures implemented to minimize or mitigate the effects of the proposed action on endangered or threatened species;
  - E) 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; and
  - F) verification that adequate funding exists to support and implement all mitigation

activities described in the conservation plan. This may be in the form of bonds, certificates of insurance, escrow accounts or other financial instruments adequate to carry out all aspects of the conservation plan.

- 3) A description of alternative actions the applicant considered that would not result in take, and the reasons that each of those alternatives was not selected. A "no-action" alternative shall be included in this description of alternatives.
- 4) Data and information to indicate that the proposed taking will not reduce the likelihood of the survival of the endangered or threatened species 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.
- 5) An implementing agreement, which shall include, but not be limited to:
  - A) the names and signatures of all participants in the execution of the conservation plan;
  - B) the obligations and responsibilities of each of the identified participants with schedules and deadlines for completion of activities included in the conservation plan and a schedule for preparation of progress reports to be provided to the Department;
  - C) certification 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;
  - D) assurance of compliance with all other federal, State and local regulations pertinent to the proposed action and to execution of the conservation plan; and
  - E) copies of any final federal authorizations for a taking already issued to the applicant, if

any.

- b) The Department, after review and public comment, may require additional measures as necessary or appropriate to the success of the conservation plan. Requirements for additional measures shall be based on the life history needs of the species involved.
- c) A Habitat Conservation Plan approved by the U.S. Fish and Wildlife Service pursuant to Section 10 of the Endangered Species Act of 1973 [26 USC 1539], and amendments thereto, may be submitted in lieu of the conservation plan described in this Section.
- d) Authorization to take an endangered or threatened species under the terms of a biological opinion issued by the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act of 1973 [26 USC 1536], and amendments thereto, or regulations implementing Section 7 [50 CFR 402] may be submitted in lieu of the conservation plan described in this Section.

**Section 1080.20 Notice and Review of Conservation Plans**

- a) After receipt of a conservation plan, the Department shall, within 30 days, review the conservation plan to determine if all required information has been provided by the applicant and:
  - 1) acknowledge receipt of the complete conservation plan in writing; or
  - 2) notify the applicant in writing of any deficiencies in the conservation plan and provide the applicant an opportunity to supply additional information to the Department. Any late-breaking or additional information will be considered part of the conservation plan for purposes of this Part.
- b) When the applicant is notified by the Department that the conservation plan is complete as defined in this Part, the applicant shall place a notice in a local newspaper of general circulation in the locality of the proposed action at least once a week for 3 consecutive weeks. At least 14 days shall elapse between the first and last publications of the notice. The notice shall also be

published one time in the official State newspaper, concurrent with the first publication in a local newspaper of general circulation. A copy of the notice as it will appear in the newspaper shall be submitted to the Department for approval before the first publication. The notice shall include, at a minimum, the following:

- 1) the name and mailing address of the applicant;
  - 2) a map or description that clearly shows or describes the precise location and boundaries of both the area to be affected by the proposed project and any areas to be affected by provisions of the conservation plan and is sufficient to enable local residents to readily identify the subject areas. It must include towns, bodies of water, local landmarks, or any other information that would identify the subject areas. If a map is used, it shall indicate the north direction;
  - 3) a summary of the incidental taking for which authorization is being requested;
  - 4) a summary of the measures that will be instituted to minimize and mitigate the effects of the proposed incidental taking;
  - 5) the location where a copy of the conservation plan is available for inspection;
  - 6) the street and e-mail address of the office of the Department to which comments on the conservation plan may be submitted; and
  - 7) the closing date for receipt of written comments on the conservation plan.
- c) The applicant shall:
- 1) provide copies of the conservation plan to be available for review at the nearest public library in the county or counties in which the proposed action will occur. Copies distributed for public review shall not include any trade secrets as defined by the Illinois Trade Secrets Act [765 ILCS 1065/2(d)]; and

- 2) provide copies of the conservation plan to the Executive Director of the Illinois Endangered Species Protection Board (Board).
- d) After the applicant's public notice is approved by the Department, the Department shall provide notice of the receipt of the conservation plan to any person who has requested notice. The Department shall maintain a permanent list of those persons or organizations that wish to be notified of all conservation plans it receives.

