

Overview – Keystone Pipeline Project Biological Survey Reports

Biological Surveys and Reports

Construction and operation of the Keystone Pipeline Project (Keystone) may affect habitats and populations of species protected under the federal Endangered Species Act (ESA) and by individual State legislation. During 2006, Keystone initiated contact with the U.S. Fish and Wildlife Service (USFWS), and state natural heritage programs and wildlife agencies to identify species and habitats of concern. After receiving lists of species and habitats, Keystone developed field survey protocols, target survey areas, and survey schedules. These protocols were submitted to the USFWS and state agencies for review. No agencies objected to the proposed protocols; agency comments received on the protocols were incorporated. Agency coordination documentation and survey protocols were filed by Keystone with the Department of State (DOS) on September 15, 2006. Further Agency coordination that has taken place since the September filing date is included in this January 2007 supplemental filing to the DOS.

Biological field surveys along the proposed Mainline pipeline right-of-way were initiated in late summer and fall of 2006 (the “as filed” route). These surveys were conducted along the pipeline route alignment that was filed with the DOS on September 15, 2006. Additional field surveys will be conducted in 2007 where necessary to determine species occurrence in the appropriate season, to survey pipeline reroutes, pump stations, pipe storage yards, and contractor yards, as well as pipeline segments where access was not previously available. Field surveys also will be conducted along the Cushing Extension and its pump station sites, pipe storage yards, and contractor yards during 2007.

The biological survey reports included in this filing will be used for: 1) preparation of a Biological Assessment as part of the USFWS Section 7 consultation; 2) documentation for the Environmental Impact Statement (EIS); and 3) preparation of state agency permit applications.

The reports filed herein include the results of all field work completed in 2006. These reports will provide field data for the majority of the listed and sensitive species that were identified for survey by the USFWS and state agencies. The information contained in these reports should provide sufficient documentation to initiate preparation of the Draft EIS.

Keystone will file additional biological survey reports in 2007 for the Cushing Extension, as well as Mainline reroutes, and ancillary facilities.

Biological Survey Progress

The attached table outlines Keystone’s process for the collection and submission of biological data.

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Keystone Pipeline Project – Biological Survey Report Completion Plan – January 2007

Survey Objective	Survey Status	September 2006 DOS Filing	November 2006 DOS Filing	January 2007 DOS Filing	Future DOS Filing Dates	Supplemental Reports
<p>Rare Plants (Western fringed orchid, Eastern fringed orchid, small white ladies slipper orchid, Decurrent false aster, running buffalo clover, prairie spiderwort, royal catchfly, spring ladies tresses)</p>	<p>Survey completion status: Western prairie fringed orchid: Habitat surveys - 90% Occurrence surveys - 0%</p> <p>Other rare plants: Habitat surveys - 0% Occurrence Surveys - 0%</p> <p>2007 spring /summer – Occurrence surveys (Mainline and Cushing Extension).</p>	<p>Agency consultation records and species lists.</p> <p>Preliminary survey areas.</p>	<p>Documentation of potential suitable orchid habitats in North and South Dakota, and Nebraska (including photographs and habitat suitability for Western Fringed Orchid is provided in the Native Prairie Survey Report discussed below).</p>	<p>Agency consultation records.</p>	<p>August 2007</p> <ul style="list-style-type: none"> Summary of surveys completed; occurrence data. 	
<p>Wetlands and Waters of the U.S.</p>	<p>2006 – spring/fall-Delineation surveys.</p> <p>Survey completion status as of October 13, 2006:</p> <p>ND – 95% SD - 83% NE - 100% KS - 98% MO – 83% ILL - 89%</p> <p>Overall – 85%</p> <p>2007 – Spring supplemental surveys (Mainline, Cushing Extension).</p>	<p>Consultation records with USACE.</p> <p>Preliminary survey areas.</p>	<p>Summary of survey progress.</p> <p>List of wetland crossings by type, and distances crossed.</p>		<p>April 2007</p> <ul style="list-style-type: none"> Cushing Extension wetland crossing list. <p>September 2007</p> <ul style="list-style-type: none"> 404 Applications filed with USACE Districts. 	

