

Johnson, Charlie

From: Carey Grell [Carey.Grell@ngpc.ne.gov]
Sent: Friday, August 11, 2006 8:18 AM
To: Johnson, Charlie
Subject: Keystone NEGPC-USFWS meeting

Charles,

Since our meeting in Grand Island on July 18th, I am providing some follow up information on a couple of items.

1.) As far as site specific information on crossing the Rainwater Basin wetland areas, I have obtained some additional information from our wetlands specialist. This wetland complex is made up of playa type wetlands, which are wind formed depressions in the landscape that hold surface runoff and rain water. This type of wetland is underlain by a clay layer in the soil which helps to hold water above the soil surface and slow the water seepage into the ground. If the clay layer is disrupted in a playa wetland, the water holding capability of the wetland may be compromised allowing faster drainage of water into the ground thus impacting the function of the wetland. If a playa wetland must be crossed by the proposed pipeline, it would first be important to know where the clay layer lies within the soil profile. From that point, if the clay layer would be impacted by construction it would be necessary for the clay to be restored to pre-project condition once construction is complete. This can be done in a variety of ways. Use of a directional bore to cross wetlands areas could possibly avoid impacting the clay layer all together. If open trenching is used, the clay could be removed and stockpiled nearby, so when construction is complete, the clay layer could be restored to pre-project condition within the soil profile. If necessary, additional clay material could be brought in from off-site to ensure that the clay layer is restored and the drainage of these wetlands is avoided.

For recommended timing for construction at water crossings that will not be constructed by directional boring (i.e. crossings outside of the Missouri River and the Platte River), to avoid and minimize impacts to aquatic species, we would encourage that construction occur from August through March. In general, it would be best if stream impacts could be avoided during the mid-April through mid-July timeframe to avoid and minimize impacts to aquatic species during spawning. We would also recommend that appropriate erosion control methods be used to prevent increased sediment input into the waterway in order to avoid impacting aquatic habitat in the local area as well as downstream. Care should also be taken to avoid the input of contaminants, such as oils, and grease, etc., into the waterway during construction. Construction in the waterway should not completely obstruct flows for any period of time, as flows need to be maintained in the waterway to allow for the movement of fish up and downstream.

I am also following up with Rick Schneider in regard to providing you with the shapefiles for bald eagle nests and roost locations, and will let you know what I find out.

Thanks,
Carey

Carey Grell
Environmental Analyst
Realty and Environmental Services Division
Nebraska Game and Parks Commission
2200 N. 33rd
Lincoln, NE 68503
phone: 402-471-5423

8/11/2006

Johnson, Charlie

From: Rick Schneider [rick.schneider@ngpc.ne.gov]
Sent: Friday, August 11, 2006 9:37 AM
To: Johnson, Charlie
Cc: carey grell
Subject: Bald eagle nests along Keystone pipeline

Dear Mr. Johnson,

Carey Grell mentioned that you were interested in obtaining a shapefile of the bald eagle nests along the route of the Keystone pipeline. It is our policy to not provide exact location information for our records of state and federally listed species. This is to help ensure that the species are not harmed and to protect landowner privacy. I have done a review of the pipeline route and we do not have any documented occurrences of bald eagles within 5 miles of where the route crosses rivers. However, for the river crossings where I have recommended pre-construction surveys, there is suitable habitat for bald eagle nesting. Our surveys of the state are far from complete and your survey of these sites will help ensure that no currently unknown nests will be disturbed during construction.

Please let me know if you have additional questions.

Rick Schneider, Ph.D.
Coordinator/Ecologist
Nebraska Natural Heritage Program
Nebraska Game and Parks Commission
2200 N. 33rd St.
Lincoln, NE 68503

402-471-5569
402-471-5528 fax

Johnson, Charlie

From: Carey Grell [Carey.Grell@ngpc.ne.gov]
Sent: Friday, August 11, 2006 9:45 AM
To: Johnson, Charlie
Subject: TransCanada, Keystone Pipeline

Charlie,

I have talked with Rick and he will be sending you an email response regarding your request for the shapefiles of bald eagle nest and roosts.