### **Section 1080.30      Comments**

Written comments on a conservation plan may be submitted to the Department by any person within 30 days after the last publication of the notice required by Section 1080.20(b). Comments will be accepted by electronic mail upon confirmation of authorship. The Department shall, upon receipt of written comments, transmit a copy of the comments to the applicant. The applicant shall evaluate the public comments received from the Department and shall submit an analysis of the comments no later than 10 days after the close of the public comment period. The analysis shall include a list of all persons or organizations making comment; a list of the criticisms, suggestions and comments raised; and the applicant's analysis of each criticism, suggestion or comment. The analysis shall also include a description of any revision to the Conservation Plan that the applicant is making in response to public comment. The comments and the applicant's analysis may be used by the Department pursuant to Section 1080.30 to support any additional measures that may be necessary or appropriate to assure the success of the Conservation Plan.

### **Section 1080.40      Final Review**

- a) The Department's Office of Resource Conservation shall coordinate and perform the review of the conservation plan and issue the incidental take authorization pursuant to this Part. The Department shall complete its review of the conservation plan within 120 days after the first publication of the notice required in Section 1080.20(b). After reviewing the conservation plan, the Department may authorize the incidental taking if the Department finds that the taking will meet all of the following requirements:

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- 1) the taking will not be the purpose of, but will be only 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;
  - 3) the parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided as described in Section 1080.10(a)(2)(F);
  - 4) based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival of the endangered species or threatened species 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;
  - 5) any additional measures, based upon the life history needs of the species involved, that the Department may require as necessary or appropriate for the purposes of the conservation plan will be performed;
  - 6) the public has received notice of the availability of the conservation plan and has had the opportunity to comment before the Department made any decision regarding the authorization of incidental take; and
  - 7) the Department has sought the advice of the Board and provided written response to any Board comments regarding the issuance of authorization for incidental taking and on the terms of any authorization to be issued.
- b) If the Department finds that the conservation plan does not meet the above requirements, the Department may require that a party to the conservation plan make additional assurances or agree to additional terms and conditions that the Department finds necessary to assure



that the requirements in subsections (a)(1) through (a)(6) will be met before authorizing incidental taking. Requirements for inclusion of additional assurances in a conservation plan shall be based on the life history needs of the species involved. The Department shall deny an authorization for incidental taking if the conservation plan does not meet the requirements of subsection (a) and the applicant refuses to accept the additional terms and conditions or refuses to make additional assurances determined necessary by the Department.

**Section 1080.50 Notice of Decision**

- a) The Department shall provide written notice to the applicant of the approval or denial of authorization for incidental taking. The written notice shall constitute the authorization for incidental taking or the denial of the authorization for incidental taking is effective as of the date of execution by the Director of the Department's Office of Resource Conservation.
- b) The Department shall make available to any person who requests it a copy of any written notice authorizing incidental taking.

**Section 1080.60 Effective Date, Term**

Any authorization for incidental take issued pursuant to 520 ILCS 10/5.5 and this Part shall have an effective date and term. The term of the authorization for incidental take shall be sufficient to assure that the terms and conditions of the authorization and the measures described in the conservation plan may be fully executed and that monitoring of the effects of those measures can be carried out for a length of time that will determine their adequacy for protection and enhancement of the endangered or threatened species.

**Section 1080.70 Separability, Exclusions**

- a) Authorization for incidental taking shall be separate and distinct from any other action of the Department. Issuance of any permit, license or authorization by the Department under any authority other than that granted in Section 5.5 of the Illinois Endangered Species Protection Act shall not constitute authorization for incidental



take. Issuance of any permit, license or authorization by the Department under any authority other than that granted in Section 5.5 of the Illinois Endangered Species Protection Act shall not be interpreted as an assurance that incidental take authorization will be issued.