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Native Prairie	<p>Survey completion status: SD, ND -90% (Mainline) NE (Mainline) KS, OK – 0% (Cushing)</p> <p>Fall 2006 – Preliminary</p> <p>Spring 2007 – Supplemental surveys (Mainline, Cushing Extension).</p>	<p>Agency consultation records and species lists.</p> <p>Preliminary survey areas.</p>	Habitat assessment for ND and SD	Agency consultation records.	<p>May 2007</p> <ul style="list-style-type: none"> Mainline - Supplemental surveys with site descriptions (reroutes). <p>April or May 2007</p> <ul style="list-style-type: none"> Cushing Extension habitat descriptions. 	
Mussels (James River, Cottonwood River, Doyle Creek)	<p>Survey completion status – SD (James River) - 100% KS (Cottonwood River, Doyle Creek) – 0%</p> <p>2007 late summer/fall – habitat/occurrence surveys completed along Cushing Extension.</p>	<p>Agency consultation records and species lists.</p> <p>Preliminary survey areas.</p>	Survey methods and results, habitat descriptions. No listed mussels were found.	Agency consultation records.	<p>If needed, a revised SD report will be submitted 30 days after DOS filing.</p> <p>Fall 2007</p> <ul style="list-style-type: none"> KS (Cushing) survey reports based on spring/summer field reconnaissance. 	
Dakota Skipper butterfly	<p>Survey completion status: Habitat – 90% Occurrence – 0%</p> <p>Summer 2007 (Occurrence Surveys -Mainline in ND and SD).</p>	<p>Agency consultation records</p> <p>Preliminary survey areas.</p>	Documentation of potential suitable habitats in North and South Dakota (including photographs and habitat suitability for Dakota Skipper is provided in the Native Prairie Survey Report discussed above).	Agency consultation records.	<p>July 2007</p> <ul style="list-style-type: none"> Occurrence surveys with site descriptions. 	

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Topeka Shiner	<p>Survey completion status: Habitat surveys SD, KS, MO – 94% (Mainline) KS – 0% (Cushing) Occurrence surveys KS, MO – 94% (Mainline) SD (Mainline) KS – 0% (Cushing)</p> <p>Spring 2007 Mainline and Cushing occurrence surveys – SD, KS</p>	<p>Agency consultation records.</p> <p>Preliminary survey areas.</p>	Survey methods and results, habitat descriptions.	<p>Updated KS/MO Topeka shiner survey report.</p> <p>Agency consultation records.</p>	<p>July 2007</p> <ul style="list-style-type: none"> Survey Reports based on spring/summer field reconnaissance in SD and KS (Mainline and Cushing). 	
<p>Fish (Arkansas River shiner, Arkansas darter, silver chub, speckled chub, Neosho madtom)</p>	<p>Survey completion status: Habitat surveys: KS (Cushing) – 0% Occurrence surveys: KS (Cushing) – 0%</p> <p>Spring 2007 habitat and occurrence surveys – KS (Cushing)</p>	No information filed.	No information filed.	Agency consultation records.	<p>Fall 2007</p> <ul style="list-style-type: none"> Survey reports based on spring/summer field reconnaissance in KS (Cushing). 	
<p>Reptiles and Amphibians (Massasauga, Kirtland's snake, Western fox snake)</p>	<p>Survey completion status: Habitat surveys MO - 100% of accessible sites IL – 0%</p> <p>Occurrence Surveys MO, IL– 0%</p>	<p>Agency consultation records.</p> <p>Preliminary survey areas and protocols.</p>	No information filed.	Habitat survey reports based on surveys completed in fall/winter 2006. Report letters detailing further survey work to be completed.	<p>May 2007</p> <ul style="list-style-type: none"> Habitat survey reports based on spring 2007 field reconnaissance and updated agency consultation records. 	