Also, I wanted to mention that for additional information on massasauga survey protocol and permit requirements if applicable (i.e. collecting permit), contact Mike Fritz (402-471-5419 or Mike.Fritz@ngpc.ne.gov)

Carey

Carey Grell
Environmental Analyst
Realty and Environmental Services Division
Nebraska Game and Parks Commission
Phone: (402) 471-5423

8/11/2006

Johnson, Charlie

From: Johnson, Charlie
Sent: Monday, July 31, 2006 9:59 AM
To: 'carey_grell@ngpc.ne.gov'
Subject: FW: Keystone Pipeline Environmental Report

Carey - unfortunately, since the Keystone Environmental Report that you requested during the July 18 meeting is a Department of State (DOS) document, ENSR has little control over to the distribution of that document. Consequently, As discussed on the phone, in order for the NGPC to obtain a copy, please request a copy (s) directly from the DOS. Below is the contact information for the DOS lead. Please let me know if you have any problems.

Matthew T. McManus
Division Chief, Energy Producer Country Affairs
U.S. Department of State
2201 C Street, N.W.
EB/ESC/IEC
Room 7525
Washington, D.C. 20520
(202) 647-3423
McManusMT@State.gov

Charles Johnson
Senior Wildlife Biologist
R|AECOM
1601 Prospect Parkway
Fort Collins, CO 80525
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8/11/2006

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TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting ENSR

Date/Time of Meeting July 19, 2006

Keystone Team Member(s) Sara Stribley

Contact Information:

Name	Mike Fritz
Title	Herpetologist
Organization	Nebraska Game and Parks Commission
Address	
County	
Phone	402-471-5419
E-mail address	Mike.Fritz@ngpc.ne.gov

Meeting Information:

Type of Contact (phone, in-person, etc.): _____ E-mail _____

Issue: Survey Protocols for Western Massasauga

Concern Level: High ___ Moderate ___ **Low** ___

Description:

Hi Mike,
Just checking to see if you have had a chance yet to gather together the massasauga information and look over my notes from our phone conversation? Thanks for your help!
Sincerely,
Sara

Sara Stribley
Staff Specialist
ENSR Corporation
1601 Prospect Pkwy
Fort Collins, CO 80525
970.493.8878 ext. 168
sstribley@ensr.aecom.com

Stribley, Sara

From: Stribley, Sara
Sent: Wednesday, July 19, 2006 9:46 AM
To: 'Mike.Fritz@ngpc.ne.gov'
Subject: Massasauga Survey Protocol

Hi Mike,
Just checking to see if you have had a chance yet to gather together the massasauga information and look over my notes from our phone conversation? Thanks for your help!
Sincerely,
Sara

Sara Stribley
Staff Specialist
ENSR Corporation
1601 Prospect Pkwy
Fort Collins, CO 80525
970.493.8878 ext. 168
sstribley@ensr.aecom.com

From: Stribley, Sara
Sent: Thursday, July 06, 2006 12:39 PM
To: 'Mike.Fritz@ngpc.ne.gov'
Subject: Massasauga Survey Protocol

Mike,
Thanks for all the information you provided to me earlier! I have tried to make my way through my notes from our phone conversation, but feel like I may have confused some information. Please feel free to correct/revise/add to anything below. Also you can get more information on the project by going to <http://www.transcanada.com/keystone/index.html>.