- b) Certain activities that are planned, designed and executed for the benefit of one or more endangered or threatened species and may result in the incidental take of individuals of those species are exempt from the provisions of this Section. Exempt activities shall be those listed in 17 Ill. Adm. Code 1075.30(c). The Department shall have the right to require persons carrying out such activities to submit information to justify the claimed exemption from this Section.

**Section 1080.80      Appeal, Revocation**

- a) The applicant may appeal a denial of authorization for incidental taking. Such appeal shall be heard pursuant to Subpart C of 17 Ill. Adm. Code 2530 - Department Formal Hearings for Rulemaking and Contested Cases.
- b) Authorization issued under this Part may be revoked by the Department for failure to implement any provision of the conservation plan. The Department shall issue notice of the revocation and, if requested by the permittee, may conduct a hearing on the revocation pursuant to Subpart C of 17 Ill. Adm. Code 2530 - Department Formal Hearings Conducted for Rulemaking and Contested Cases. Revocation of a permit may subject the permittee to criminal penalties as provided in the Endangered Species Protection Act if a taking is found subsequent to the revocation or if the taking is proximate to the failure to implement the conservation plan.

**ENSR**

1601 Prospect Parkway, Fort Collins, Colorado 80525  
T 970.493.8878 F 970.493.0213 www.ensr.aecom.com

January 17, 2007

Rick Pietruszka  
Illinois Department of Natural Resources  
One Natural Resources Way, 2nd Floor  
Springfield, IL 62702

Dear Mr. Pietruszka:

At this time, ENSR Corporation (ENSR) is providing you with information regarding the implementation of the 2007 biological survey program for the Keystone Mainline Pipeline Project in Illinois, and requesting your feedback and concurrence on certain proposed actions.

**Project Description**

As provided in previous communications, TransCanada is planning to construct and operate an approximately 1,845-mile-long interstate crude oil transmission system from an oil supply hub near Hardisty, Alberta, Canada, to destinations in the Midwestern United States (U.S). The proposed Project would consist of approximately 1,078 miles of new pipeline constructed from the U.S.-Canada border in Cavalier County, North Dakota, to terminals and refineries in Wood River (Madison County) and Patoka (Marion County), Illinois. This pipeline is referred to as the Keystone Mainline. Approximately 283 miles of the Keystone Mainline would parallel the proposed Rockies Express Pipeline - West (REX-West) Project in Kansas and Missouri. In addition, TransCanada proposes to construct a 292-mile pipeline extension (Cushing Extension) that would extend from the Keystone Mainline south from the Nebraska/Kansas border to Cushing, Oklahoma. TransCanada proposes to begin construction of the Keystone Mainline in early 2008, with the system in-service by the end of 2009. Work on the Cushing Extension will begin in late 2009 or early 2010, with a Cushing Extension in-service date of 2010. The project also will require the construction of pump stations, valves, meters, and other ancillary facilities. The hydraulic characteristics of the pipeline will determine pump station and valve locations. Electrical powerlines and facility upgrades will be required in some locations to provide power for the new pump stations, though these facilities will be constructed by local utility companies, not Keystone.

**Biological Survey Program**

In 2006, biological surveys were initiated for several species potentially located along the Keystone Mainline Project route in Illinois. Additional surveys are planned throughout 2007 for the species surveyed in 2006, and for the majority of remaining sensitive species that may be located within the Keystone Mainline Project vicinity (see attached survey schedule). Sensitive species and survey locations have been determined through consultation with the Illinois Department of Natural Resources (IDNR), the Illinois Natural Heritage Program, the Illinois Natural History Survey, and the U.S. Fish and Wildlife Service (USFWS). Some survey areas have been refined based on information obtained through habitat surveys conducted in 2006. To facilitate your review of the 2007 Keystone Mainline biological survey program, ENSR is providing you with the following materials, and asking for your signed concurrence on several proposed actions:

- Proposed Threatened and Endangered Species Survey Schedule (2006-2007) – This document is provided to give an overview of when and where species specific surveys have been, and will be conducted in Illinois. Please sign and return the survey schedule concurrence form as “concur”

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Rick Pietruszka  
January 17, 2007  
Page 2

or “do not concur.” Please also provide specific comments in the area provided if you “do not concur,” in order for ENSR to promptly address concerns.