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	<p>Spring 2007 – Complete habitat surveys – MO, IL.</p> <p>Spring/summer 2007 – Potential occurrence surveys.</p>			Agency consultation records.	<p>August 2007</p> <p>Snake survey reports, if agencies require occurrence surveys.</p>	
Least tern and piping plover	<p>No 2006 surveys were conducted.</p> <p>Occurrence surveys – 2007 (Mainline and Cushing Extension).</p>	<p>Agency consultation records.</p> <p>Preliminary survey areas.</p>	Documentation of potential suitable habitats.	No information filed.	<p>August 2007</p> <ul style="list-style-type: none"> Results of 2007 surveys (Mainline and Cushing) 	
Raptor Nests (including bald eagle)	<p>Spring 2006 –</p> <ul style="list-style-type: none"> Preliminary survey 2006 Survey completion status – 70% <p>Spring 2007 –</p> <ul style="list-style-type: none"> Conduct Mainline and Cushing Extension raptor surveys within construction ROW (nesting and winter roosting surveys for bald eagles will occur 1.0 mile from either side of the construction ROW along major river crossings). Potential preconstruction surveys – 2008 (Mainline and Cushing Extension). 	Agency consultation records.	List of raptor nests and locations encountered during spring 2006 helicopter surveys.	Agency consultation records.	<p>March 2007</p> <ul style="list-style-type: none"> Results of 2007 aerial raptor/bald eagle surveys (Mainline and Cushing Extension). <p>Spring 2008</p> <ul style="list-style-type: none"> Results of preconstruction aerial surveys. 	If needed, a revised report will be submitted 30 days after DOS filing.

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Greater Prairie Chicken	<p>Winter 2007 – Phone surveys with landowners to determine potential presence. Completion status – 50%.</p> <p>Spring 2007 – breeding surveys, depending on phone survey results.</p>	<p>Agency consultation records.</p> <p>Preliminary survey areas and protocols.</p>	No information filed.	Agency consultation records.	<p>March 2007</p> <ul style="list-style-type: none"> • Results of phone surveys with landowners in MO and agency coordination regarding further survey requirements. <p>August 2007</p> <ul style="list-style-type: none"> • Results of breeding surveys, if conducted 	If needed, a revised report will be submitted 30 days after DOS filing.
King rail	Spring 2007 MO - Surveys may be conducted in large complex wetlands.	<p>Agency consultation records</p> <p>Preliminary survey areas and protocols.</p>	No information filed.	Agency consultation records.	<p>April 2007</p> <ul style="list-style-type: none"> • Further agency coordination regarding survey requirements, survey protocols, and habitat assessment report, based on wetland delineations. <p>August 2007</p> <p>Habitat survey report, if surveys are necessary based on wetland habitat assessment.</p>	

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Barn owl	To date, no structures will be destroyed during construction, therefore; no surveys planned. However, 2008 preconstruction surveys in MO, IL would be conducted if structures (old barns or homes) would be affected by construction activities.	Agency consultation records Preliminary survey areas and protocols.	No information filed.	Agency consultation records.	Spring 2008 <ul style="list-style-type: none"> Report filed only if habitat is present. 	
Bats (Indiana bat, gray bat)	Survey completion status: Fall 2006 habitat surveys: MO - 84% of accessible sites, IL – 100% of accessible sites Completions status - 84% Spring 2007 – Complete habitat surveys Spring/summer 2007 – Potential mist net surveys – MO, IL.	Agency consultation records Preliminary survey areas and protocols.	No information filed.	Habitat survey reports (MO, IL) based on surveys completed in fall/winter 2006. Report letters detailing further survey work to be completed.	March 2007 <ul style="list-style-type: none"> Habitat survey reports based on spring 2007 field reconnaissance and updated agency consultation records. Fall 2007 <ul style="list-style-type: none"> Mist net/occurrence survey reports – MO, IL. 	If needed, a revised report will be submitted 30 days after DOS filing.
River otter	2007 – Occurrence surveys in NE, IL	Agency consultation records	No information filed.	No information filed	August 2007 <ul style="list-style-type: none"> Results of surveys conducted in NE and IL. 	

¹Migratory birds – Keystone will discuss options for complying with the Migratory Bird Treat Act (MBTA) with the USFWS. Future surveys will depend on the outcome of these discussions.