1. First step is to determine if there is any appropriate habitat along the project route. This can be done by looking at GIS land coverage data or habitat surveys. The massasauga depends on native tall-grass prairies and wet-meadows. The wet meadows should support plant species such as cattails, prairie cordgrass, and reed canary grass, and should also be associated with crayfish burrows. The massasauga utilizes the crayfish burrows as winter hibernacula. They emerge from their burrows in April and move into upland native prairie during the spring. This species can move up to 1 mile to find suitable habitat.
2. Survey for appropriate winter denning and summer use habitat.
3. If appropriate habitat is found within or adjacent to construction ROW, surveys for the animal should be conducted prior to construction in the year construction will occur.
4. If construction is to occur during the active season, surveys for massasauga should be conducted within a ¼ mile-buffer of any native tall-grass prairie habitat. If construction is to occur during the winter hibernation, a survey in September should be conducted to determine if any animals utilize the wet-meadows/crayfish burrow habitat.
5. If animals are found, they must be trapped and cleared and a site drift-fence must be erected to prevent massasaugas from returning to site.
6. Construction should not be conducted in appropriate habitat during ????????

Also, when you get a chance, if you could send me your revised survey protocol, and possibly the mapping of known massasauga occurrences that would be greatly appreciated! The construction ROW is 110 ft with a permanent ROW of 60 ft. Thanks again for your help!

Sincerely,

Sara Stribley
Staff Specialist
ENSR Corporation
1601 Prospect Pkwy
Fort Collins, CO 80525
970.493.8878 ext. 168
sstribley@ensr.aecom.com

U.S. Fish and Wildlife Service / Nebraska Game and Parks Commission; Nebraska U.S. Fish and Wildlife Service Field Office, Grand Island, NE

July 18, 2006. 10:00am – 12:00pm

Attendees:

John Cochnar (USFWS)
Jeff Runge (USFWS)
Carey Grell (NGPC)
Charles Johnson (ENSR)
Doree Dufresne (ENSR)
Patti Grigsby (ENSR)
John Sellers (Universal/ENSCO)

Meeting Objectives

ENSR met with the USFWS and NGPC to discuss issues pertaining to wildlife and special status species that could potentially occur along the Keystone Project route. The goal of this discussion was to verify ENSR's habitat assessment approach, species occurrence information, and to discuss required surveys.

ENSR and Universal discussed the proposed construction schedule that would likely begin in early 2008 and would continue through 2009, including possible winter construction.

Response Overview

The agencies have not had the opportunity to review the Environmental Report that was completed in April 2006. The agencies would like to obtain a copy of the Environmental Report for their review and further input.

It was indicated that TransCanada has committed to crossing 7 River areas by HDD including:

- Missouri River (2)
- Platte River (1)
- Chariton River (1)
- Cuivre (2)
- Mississippi (1)

The agencies (USFWS and NGPC) have no issues with winter construction. In fact, winter construction would be preferable over spring/summer, given that most species revolve around breeding/nesting/spawning seasons.

Cushing Extension

It was indicated that the Cushing Extension is being analyzed, and ENSR is currently gathering baseline information for the permitting process. However, it is unclear if the extension would be part of the EIS for the mainline portion of the pipeline.

The USFWS said that it would be preferable to include the Cushing Extension into the total project analysis, based primarily on the down-sizing of the USFWS offices and the ability of the USFWS to adequately address the project.

(Subsequent to the meeting, John Cochnar was contacted indicating that the Cushing Extension would be analyzed in the Keystone EIS and that surveys would be conducted in 2007 and prior to construction in 2008, if needed)

Wetland Crossings

The NGPC has concerns regarding construction and reclamation of wetlands (particularly within the Rainwater Basin area) following construction.

Carey Grell will provide construction and reclamation recommendations.

Migratory Bird Treaty Act

If construction would occur during the breeding season for migratory bird species, the USFWS would like TransCanada to clear vegetation from the construction ROW outside of the breeding season for migratory bird species, prior to construction.

Because the majority of the project area would consist of previously disturbed agricultural lands and rangeland, ENSR proposed other options to address the MBTA issue pertaining to breeding birds along the project route:

- 1) Obtain a depredation permit that would allow the take of migratory bird species and their nests,
- 2) Limit surveys to those migratory bird species that are identified as USFWS Birds of Conservation Concern (BCC) and Partner In Flight "high priority bird species (PIF)."