- Biological Survey March-Charts (2007) – These charts are provided as a visual tool to guide your assessment of the proposed Threatened and Endangered species surveys. The y-axis provides information on approximate survey windows. This axis shows the general timeframe in which ENSR proposes to complete the surveys for a specific species (based on nesting, spawning, flowering periods, etc.) The x-axis provides information on the Mainline milepost marker where appropriate habitat has been determined to exist for a species. This axis shows where ENSR proposes to complete species specific surveys.
- Survey Protocols – These documents provide detailed information on how specific surveys will be conducted for Threatened and Endangered species. Wherever possible, survey protocols were produced directly from state or federal agency feedback. Please sign and return the survey protocol concurrence form as “concur” or “do not concur.” Please also provide specific comments in the area provided if you “do not concur,” in order for ENSR to promptly address concerns.
- 1:100k U.S. Geological Survey (USGS) Topographic Maps of the Keystone Mainline in Illinois – Provided for geographic reference to the Project.

Copies of these materials also have been sent to Bob Hammel (IDNR – Carlyle Lake), and John Cochran (Nebraska USFWS – Project Lead). ENSR would like to meet with representatives of the IDNR in early February to discuss this material in further detail, and you should have already been contacted by ENSR regarding a meeting date and time. If you have any questions regarding the enclosed materials, please contact me at (970) 493-8878 ext. 181 or email [cjohnson@ensr.aecom.com](mailto:cjohnson@ensr.aecom.com)

Sincerely,



Charles Johnson  
Senior Wildlife Biologist

CJ/ss

Ref: 10623-004

Enc: Proposed Threatened and Endangered Species Survey Schedule  
Biological Survey March-Charts  
Survey Protocols  
1:100k USGS Topographic Maps

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## Keystone Pipeline Project Survey Schedule Concurrence Form

<input type="checkbox"/> CONCUR	Signature:
	Name:
<input type="checkbox"/> DO NOT CONCUR	Title:
	Date:

*If you checked "DO NOT CONCUR," please provide reasons and specific directions in the space provided below on how survey schedule should be changed to meet your acceptance:*

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**ENSR**

1601 Prospect Parkway, Fort Collins, Colorado 80525  
T 970.493.8878 F 970.493.0213 www.ensr.aecom.com

January 17, 2007

Bob Hammel  
Illinois Department of Natural Resources  
Carlyle Lake SFWA  
RR2, Box 233  
Vandalia, IL 62471

Dear Mr. Hammel:

At this time, ENSR Corporation (ENSR) is providing you with information regarding the implementation of the 2007 biological survey program for the Keystone Mainline Pipeline Project in Illinois, and requesting your feedback and concurrence on certain proposed actions.

**Project Description**

TransCanada is planning to construct and operate an approximately 1,845-mile-long interstate crude oil transmission system from an oil supply hub near Hardisty, Alberta, Canada, to destinations in the Midwestern United States (U.S). The proposed Project would consist of approximately 1,078 miles of new pipeline constructed from the U.S.-Canada border in Cavalier County, North Dakota, to terminals and refineries in Wood River (Madison County) and Patoka (Marion County), Illinois. This pipeline is referred to as the Keystone Mainline. Approximately 283 miles of the Keystone Mainline would parallel the proposed Rockies Express Pipeline - West (REX-West) Project in Kansas and Missouri. In addition, TransCanada proposes to construct a 292-mile pipeline extension (Cushing Extension) that would extend from the Keystone Mainline south from the Nebraska/Kansas border to Cushing, Oklahoma. TransCanada proposes to begin construction of the Keystone Mainline in early 2008, with the system in-service by the end of 2009. Work on the Cushing Extension will begin in late 2009 or early 2010, with a Cushing Extension in-service date of 2010. The project also will require the construction of pump stations, valves, meters, and other ancillary facilities. The hydraulic characteristics of the pipeline will determine pump station and valve locations. Electrical powerlines and facility upgrades will be required in some locations to provide power for the new pump stations, though these facilities will be constructed by local utility companies, not Keystone.