USFWS Response:

Because the USFWS Migratory Bird Office has discontinued the issuance of depredation permits for road project, it may be difficult to obtain a depredation permit for the project.

John indicated that a meeting should be arranged with regional USFWS special agents and the USFWS Migratory Bird Office to discuss the options listed above (depredation permit, limited breeding bird surveys to BCC and PIF species) and other options to minimize impacts to nesting bird species. John will talk to the USFWS regional coordinator to discuss the best way to set up meetings.

If required, surveys for nesting bird species would focus on wetlands, forests/riparian habitats, upland grasslands and agricultural areas with alfalfa and hay (these areas provide nesting habitat for many migratory bird species). Although focusing surveys efforts on BCC and PIF species seemed reasonable, he would like to discuss these options further with regional USFWS special agents and the USFWS Migratory Bird Office.

Issues to be resolved:

John Cochnar will set up meeting with USFWS special agents and the USFWS Migratory Bird Office to discuss MBTA issues.

Platte River Water Depletions

If water would be used from the Platte River drainage for hydrostatic testing, consultation with the USFWS would be necessary to determine whether water withdrawals would result in a net depletion of water.

Special Status Species

River Otter

Surveys would be required at the Elkhorn and Platte River crossings if construction were to occur during the river otter denning season.

- Contact Sam Wilson (NGPC – [402] 471-5174) regarding survey protocol and occurrence data within the project area.

Conclusion: Conduct breeding surveys if construction would occur during the breeding season for this species.

Bald Eagle

Conduct breeding and winter roost surveys, if construction occurs during the breeding season / winter roost season along river corridors only (project-wide).

The NGPC will provide historic and known nest sites and winter roosts, if they exist within the project vicinity. Based on the letter from Rick Schneider (NGPC T&E) nesting habitat in NE occurs along the Elkhorn, Platte, and W. Fork Big Blue River. This letter also indicates that no known winter roost sites have been documented within the project vicinity.

Conclusion: Conduct breeding and winter roost surveys if construction along river corridors would occur during the breeding and winter roosting season for bald eagles.

Interior Least Tern/ Piping Plover

Conduct breeding surveys for these species, if construction occurs during the breeding season. Surveys would be required only at the Platte, Elkhorn, and Missouri (Yankton) river crossings (project-wide).

Conclusion: Conduct breeding surveys if construction would occur during the breeding season for these species.

Whooping Crane

The main migration route for this species occurs west of the project area (project-wide). No surveys would be required for this species. However, if this species is observed during project construction, the USFWS should be immediately contacted and protection measures would be discussed.

Conclusion: No surveys would be required.. Immediately contact USFWS if whooping cranes are identified during construction.

Blacknosed Shiner/ Finescale Dace/ Lake Sturgeon / Northern Redbelly Dace

These species would either be restricted to the Missouri River or would not occur within the project area. Since the construction method at the Missouri River would be HDD, the agencies concluded that these species would not be impacted.

Conclusion: *No concerns.*

Pallid Sturgeon/ Sturgeon Chub

These species would either be restricted to the Missouri and Platte rivers or would not occur within the project area. Since the construction method at these river crossings would be HDD, the agencies concluded that these species would not be impacted.

Conclusion: *No concerns.*

Topeka Shiner

This species would either be restricted to the Missouri River or it would not occur within the project area. Since the construction method at the river crossing would be HDD, the agencies concluded that these species would not be impacted in Nebraska.

The USFWS indicated that if stream channels identified as having potential Topeka shiner populations are dry, open cut would be ok. If the channels are running or if pools of water occur at the crossings, further habitat analysis may be required to determine if the channel could be open-cut or if it should be drilled. Other potential measures could include surveys to determine presence along the stream or constructing outside of the spawning period.

Conclusion: *Determine habitat conditions at time of construction. Re-consult if necessary.*

Western Massasauga

This species could occur along the project route and would primarily occur within native tallgrass prairie. ENSR should review data set for tallgrass prairie that was provided by NGPC. The NGPC would require biological monitors to move snakes off of the construction ROW ahead of construction activities. Biological monitors could include: Joyce Collins.

Conclusion: *Review tallgrass prairie data. Identify experts as biological monitors.*

Higgins Eye Pearly Mussel/ Scaleshell Mussel/ Winged Mapleleaf

These species would be restricted to the Missouri River. Since the construction method at the Missouri River would be HDD, the agencies concluded that these species would not be impacted.

Conclusion: *No concerns.*

Small White Lady's Slipper/ Western Prairie Fringed Orchid

Conduct surveys for these species within all suitable habitat along project route, including state, federal, and private lands.

Conclusion: *Conduct surveys for these species prior to construction. Surveys for these species can occur in 2007 to determine presence. If plants are not documented in 2007, no further surveys would be required.*

Other Special Status Species

Gray Wolf

If this species is documented during construction, immediately contact the USFWS to determine if any additional protection would be required.

Conclusion: *No surveys would be required.. Immediately contact USFWS if whooping cranes are identified during construction.*

Dakota Skipper

Conduct surveys within suitable native prairie habitats prior to construction.

Conclusion: *Conduct surveys for these species in 2007.*

Eskimo Curlew

Due to the rarity of this species and the fact that it would occur as a migrant (breeds in the arctic), the USFWS does not think that this species would be impacted by the project. If this species is documented during construction, immediately contact the USFWS to determine if any additional protection would be required.

Conclusion: *No surveys would be required . Immediately contact USFWS if this species is identified during construction.*

American Burying Beetle

No surveys would be required along the mainline portion of the Keystone Project. The Cushing portion of the project may require surveys depending on the habitat crossed.

Conclusion: *No surveys would be required.. Immediately contact USFWS if this species is identified during construction.*

Indiana Bat/Gray Bat

John indicated that he will defer any discussions relative to these species to the Missouri and Illinois USFWS.

Decurrent False Aster / Running Buffalo Clover/Prairie Bush Clover

John indicated that he will defer any discussions relative to these species to the Missouri and Illinois USFWS, but anticipates that surveys would be required prior to construction.

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TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting	ENSR
Date/Time of Meeting	July 10, 2006
Keystone Team Member(s)	Sara Stribley

Contact Information:

Name	Gery Steinauer
Title	Botanist
Organization	Nebraska Game and Parks Commission
Address	
County	
Phone	402-6942498
E-mail address	gery.steinauer@ngpc.ne.gov

Meeting Information:

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

Issue: Survey Protocols for Small White Lady's Slipper and Western Prairie Fringed Orchid

Concern Level: High Moderate **Low**

Description:

I spoke with Gery to confirm some information about the SWLS and WPFO:

Small White Lady's Slipper: the survey period really should be from mid-May to the first week of June (not mid-June as the letter from the NE NHP suggests). Very difficult to identify in the field, is usually identified by its very distinctive leaves. It may occur in the Platte River Valley. Probably will not find it in Cedar County. Wayne County is all agricultural land, so very unlikely to find any native prairie habitat.

Western Prairie Fringed Orchid: focus on surveying in areas of appropriate habitat. This species can also be found in upland areas, in wetter ravines. Jefferson County probably too dry for species to occur. Also, probably will not find it in Cedar County, and again Wayne County.