**Biological Survey Program**

In 2006, biological surveys were initiated for several species potentially located along the Keystone Mainline Project route in Illinois. Additional surveys are planned throughout 2007 for the species surveyed in 2006, and for the majority of remaining sensitive species that may be located within the Keystone Mainline Project vicinity (see attached survey schedule). Sensitive species and survey locations have been determined through consultation with the Illinois Department of Natural Resources (IDNR), the Illinois Natural Heritage Program (ILNHP), the Illinois Natural History Survey, and the U.S. Fish and Wildlife Service (USFWS). Some survey areas have been refined based on information obtained through habitat surveys conducted in 2006. To facilitate your review of the 2007 Keystone Mainline biological survey program, ENSR is providing you with the following materials:

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Bob Hammel  
January 17, 2007  
Page 2

- Proposed Threatened and Endangered Species Survey Schedule (2006-2007) – This document is provided to give an overview of when and where species specific surveys have been, and will be conducted in Illinois.
- Biological Survey March-Charts (2007) – These charts are provided as a visual tool to guide your assessment of the proposed Threatened and Endangered species surveys. The y-axis provides information on approximate survey windows. This axis shows the general timeframe in which ENSR proposes to complete the surveys for a specific species (based on nesting, spawning, flowering periods, etc.) The x-axis provides information on the Mainline milepost marker where appropriate habitat has been determined to exist for a species. This axis shows where ENSR proposes to complete species specific surveys.
- Survey Protocols – These documents provide detailed information on how specific surveys will be conducted for Threatened and Endangered species. Wherever possible, survey protocols were produced directly from state or federal agency feedback
- 1:100k U.S. Geological Survey (USGS) Topographic Maps of the Keystone Mainline in Illinois – Provided for geographic reference to the Project.

Additional copies of these materials are enclosed for distribution to other state wildlife representatives. Copies of these reports also have been sent to Rick Pietruszka (IDNR), and John Cochnar (Nebraska USFWS – Project Lead). ENSR also would like to meet with you in early February to discuss this material in further detail, and you should have already been contacted by ENSR regarding a meeting date and time. If you have any questions regarding the enclosed materials, please contact me at (970) 493-8878 ext. 181 or email [cjohnson@ensr.aecom.com](mailto:cjohnson@ensr.aecom.com).

Sincerely,



Charles Johnson  
Senior Wildlife Biologist

CJ/ss

Ref: 10623-004

Enc: Proposed Threatened and Endangered Species Survey Schedule  
Biological Survey March-Charts  
Survey Protocols  
1:100k USGS Topographic Maps

**Keystone Pipeline Project  
Proposed Survey Schedule for Illinois  
2006 - 2007**

Completed 2006 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
<b>Indiana Bat</b> <i>Myotis sodalists</i> FE; IL-E	Habitat surveys: August, September, December	Madison, Bond, Fayette, Marion counties.	Habitat evaluations were initiated at woodlots within the construction ROW to characterize potential roosting habitat quality for this species.	BHE Environmental	See attached study plan and protocol.

Proposed 2007 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
<b>Indiana Bat</b> <i>Myotis sodalists</i> FE; IL-E	Habitat surveys: January/February  Occurrence surveys: 15-May to 15-August	Madison, Bond, Fayette, Marion.	Complete habitat evaluations within the construction ROW to identify potential habitat for this species.  Conduct occurrence surveys/mist netting activities within identified survey areas for this species.	BHE Environmental	See attached study plan and survey protocol.
<b>River otter</b> <i>Lontra Canadensis</i> IL-E	Denning season: March through September	<b>Bond:</b> 1050.8 (Shoal Creek). <b>Fayette:</b> 1072.2 (Kaskaskia River).	One survey will be conducted for den sites within 0.25-mile upstream and downstream of the river crossings on both sides of the river bank.	Qualified ENSR biologist and/or contractor.	See attached survey protocol.
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i>	January/February	Marion: 1021.5 (Mississippi River)	Aerial survey will be conducted along the Mississippi River crossing to	Mike Phelan, Karen Caddis – ENSR wildlife biologists	See attached survey protocol.