Gery said that if we provided him with a map of the line and some GIS layers showing land coverage, he could narrow down the survey areas. He also suggested we contact him before surveying for input as to where we should survey. I mentioned that ENSR would be in Nebraska to meet with the Nebraska Game and Parks Commission sometime in July. He stated he was out of a different office and would be in the field for the

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TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting ENSR

Date/Time of Meeting July 6, 2006

Keystone Team Member(s) Sara Stribley

Contact Information:

Name	Mike Fritz
Title	Herpetologist
Organization	Nebraska Game and Parks Commission
Address	
County	
Phone	402-471-5419
E-mail address	Mike.Fritz@ngpc.ne.gov

Meeting Information:

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

Issue: Survey Protocols for Western Massasauga

Concern Level: High Moderate Low

Description:

Discussed a more detailed survey protocol for the Western Massasauga with Mike Fritz. The following was discussed:

1. First step is to determine if there is any appropriate habitat along the project route. This can be done by looking at GIS land coverage data or habitat surveys. The massasauga depends on native tall-grass prairies and wet-meadows. The wet meadows should support plant species such as cattails, prairie cordgrass, and reed canary grass, and should also be associated with crayfish burrows. The massasauga utilizes the crayfish burrows as winter hibernacula. They emerge from their burrows in April and move into upland native prairie during the spring. This species can move up to 1 mile to find suitable habitat.
2. Survey for appropriate winter denning and summer use habitat.
3. If appropriate habitat is found within or adjacent to construction ROW, surveys for the animal should be conducted prior to construction in the year construction will occur.
4. If construction is to occur during the active season, surveys for massasauga should be conducted within a ¼ mile-buffer of any native tall-grass prairie habitat. If construction is to occur during the winter

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hibernation, a survey in September should be conducted to determine if any animals utilize the wet-meadows/crayfish burrow habitat.

5. If animals are found, they must be trapped and cleared and a site-drift fence must be erected to prevent massasaugas from returning to site.
6. Construction should not be conducted in appropriate habitat during ????????

There are known occurrences of the massasauga in Jefferson, Gage, and northwestern Colfax counties. I will be sending this summary to Mike to confirm this information. Mike was also going to provide me with a more formal protocol that he was going to tailor for this type of project (pipeline) and a map of the known species occurrences.

Stribley, Sara

From: Stribley, Sara
Sent: Thursday, July 06, 2006 12:39 PM
To: 'Mike.Fritz@ngpc.ne.gov'
Subject: Massasauga Survey Protocol

Mike,

Thanks for all the information you provided to me earlier! I have tried to make my way through my notes from our phone conversation, but feel like I may have confused some information. Please feel free to correct/revise/add to anything below. Also you can get more information on the project by going to <http://www.transcanada.com/keystone/index.html>.

1. First step is to determine if there is any appropriate habitat along the project route. This can be done by looking at GIS land coverage data or habitat surveys. The massasauga depends on native tall-grass prairies and wet-meadows. The wet meadows should support plant species such as cattails, prairie cordgrass, and reed canary grass, and should also be associated with crayfish burrows. The massasauga utilizes the crayfish burrows as winter hibernacula. They emerge from their burrows in April and move into upland native prairie during the spring. This species can move up to 1 mile to find suitable habitat.
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5. If animals are found, they must be trapped and cleared and a site drift-fence must be erected to prevent massasaugas from returning to site.
6. Construction should not be conducted in appropriate habitat during ???????

Also, when you get a chance, if you could send me your revised survey protocol, and possibly the mapping of known massasauga occurrences that would be greatly appreciated! The construction ROW is 110 ft with a permanent ROW of 60 ft. Thanks again for your help!

Sincerely,

Sara Stribley
Staff Specialist
ENSR Corporation
1601 Prospect Pkwy
Fort Collins, CO 80525
970.493.8878 ext. 168
sstribley@ensr.aecom.com

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FOR INTERNAL KEYSTONE PROJECT USE ONLY

TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting ENSR

Date/Time of Meeting July 6, 2006

Keystone Team Member(s) Sara Stribley

Contact Information:

Name	Joel Jorgensen
Title	Song and Game Bird Specialist
Organization	Nebraska Game and Parks Commission
Address	
County	
Phone	402-471-5440
E-mail address	Joel.Jorgensen@ngpc.ne.gov

Meeting Information:

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

Issue: Survey Protocols for Bald Eagle, Piping Plover, Interior Least Tern

Concern Level: High Moderate Low

Description:

Wanted to confirm survey information in letter to ENSR from Rick Schneider dated June 16, 2006. Joel provided the following information:

Bald eagles: surveys should be conducted Feb – March. Recommends follow up surveys throughout project to check for new nest sites. Surveys should be conducted at any potential habitat along ROW.