**Keystone Pipeline Project  
Proposed Survey Schedule for Illinois  
2006 - 2007**

<b>Proposed 2007 Surveys</b>					
<b>Species &amp; Status</b>	<b>Approximate Survey Dates</b>	<b>Specific Survey Areas (by County &amp; MP)</b>	<b>Survey Description</b>	<b>Surveyor</b>	<b>Comments</b>
FT; IL-T			Identify winter roost and nest sites		2008 pre-construction surveys will not be required if construction occurs outside of the breeding/winter roost seasons for this species.
<b>Raptors</b>	March-April	Madison, Bond, Fayette, Marion counties.	Aerial survey to identify nest and breeding territories within the ROW	Mike Phelan – ENSR wildlife biologist	See attached survey protocol.  2008 pre-construction surveys will not be required if construction occurs outside of the breeding season.
<b>Loggerhead shrike</b> <i>Lanius ludovicianus</i> IL-T	Nesting period: 1-March to 15-June.	<b>Fayette:</b> 1069-1073	One ground survey or aerial survey prior to construction. Survey will be conducted 200 feet from the construction ROW, depending on access.	Qualified ENSR biologist and/or contractor.	See attached survey protocol.  2008 pre-construction surveys will not be required if construction occurs outside of the breeding season.
<b>Massasauga</b> <i>Sistrurus catenatus</i> FC; IL-E	Habitat Surveys: January/February	Madison, Bond, Fayette, Marion counties.	Complete habitat evaluations within the construction ROW to identify potential habitat for this species.  Reconvene with the IDNR to determine further survey requirements.	BHE Environmental	See attached study plan and survey protocol.  No pre-construction surveys would be required in 2008 if surveys are completed in 2007.

**Keystone Pipeline Project  
Proposed Survey Schedule for Illinois  
2006 - 2007**

Proposed 2007 Surveys					
Species & Status	Approximate Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor	Comments
<b>Kirtland's snake</b> <i>Clonophis kirtlandi</i> IL-T	Habitat Surveys: January/February	Madison, Bond, Fayette, Marion counties.	Complete habitat evaluations within the construction ROW to identify potential habitat for this species.  Reconvene with the IDNR to determine further survey requirements.	BHE Environmental	See attached study plan and survey protocol.  No pre-construction surveys would be required in 2008 if surveys are completed in 2007.
<b>Decurrent false aster</b> <i>Boltonia decurrens</i> FT; IL-T	Flowering period: Late-August to September 30.	<b>Madison:</b> 1023.8-1024.1, 1025.3-1025.6, 1026.6-1027.0, 1028.0-1028.4, 1028.7-1028.8, 1029.8-1030.2 <b>Bond:</b> 1055.3-1057.0 <b>Fayette:</b> 1069.4-1073.4	One survey will be conducted during the flowering period to determine presence within the construction ROW.	Qualified ENSR biologist and/or contractor	See attached survey protocol.  2008 pre-construction surveys would only be required in areas where this species was observed in 2007.
<b>Eastern fringed orchid</b> <i>Platanthera leucophaea</i> FT; IL-E	Flowering period: Late-June to mid-July.	<b>Madison:</b> 1021.5-1023.1, 1024.2-1024.8, 1027.0-1027.2, 1028.5-1029.0, 1029.8-1030.3, 1036.6-1037.2, 1037.9-1038.0, 1038.7-1039.0, 1042.7-1042.8, 1046.0-1047.1 <b>Bond:</b> 1053.2-1054.0, 1055.9-1056.1, 1056.6-1057.1, 1057.9-1058.0, 1058.6-1059.2, 1061.0-1062.1, 1068.0-1068.2 <b>Fayette:</b> 1069.4-1073.4	One survey will be conducted during the flowering period to determine presence within the construction ROW.	Qualified ENSR biologist and/or contractor	See attached survey protocol.  2008 pre-construction surveys would only be required in areas where this species was observed in 2007.