Terns/Plovers: surveys should be conducted May – July. There are not any known occurrences along the Platte river where the project crosses near the Colfax/Bulter county line. However, surveys should still be conducted, along with monitoring for new nest sites.

Whooping cranes unlikely to occur along route. Tend to inhabit eastern portion of state.

Joel also encouraged continued correspondence with the NGPC to keep posted on new Bald eagle sites and Plover/tern monitoring.

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Carey Grell
Nebraska Game and Parks Commission
2200 North 33rd Street
Lincoln, NE 68503

Dear Ms. Grell:

Thank you for agreeing to meet with ENSR to discuss the proposed TransCanada Keystone Pipeline Project. To facilitate our meeting, ENSR is providing preliminary species tables and habitat information for your review to determine potential species survey requirements along the project route.

As discussed in the January 24, 2006 letter, TransCanada is planning to construct and operate a 1,830-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 1,070 miles of new pipeline constructed from the U.S.-Canada border in Pembina County, North Dakota to terminals and refineries in Salisbury (Chariton County), Missouri, Wood River (Madison County), and Patoka (Marion County), Illinois. Approximately 283 miles would parallel the proposed Rockies Express Pipeline - West (REX-West) Project in Kansas and Missouri. In addition, TransCanada is considering the construction of a 291-mile pipeline extension that would extend the Keystone Pipeline south from the Nebraska/Kansas border to Cushing, Oklahoma. TransCanada proposes to begin construction of the new pipeline in early 2008, with the system in-service by the end of 2009. 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.

At this time, ENSR is providing information regarding the Keystone Mainline portion of the project. As the Cushing Extension portion of the project develops, we will provide additional information for your review and input.

Attached for your review are state-specific special status species tables (i.e., federally listed, proposed and candidate species; state listed species) (**Tables 1 and 2**) that include a brief description of species habitat, miles of potential habitat crossed by the project, and approximate mileposts where potential habitat has been preliminarily identified along the project route. **Table 3** provides potential species habitat by state and county. Habitat for special status species was determined based on species habitat association, known distribution, and agency correspondence (e.g., U.S. Fish and Wildlife Service [FWS], state wildlife agencies, and National Heritage Program/NatureServe), in

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combination with aerial habitat surveys, Land Use-Land Cover (LULC) data, and aerial photography. Survey data from the REX-West Project also was used to quantify potential habitat that would be crossed in Kansas and Missouri (Buchanan County through Randolph County).

Also attached for your review are 1:100,000-scale maps that identify areas along the pipeline route where potential grassland, wetland/riparian, and upland woodland/forests have been identified. Habitat data within these maps were obtained from LULC data and aerial photography. These preliminary habitat locations may be modified following further habitat analysis and consultations with federal and state agencies. In addition, some pipeline routing modifications continue to be developed and evaluated including those denoted by red "reroute" lines on the attached maps. As a result, habitat analysis and consultation will continue for these routing adjustments as needed in the future. Habitat related to powerlines has not been evaluated at this time.

We look forward to our visit on July 18 in Grand Island at 10:00 am. If you have any questions regarding the enclosed materials, please contact me at (970) 493-8878 ext. 181 or email cjohnson@ensr.aecom.com.

Sincerely,

Charles Johnson
Senior Wildlife Biologist

Enclosures: 1:100,000-scale maps
Tables 1 through 3